

Utility Board of the City of Key West
Stock Island Power Plant
Facility ID No. 0870003
Monroe County

Initial Title V Air Operation Permit
PROPOSED Permit No. 0870003-001-AV

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Section

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November 8, 1999

Initial Title V Air Operation Permit
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Permittee:
Utility Board of the City of Key West
P.O. Drawer 6100
Key West, Florida 33041-6100

PROPOSED Permit No. 0870003-001-AV
Facility ID No. 0870003
SIC Nos. 49, 4911
Project: Initial Title V Air Operation Permit

This permit is for the operation of the Stock Island Power Plant. This facility is located at 6900 Front Street, Stock Island, Monroe County; UTM Coordinates: Zone 17, 425.65 km East and 2716.67 km North; Latitude: 24° 33' 49" North and Longitude: 81° 44' 03" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The Utility Board of the City of Key West is authorized to operate the Stock Island Power Plant as shown in the application and approved drawings, plans, and other documents, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units
Appendix I-1, List of Insignificant Emissions Units and Activities
APPENDIX TV-3, TITLE V CONDITIONS (Version Dated 12/02/97)
APPENDIX SS-1, STACK SAMPLING FACILITIES (Version dated 10/07/96)
TABLE 297.310-1, CALIBRATION SCHEDULE (Version Dated 10/07/96)
FIGURE 1 - SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM REPORT (version dated 7/96)
Acid Rain Retired Unit Exemption (Ralph Garcia Steam Plant)
Phase II Acid Rain New Unit Exemptions (D-1, D-2, CT-1, CT-2, & CT-3)

Effective Date: January 1, 2000
Renewal Application Due Date: July 5, 2004
Expiration Date: December 31, 2004

Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/clp/stw

Section I. Facility Information

Subsection A. Facility Description

This facility consists of five regulated emission units with a total generating capacity of 80.7 MW. There are two regulated diesel generators, three simple cycle combustion turbines, and miscellaneous unregulated units. To reduce pollution, a combination of control techniques is used including water injection, ignition timing retardation, and low sulfur fuel oil. The Ralph Garcia Steam Plant [EPA ID #1] was retired January 1, 1998. Also included in this permit are insignificant emissions units and activities.

Based on the initial Title V permit application received June 12, 1996, this facility is not a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Units

E.U.

<u>ID No.</u>	<u>Brief Description</u>
005	8.8 MW Medium Speed Diesel Generator [Unit #1; EPA ID #D-1]
006	8.8 MW Medium Speed Diesel Generator [Unit #2; EPA ID #D-2]
007	23.5 MW Simple Cycle Combustion Turbine [CT-1]
008	19.77 MW Simple Cycle Combustion Turbine [CT-2]
009	19.77 MW Simple Cycle Combustion Turbine [CT-3]
010	Unregulated Emissions Units (See Appendix U-1.)

Emission units 002, 003, and 004 were moved to emissions unit 010.

Subsection C. Retired Acid Rain Unit

001 37 MW Ralph Garcia Steam Plant [EPA ID #1][Retired January 1998]

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit ID Nos. on all correspondence, test report submittals, applications, and other information.

Subsection D. Relevant Documents

The documents listed below are not a part of this permit; however they are specifically related to this permitting action.

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

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

Table 2-1, Summary of Compliance Requirements

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

Appendix H-1, Permit History/ID Number Transfers

These documents are on file with permitting authority:

Initial Title V Permit Application received June 12, 1996.

Letter received June 28, 1999, from Mr. Joe Stone, Environmental Services
Supervisor for Stock Island Power Plant.

Section II. Facility-wide Conditions

1. APPENDIX TV-3, TITLE V CONDITIONS (version dated 8/11/97), is a part of this permit.

{Permitting note: APPENDIX TV-3, TITLE V CONDITIONS, is distributed to the Permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The Permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(b)1.& 4., F.A.C.]

{Permitting Note: Although the Permittee is not required to perform a visible emissions compliance test to demonstrate compliance with the facility-wide limitations annually or before renewal, if the Department believes that the general visible emissions standard is being violated, the Department may require that the owner or operator perform a visible emissions compliance test per Chapter 62-297.310(7)(b), Special Compliance Tests. In addition, Department personnel who are certified to perform visible emissions tests may determine compliance with the general visible emissions standard.}

4. Prevention of Accidental Releases (Section 112(r)of CAA). If required by 40 CFR 68, the Permittee shall submit to the implementing agency:

a. a risk management plan (RMP) when, and if, such requirement becomes applicable, and

b. certification forms and/or RMPs according to the promulgated rule schedule.

[40 CFR 68]

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

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

6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Exempt Emissions Units and/or Activities, is a part of this permit.

[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

7. **Not federally enforceable.** The Permittee shall take reasonable precautions to prevent emissions of unconfined particulate matter at this facility. These precautions include receiving delivery of fuel oil by barge rather than trucks, and using paved roads for the fuel trucks which deliver vehicle fuel. Additionally, watering will be used as needed to prevent emissions from unpaved areas.

[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received June 12, 1996]

8. The Permittee shall submit all compliance, annual operating reports and other correspondence required of this permit to the Department's South District and Marathon Branch offices:

Department of Environmental Protection
South District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida, 33901
Telephone: 941/332-6975
Fax: 941/332-6969

Department of Environmental Protection
Marathon Branch Office
2796 Overseas Highway, Suite 221
Marathon Florida, 33901
Telephone: 305/289-2310
Fax: 305/289-2314

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

United States Environmental Protection Agency
Region 4
Air, Pesticides, & Toxics Management Division
Air and EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155
Fax: 404/562-9163

{Permitting note: Condition no. 51 of Appendix TV-3, lists the necessary elements of a compliance certification required under 40 C.F.R. 70.6(c)(5)(iii).}

10. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.]

Section III. Emissions Units and Conditions

Subsection A. Two Medium Speed Diesel Generators

E.U.

ID No. Brief Description

005 8.8 MW Medium Speed Diesel Generator [Unit #1; EPA ID #D-1]

006 8.8 MW Medium Speed Diesel Generator [Unit #2; EPA ID #D-2]

Each of the two 8.8 MW (nominal) electric Fairbanks Morse diesel generators (Model PC-2.6V) burns No. 2 distillate fuel oil and has a maximum heat input rate of 85.4 million Btu per hour. Sulfur dioxide emissions are controlled by limiting the sulfur content of the No. 2 fuel oil to 0.05% by weight. Nitrogen oxides emissions are controlled by ignition timing retard and by limiting the hours operation. Visible emissions and NOx emissions are continuously monitored. Commercial operation commenced April 1, 1991. The units are exempt from acid rain regulations by the attached New Unit Exemptions, effective January 1, 1999 through December 31, 2003. {Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination dated 6/5/89, AO44-207419 & PSD-FL-135}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum heat input rate to each diesel generator shall not exceed 85.4 MMBtu per hour (606 gallons per hour). The sum total consumption of fuel oil for both diesel generators combined shall not exceed 2.27 million gallons in any consecutive 12-month period.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE) and AC44-207419/PSD-FL-135]

A.2. Emissions Unit Operating Rate Limitation During and After Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions 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.]

A.3. Methods of Operation - Fuels. The only fuel to be burned in this unit is new (virgin) No. 2 fuel oil. The sulfur content shall not exceed 0.05 percent by weight.

[Rules 62-213.440(1), F.A.C.; AC44-221256/PSD-FL-135; and Acid Rain Program New Unit Exemptions.]

A.4. Hours of Operation. For both units combined, the hours of operation shall not exceed a combined total of 3,740 full load equivalent engine hours in any consecutive 12-month period.

[Rule 62-212.400(6), F.A.C.]

Emission Limitations and Standards

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

A.5. Oxides of Nitrogen. NO_x emissions shall not exceed any of the following limits:

- a. 160.9 pounds per hour from each engine;
- b. 6.0 grams per horsepower-hour from each engine;
- c. 300.9 tons in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

A.6. Sulfur Dioxide. SO₂ emissions shall not exceed either of the following limits:

- a. 43.6 pounds per hour from each engine;
- b. 81.6 tons in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

A.7. Particulate Matter. PM/PM₁₀ emissions shall not exceed any of the following limits:

- a. 8.5 pounds per hour from each engine;
- b. 0.1 million pound per million Btu heat input;
- c. 16.0 tons in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

A.8. Carbon Monoxide. CO emissions shall not exceed any of the following limits:

- a. 53.6 pounds per hour from each engine;
- b. 2.0 grams per horsepower-hour from each engine;
- c. 100.3 tons in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

A.9. Volatile Organic Compounds. VOC emissions shall not exceed any of the following limits:

- a. 26.8 pounds per hour from each engine;
- b. 1.0 grams per horsepower-hour from each engine;
- c. 50.1 tons in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

A.10. Beryllium (Be). Beryllium emissions shall not exceed 0.00054 pounds per hour from each engine and shall not exceed 2.0 pounds in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., AC44-221256]

A.11. Objectionable Odor. The Permittee shall not discharge air pollutants which cause or contribute to an objectionable odor.

[Rule 62-296.320(1)(a)2, F.A.C., AC44-221256]

Excess Emissions

A.12. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

A.13. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

Monitoring Requirements

A.14. The Permittee shall calibrate, maintain, and operate continuous monitoring equipment, in accordance with the manufacturer's instructions, to continuously monitor and record opacity and NOx emissions. The Permittee shall maintain a complete file of all measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; all continuous emissions monitoring system performance evaluations, all continuous emissions monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required, recorded in an a permanent legible form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

Test Methods and Procedures

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any terms or conditions of this permit.}

A.15. The Permittee shall conduct a compliance test for each diesel generator on an *annual basis* for the following pollutants. Each compliance test shall be conducted in accordance with 40 CFR 60, Appendix A, using the method indicated.

- a) Oxides of Nitrogen (NO_x) - EPA Method 20.
- b) Sulfur Dioxide (SO₂) - EPA Method 6 or ASTM D 2880-71 for sulfur in oil.
- c) Visible Emissions - EPA Method 9.
- d) Particulate Matter (PM/PM₁₀) - EPA Method 5.

An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

[Rule 62-297.310(7)(a)4. & 5., F.A.C., AC44-152197]

A.16. The Permittee shall conduct a compliance test for each of the following pollutants *prior to obtaining a renewed operation permit*. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy this requirement. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of compliance test results for any emissions unit that, during the year prior to renewal: a) did not operate; or b) in the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours. Each compliance test shall be conducted in accordance with 40 CFR 60 Appendix A, using the method indicated.

- a) Carbon Monoxide (CO) – EPA Method 10.
- b) Beryllium (Be) – EPA Method 104.
- c) Volatile Organic Compounds (VOC) - EPA Method 25.

[Rule 62-297.310(7)(a)3., F.A.C., AC44-152197]

A.17. By this permit, annual emissions compliance testing for visible emissions and particulate matter is not required for these emissions units while burning liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

A.18. The specific conditions of Subsection D, Common Conditions I, apply to these emission units.

Reporting and Recordkeeping Requirements

A.19. In order to document compliance with the hours of operation limitation of specific condition A.4, the fuel oil consumption limit of specific condition A.1, and the annual

NOx emission limit of specific condition A.5, the Permittee shall keep daily records of the hours of operation, the fuel oil consumption, and the NOx emissions. At a minimum, the records shall indicate:

- (a) the daily hours of operation for each individual diesel generator,
- (b) the daily hours of operation expressed as full load equivalent engine hours (both units combined);
- (c) the daily sum total fuel oil consumption in gallons for both units combined;
- (d) the daily sum total NOx emissions in pounds for both units combined;
- (e) a cumulative total hours of operation expressed as full load equivalent engine hours for the current month;
- (f) a cumulative sum total fuel oil consumed in gallons for the current month;
- (g) a cumulative sum total NOx emissions in tons for the current month;
- (h) a rolling cumulative total hours of operation expressed as full load equivalent engine hours for the previous 12 consecutive months;
- (i) a rolling cumulative sum total fuel oil consumed in gallons for the previous 12 months; and
- (j) a rolling cumulative sum total NOx emissions in tons for the previous 12 consecutive months.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

A.20. For each calendar quarter, the Permittee shall submit to the Department a written report of emissions in excess of the emission limiting standards as set forth in this permit. The report shall be postmarked by the 30th day following the end of each calendar quarter. The report shall include at least the following information:

1. The quarterly hours of operation for each individual diesel generator.
2. The magnitude of excess emissions, any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
3. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions.
4. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.
5. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

A.21. In order to document compliance with the hourly SO₂ emission limit of specific condition A.6 and the fuel sulfur limit of specific condition A.3, the Permittee shall keep records of the as-fired fuel sulfur content, in percent by weight. For each shipment of fuel oil, the sulfur content shall be based on either vendor provided analysis or other analysis using ASTM D2622-94, ASTM D4294-90 (95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or the latest editions). The records shall be

maintained for a minimum of five years and shall be made available to the Department upon request.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

Source Commitments

A.22. If the Permittee requests relaxation of any federally enforceable limits for these units, then the Department will determine whether the NSR requirements of Rule 62-212.400, F.A.C. shall apply, as though the construction permit AC44-221256 had not been issued.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

A.23. Best Available Control Technology (BACT) will be re-evaluated if the Permittee requests an increase in or exceeds the permitted hours of operation. Selective Catalytic Reduction for NOx control will be required at a minimum for BACT if deemed technologically feasible. In no event shall the BACT control installation and compliance testing occur later than 30 months from the date that the Permittee requested to exceed the permitted hours of operation or actually exceeded the permitted hours of operation.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

A.24. The three existing 16.5 MW steam units at the Key West Plant shall not operate.

[AC44-221256/PSD-FL-135 and AC44-152197]

Subsection B. 23.5 MW Combustion Turbine

E.U. Brief Description

ID No.

007 23.5 MW Simple Cycle Combustion Turbine [CT-1]

Emissions unit 007 is a General Electric (GE) Frame 5 model PG5341 CT equipped with water injection for fuel oil firing. It has a rated capacity of 23.5 MW at ISO conditions. The GE CT has a heat input of 312 MMBtu per hour (at 59° F) while burning oil. The CT is fired with No. 2 fuel oil with a sulfur content not to exceed 0.05 % by weight. NOx emissions are controlled by a water injection system. The water to fuel ratio is continuously monitored. This turbine began operation January 1, 1996.

{Permitting notes: This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C.; NSPS - 40 CFR 60 Subpart A; Rule 212.400, F.A.C., Prevention of Significant Deterioration; PSD-FL-210; and AC44-245399. The unit is not affected by the Acid Rain Program, since it meets the requirements of 40 CFR 72.7 by serving a generator with less than 25 MW.}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum heat input to the GE combustion turbine (CT) at an ambient temperature of 59° F shall not exceed 312 MMBtu/hr while firing fuel oil. Heat input may vary depending on ambient conditions and the CT's characteristics. The approved manufacturer's curves shall be used to establish heat input rates over a range of temperatures for the purpose of compliance determination.
[Rule 62-210.200, F.A.C., AC44-245399/PSD-FL-210]

B.2. Methods of Operation - Fuels. The only fuel to be burned in this unit is new No. 2 fuel oil. The sulfur content shall not exceed 0.050 percent by weight.
[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C., AC44-245399/PSD-FL-210]

B.3. Hours of Operation/Fuel Consumption. The maximum No. 2 fuel oil consumption allowed to be burned in the CT is 7.1 million gallons per year, which is equivalent to 2,888.5 hours per year at full-load; the CT may operate for more than this if operating at part-load.
[Rule 62-212.500(56), F.A.C., AC44-245399, PSD-FL-210]

Emission Limitations and Standards

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

Pursuant to Rule 62-212.410, F.A.C., BACT, the maximum allowable emissions from the CT, when firing No. 2 fuel oil at 15% O₂, shall not exceed:

B.4. Oxides of Nitrogen. NO_x emissions shall not exceed any of the following limits:

a. Nitrogen oxides emissions, expressed as NO_x, shall not exceed:

$$STD = 0.0075 (14.4)/Y + F$$

where:

STD = allowable NO_x 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 = NO_x emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(3).

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

Fuel-bound nitrogen (% by weight)	F (NO _x % 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. 75 ppmvd, based on a 1-hour average at 15% O₂;

c. 96 lbs./hour, based on a 1-hour average at 15% O₂;

d. 138 TPY.

[AC44-245399/PSD-FL-210, 40 CFR 60.332]

B.5. Sulfur Dioxide. SO₂ emissions shall be controlled by limiting the sulfur content of the fuel to a maximum of 0.05 percent by weight.

[AC44-245399/PSD-FL-210, 40 CFR 60.333]

B.6. Particulate Matter/PM₁₀. PM/PM₁₀ emissions shall be limited to 18 lbs./hour, based on a 1-hour average; 43 TPY.

[AC44-245399, PSD-FL-210]

B.7. Carbon Monoxide. CO shall be limited to 20 PPM at 100% load, and 136 PPM at 50% load; 64 lbs. per hour, based on a 1-hour average; 152 TPY.

[AC44-245399/PSD-FL-210]

B.8. Visible Emissions. Visible emissions shall be limited to 20 percent opacity.

[AC44-245399/PSD-FL-210]

Excess Emissions, Monitoring Requirements, and Test Methods & Procedures, and Reporting & Recordkeeping Requirements

B.9. Two copies of the results of the emission tests for the pollutants listed in conditions B.4. through B.7. shall be submitted within forty-five days of the last sampling run to the South District office in Ft. Myers. All reports shall be in a format consistent with and shall include the information in accordance with Rule 62-297.310 (8), F.A.C.
[Rule 62-297.310(8), F.A.C.]

B.10. The specific conditions of Subsection D, Common Conditions I, and Subsection E, Common Conditions II, apply to these emissions units.

Subsection C. 19.77 MW Combustion Turbines

<u>E.U.</u>	<u>Brief Description</u>
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<u>ID No.</u>	
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008	19.77 MW Simple Cycle Combustion Turbine [CT-2]
009	19.77 MW Simple Cycle Combustion Turbine [CT-3]

These emissions units are two refurbished General Electric Model MS-5001R 19.77 MW combustion turbines. CT-2 had a startup date of June 1, 1998, while CT-3 had a startup date of August 1, 1998.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required; NSPS - 40 CFR 60, Subparts A (General Provisions) and GG, (Standards of Performance for Stationary Gas Turbines), adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C.; Rule 212.400, F.A.C., Prevention of Significant Deterioration; and AC0870003-003, issued January 8, 1998. The units are not affected by the Acid Rain Program, since they meet the requirements of 40 CFR 72.7 by serving a generator with less than 25 MW.}

General Provisions

Notification and Record Keeping

C.1. A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c) shall be postmarked not less than 30 days prior to such date. The notification shall be sent to the Department's South District Office and Marathon Branch Office.
[40 CFR 60.7(a)(5)]

C.2. When it has been demonstrated that these units meet the emission limitations established in permit AC-0870003-003, a properly signed and sealed certification from the permittee's Professional Engineer shall be submitted to the offices listed in C.1. stating that 1) the construction of CT-2 and CT-3 was completed in accordance with permit AC-870003-003 and, 2) the units have been tested and are in compliance with the terms and conditions contained within permit AC-870003-003.

[Rules 62-212.400(7)(b) and 62-213.420(1)(a)5., F.A.C., AC-870003-003]

Performance Tests

C.3. Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup, the Permittee shall conduct performance test(s) and furnish the offices listed in C.1. a written report of the results of such performance test(s).

[40 CFR 60.8(a)] {Permitting note: See Subsection E. for additional requirements.}

Essential Potential to Emit (PTE) Parameters

C.4. Hours of Operation. Each emission unit is allowed to operate 4,000 hours per year. The combined operation of both units shall also be limited to 4,000 hours per year. [AC-870003-003].

C.5. Method of Operation - Fuels. Only No. 2 fuel oil can be fired in the combustion turbines. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight. [AC-870003-003]

C.6. Permitted Capacity. The maximum heat input rate to each combustion turbine shall not exceed 305 million Btu per hour (MMBtu/hr). [AC-870003-003]

C.7. Fuel Consumption. The maximum No. 2 fuel oil consumption allowed to be burned in either emission unit No. 008 or emission unit No. 009 is 8,840,000 gallons per year, which is equivalent to 4,000 hours per year of operation at full load. The combined fuel oil consumption for both units shall be limited to 8,840,000 gallons per year. [AC-870003-003]

Emission Limitations and Standards

{Note: The emission limits of LB/hr apply to each unit, while the TPY limit apply to each unit individually and both units collectively.}

C.8. Oxides of Nitrogen. For each turbine, NO_x emissions shall not exceed any of the following limits:

a. Nitrogen oxides emissions, expressed as NO_x, shall not exceed:

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

where:

STD = allowable NO_x 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 = NO_x emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(3).

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

Fuel-bound nitrogen (% by weight)	F (NO _x % 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. 75 ppmvd, based on a 1-hour average at 15% O₂; and
- c. 93.8 lb./hour, based on a 1-hour average at 15% O₂; and 40 degrees F from each turbine.
- d. 172 TPY, based on an average hourly concentration of 86 pounds per hour at 85 degrees F ambient temperature from both turbines combined.
- e. no more than 4,000 hours per year of operation, from either or both turbines combined.
[40 CFR 60.332, AC-870003-003]

C.9. Sulfur Dioxide. For each turbine, SO₂ emissions shall be controlled by limiting the sulfur content of the fuel to a maximum of 0.05 percent by weight.
[40 CFR 60.333, AC-870003-003]

C.10. Particulate Matter/PM₁₀. For each turbine, PM/PM₁₀ emissions shall be limited to 16.6 lb./hour, based on a 1-hour average; PM and PM₁₀ from both turbines combined shall be limited to 55 TPY and 45 TPY, respectively.
[AC-870003-003]

C.11. Carbon Monoxide. For each turbine, CO shall be limited to 25.2 lb./hour, based on a 1-hour average; and from both turbines combined, 101 TPY.
[AC-870003-003]

C.12. Visible Emissions. Visible emissions shall be limited to 20 percent opacity.
[AC-870003-003]

Excess Emissions, Monitoring Requirements, Test Methods & Procedures, and Reporting & Recordkeeping Requirements

C.13. Two copies of the results of the emission tests for the pollutants listed in conditions C.8. through C.11. shall be submitted within forty-five days of the last sampling run to the South District office in Ft. Myers. All reports shall be in a format consistent with and shall include the information in accordance with Rule 62-297.310 (8), F.A.C.
[Rule 62-297.310(8), F.A.C.]

C.14. The specific conditions of Subsection D, Common Conditions I, and Subsection E, Common Conditions II, apply to these emissions units.

Subsection D. Common Conditions I

The following conditions apply to all emissions units listed in Section III, Subsections A., B., and C., of this permit.

Test Methods & Procedures

D.1. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

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

D.2. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

D.3. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

Exceptions to these requirements are as follows:

- a. (not applicable)
 - b. (not applicable)
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1. (See attachment.)
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

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

D.4. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

D.5. Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

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

Subsection E. Common Conditions II

The following conditions apply only to the Combustion Turbines listed in listed in Section III, Subsections B. and C. of this permit.

Excess Emissions

E.1. Excess emissions from the CT resulting from start-up, shutdown, malfunction, or load change shall be acceptable providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for a longer duration.

[AC44-245399/PSD-FL-210, 0870003-003-AC]

E.2. Excess Emissions Defined. For the purpose of reports required under 40 CFR 60.7(c) (see specific condition C.24.), periods of excess emissions that shall be reported are defined as follows:

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

b. *Sulfur dioxide.* Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.05 percent.

[40 CFR 60.334(c)(1)&(c)(2), 0870003-003-AC]

Monitoring Requirements

E.3. CMS Requirements. The Permittee shall install, operate, and maintain a continuous monitoring system (CMS) to monitor and record the fuel consumption, the ratio of water to fuel being fired in the turbine, and the electrical output in MW. The system shall be accurate to within ± 5.0 percent and shall be approved by the Department. Quarterly calibrations shall be performed on the CMS.

[40 CFR 60.334(a); AC44-245399/PSD-FL-210, 0870003-003-AC]

E.4. Critical Fuel Parameters. The Permittee shall monitor sulfur content, nitrogen content, and the lower heating value of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

a. 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.

b. 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 Bureau of Air Regulation before they can be used to comply with 40 CFR 60.334(b).

[AC44-245399/PSD-FL-210, 40 CFR 60.334(b)(1)&(b)(2), 0870003-003-AC]

Test Methods & Procedures

E.5 Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 95 to 100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input versus inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 105 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report.

To demonstrate compliance with federal new source performance standard Subpart GG - Standards of performance Stationary Gas Turbines, the initial test shall be conducted at four load points and corrected to ISO conditions for comparison to the NSPS allowable. *Subsequent annual compliance tests conducted to establish compliance with NOx limits that are more stringent than the NSPS standard shall not require an ISO correction or testing at four load points; rather, the testing shall be done at capacity, as defined above.* However, when testing shows that NOx emissions exceed the standard when operating at capacity, the company shall recalibrate the NOx emission control system using emission testing at four loads as required in Subpart GG.

[Rule 62-4.070(3), F.A.C.]

E.6. Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Department (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Department's satisfaction that the affected facility is in compliance with the standard, or (3) approves shorter sampling times and smaller sample volumes when necessitated by process variables or

other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Department's authority to require testing under section 114 of the Act.

[40 CFR 60.8(b)(1), (4) & (5)]

E.7. Performance tests shall be conducted under such conditions as the Department shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Department such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c)].

E.8. The Utility Board of the City of Key West shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to such facility. This includes (a) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (b) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

2. Safe sampling platform(s).

3. Safe access to sampling platform(s).

4. Utilities for sampling and testing equipment.

[40 CFR 60.8(e)]

E.9. Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department's approval, be determined using the arithmetic mean of the results of the two other runs.

[40 CFR 60.8(f)].

E.10. Compliance tests shall be performed on the CT while firing oil. Testing of emissions shall be conducted at 95-100% of the manufacturer's rated heat input based on the average ambient air temperature during the test.

Annual compliance tests shall be performed on the CT if the No. 2 fuel was used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods in accordance with 40 CFR 60, Appendix A, as adopted by reference in Chapter 62-297, F.A.C.:

a. Reference Method 5B for PM.

- b. Reference Method 9 for VE.
- c. Reference Method 10 for CO.
- d. Reference Method 20 for NO_x.
- e. Other methods may be used for compliance testing after obtaining prior Departmental approval, in writing.

[Rule 62-297.310(7)(a)(4), F.A.C., AC44-2445399, 0870003-003-AC]

E.11. Sulfur Content. The Permittee shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: ASTM D 2880-96, or more recent version, shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92, or more recent versions, shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17): The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Department.
[40 CFR 60.335(d)]

E.12. To compute the nitrogen oxides emissions, the Permittee shall use analytical methods and procedures that are accurate to within +5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired.
[40 CFR 60.335(a)]

E.13. The NO_x emission rate shall be computed for each run using the following equation:

$$NO_x = (NO_{xO}) (Pr/Po)^{0.5} e^{19(Ho-0.00633)} (288^\circ K/Ta)^{1.53}$$

where:

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

NO_{xO} = observed NO_x concentration, PPM by volume.

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

P_o = observed combustor inlet absolute pressure at test, mm Hg.

H_o = observed humidity of ambient air, g H₂O/g air.

e = transcendental constant, 2.718.

T_a = ambient temperature, °K. [40 CFR 60.335(c)(1)]

E.14. The owner or operator may use the following as an alternative to the reference methods and procedures specified in 40 CFR 60.335:

Instead of using the equation in paragraph 40 CFR 60.335(c)(1), manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission

level measured by the performance test as provided in 40 CFR 60.8 to ISO standard day conditions. These factors are developed for each gas turbine model they manufacture in terms of combustion inlet pressure, ambient air pressure, ambient air humidity, and ambient air temperature. They shall be substantiated with data and must be approved for use by the Department before the initial performance test required by 40 CFR 60.8. Notices of approval of custom ambient condition correction factors will be published in the Federal Register.

[40 CFR 60.335(f)(1)]

E.15. The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with 40 CFR 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

[40 CFR 60.335(c)(2)]

E.16. Compliance with the allowable emission limiting standards given in Subsections B. and C. shall be determined by using EPA Reference Method 20 as described in 40 CFR 60, Appendix A (1996, version) adopted by reference in Rule 62-204.800, F.A.C. The span values shall be 300 PPM of nitrogen oxide and 21 percent oxygen. The NO_x emissions shall be determined 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. An annual compliance test shall be performed on the unit if operated for more than 400 hours in the preceding 12-month period.

[Rule 62-297.310, F.A.C. and 40 CFR 60.335(c)(3)]

E.17. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60 or other methods and procedures as specified in this permit, except as provided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph 40 CFR 60.335(f).

[40 CFR 60.335(b)]

E.18. (a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to 40 CFR 60, unless otherwise specified in an applicable subpart or by the Department. Appendix F is applicable December 4, 1987.

(b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under 40 CFR 60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's

written requirements or recommendations for installation, operation, and calibration of the device.

(c) If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he/she shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Department under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 40 CFR 60.8 and as described in 40 CFR 60.11(e)(5), shall furnish the Department two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 40 CFR 60.8 is conducted.

(2) Except as provided in 40 CFR 60.13(c)(1), the owner or operator of an affected facility shall furnish the Department within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

(d) (1) Permittee's of all continuous emission monitoring systems installed in accordance with the provisions of 40 CFR 60 shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

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

(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of 40 CFR 60 shall be used.

(g) When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Department. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

(h) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorder during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., PPM pollutant and percent O₂ or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

[Rule 62-296.800, F.A.C.; 40 CFR 60.13(a)-(h)].

E.19. After receipt and consideration of written application, the Department may approve alternatives to any monitoring procedures or requirements of 40 CFR 60 including, but not limited to the following:

(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by 40 CFR 60 would not provide accurate measurements due to liquid water or other interferences caused by substances with the effluent gases.

(2) Alternative monitoring requirements when the affected facility is infrequently operated.

(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.

(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(5) Alternative methods of converting pollutant concentration measurements to units of the standards.

(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.

(7) Alternatives to the ASTM test methods or sampling procedures specified by any subpart.

(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Department may require that such demonstration be performed for each affected facility.

(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities are released to the atmosphere through more than one point.

[Rule 62-296.800, F.A.C.; 40 CFR 60.13(i)].

Reporting and Recordkeeping Requirements

E.20. To determine compliance with the fuel oil firing heat input limitation, the Permittee shall maintain daily records of fuel oil consumption for the turbine and the heating value for the fuel. All records shall be maintained for a minimum of five years after the date of each record and shall be made available to representatives of the Department upon request.

[Rule 62-4.070(3)]

E.21. Excess Emissions Report. The Permittee shall record the occurrence and duration of any startup, shutdown, or malfunctions of the turbine and any malfunction of the air

pollution control equipment or CMS. Additionally, the Permittee shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C., and 40 CFR 60.7(b)]

E.22. Quarterly Report. The Permittee shall submit a quarterly excess emissions and monitoring systems performance report. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

1. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

2. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

3. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)]

E.23. Summary Report. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7(d) unless otherwise specified by the Department. One summary report form shall be submitted for each pollutant monitored.

1. If the total duration of excess emissions for the reporting period is less than one percent of the operating time for the reporting period and CMS downtime for the reporting period is less than five percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Department.

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

[40 CFR 60.7(d)]

E.24. Reporting Frequency.

(1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a

quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under 40 CFR 60 continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and

(iii) The Department does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Department in writing of his or her intention to make such a change and the Department does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Department may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Department to make a judgment about the source's potential for noncompliance in the future. If the Department disapproves the Permittee's request to reduce the frequency of reporting, the Department will notify the Permittee in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Department to the Permittee will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the Permittee shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the Permittee may again request approval from the Department to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)]

E.25. Records Retention. The Permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least

5 (five) years following the date of such measurements, maintenance, reports, and records.

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

Additional General Provisions - 40 CFR 60 Subpart A

E.26. Department Notification.

(a) The Permittee shall provide to the Department's South District office at least 15 days prior notice of any compliance or performance test, except as specified under other subparts, to afford the District office the opportunity to have an observer present. Test results shall be submitted to the District office no later than 45 days after completion of the test.

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

[40 CFR 60.8(d) and Rule 62-297.310(7)(a)9., F.A.C.]

Compliance with Standards and Maintenance Requirements

E.27. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 CFR 60, any alternative method that is approved by the Department, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

[40 CFR 60.11(b)].

E.28. The Permittee shall follow the manufacturer's instructions during periods of start-up, shutdown, malfunction, or load change to ensure that the best operational practices to minimize emissions will be adhered to and the duration of any excess emissions will be minimized. The instructions shall be kept on file at the plant site and made available for inspection upon request by the Department.

[40 CFR 60.11(d)]

E.29. Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in

compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
[40 CFR 60.11(g)].

E.30. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[40 CFR 60.12]

Monitoring Requirements

E.31. An alternative to the relative accuracy test specified in Performance Specification 2 of 40 CFR 60 Appendix B, may be requested as follows:

(1) An alternative to the reference method tests for determining relative accuracy is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Department to waive the relative accuracy test in section 7 of Performance Specification 2 and substitute the procedures in section 10 if the results of a performance test conducted according to the requirements in 40 CFR 60.8 of this subpart or other tests performed following the criteria in 40 CFR 60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Department to waive the relative accuracy test and substitute the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the relative accuracy test shall include a detailed

description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Department will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).

(2) The waiver of a CEMS relative accuracy test will be reviewed and may be rescinded at such time following successful completion of the alternative RA procedure that the CEMS data indicate the source emissions approaching the level of the applicable standard. The criterion for reviewing the waiver is the collection of CEMS

data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., 40 CFR 60.45(g)(2) and 40 CFR 60.45(g)(3), 40 CFR 60.73(e), and 40 CFR 60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of relative accuracy testing. If this criterion is exceeded, the owner or operator must notify the Department within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Department will review the notification and may rescind the waiver and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2. [Rule 62-296.800, F.A.C.; 40 CFR 60.13(j)].

Modifications

E.32. Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere. [Rule 62-296.800, F.A.C.; 40 CFR 60.14(a)].

E.33. Emission rate shall be expressed as kg/hr (lbs./hour) of any pollutant discharged into the atmosphere for which a standard is applicable. The Department shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Department to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Department's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Department's satisfaction that there are reasonable grounds to dispute the result obtained by the Department utilizing emission factors as referenced in 40 CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 appendix C of 40 CFR 60 shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such

conditions as the Department shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(b)].

E.34. The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of 40 CFR 60 any other facility within that source.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(c)].

E.35. The following shall not, by themselves, be considered modifications under 40 CFR 60:

(1) Maintenance, repair, and replacement which the Department determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the date any standard under 40 CFR 60 becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Department determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(e)].

E.36. Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of this section.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(f)].

E.37. Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(g)].

Section IV. Acid Rain Part

Operated by: Utility Board of the City of Key West
ORIS code: 6584

The following emissions units are regulated under the Acid Rain Program:

E.U.

<u>ID No.</u>	<u>Description</u>
001	Ralph Garcia Steam Plant [EPA ID #1][Retired]
005	8.8 MW Medium Speed Diesel Generator [Unit #1; EPA ID #D-1]
006	8.8 MW Medium Speed Diesel Generator [Unit #2; EPA ID #D-2]
007	23.5 MW Simple Cycle Combustion Turbine [CT-1]
008	19.77 MW Simple Cycle Combustion Turbine [CT-2]
009	19.77 MW Simple Cycle Combustion Turbine [CT-3]

1. The Utility Board of the City of Key West must comply with all the requirements and provisions as set forth in the applications listed below:

Ralph Garcia Steam Plant: "Retired Unit Exemption" DEP Form No. 62-210.900(1)(a)3., effective 01/01/98.

D-1, D-2, CT-1, CT-2, & CT-3: "New Unit Exemption" DEP Form No. 62-210.900(1)(a)2., effective 01/01/99 through 12/31/03.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C. 40 CFR 72]

2. The following table lists the Phase II sulfur dioxide allowances for the above units:

E.U. ID No.	EPA ID #	YEAR	2000	2001	2002	2003
001 (retired)	1	SO ₂ allowances, under Table 2 of 40 CFR 73	2550*	2550*	2550*	2550*
005, 006	D-1, D-2	SO ₂ allowances, under Table 2 of 40 CFR 73	99	99	99	99

*The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the US EPA under Table 2 of 40 CFR 73.]

3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
- b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- c. Allowances shall be accounted for under the Federal Acid Rain Program.
[Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]

4. Where an applicable requirement of the Act is more stringent than applicable regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.
[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, F.A.C., Definitions – Applicable Requirements.]

5. Retired Unit Exemption - Ralph Garcia. The designated representative of this acid rain unit applied for an exemption from the requirements of the Federal Acid Rain Program by submitting a completed and signed “Retired Unit Exemption” form (DEP Form No. 62-210.900(1)(a)3., F.A.C.) to the Department. The date of permanent retirement is January 1, 1998. The unit has been completely dismantled and has ceased operation.
[Rule 62-214.340(2), F.A.C.; and, 40 CFR 72.8.]

6. New Unit Exemption - D-1, D-2, CT-1, CT-2, & CT-3. The designated representative of this acid rain unit applied for an exemption from 40 CFR 72.1 through 72.6, and 40 CFR 72.10 through 72.13 of the Federal Acid Rain Program by submitting a completed and signed “New Unit Exemption” form (DEP Form No. 62-210.900(1)(a)2., F.A.C.) to the Department. The date of exemption is effective 01/01/99 through 12/31/03. This exemption may be renewed.
[Rule 62-214.340(2), F.A.C.; and, 40 CFR 72.7.]

7. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition No. 51., Appendix TV-3, Title V Conditions.}
[Rule 62-214.420(11), F.A.C.]

8. Comments, notes, and justifications: Stock Island has no Phase I allowances.

Acid Rain Attachments and Relevant Documents:

Ralph Garcia Steam Plant: “Retired Unit Exemption” DEP Form No. 62-210.900(1)(a)3., effective 01/01/98.

D-1, D-2, CT-1, CT-2, & CT-3: “New Unit Exemption” DEP Form No. 62-210.900(1)(a)2., effective 01/01/99 through 12/31/03.

UTILITY BOARD OF THE CITY OF KEY WEST

~~Scott Sheplak~~
Cindy
please handle
Scott
7/12

POST OFFICE DRAWER 6100
KEY WEST, FLORIDA 33041-6100



TELEPHONE: (305) 295-1000
www.kwcityelectric.com

June 23, 1999

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

RECEIVED

JUN 28 1999

BUREAU OF
AIR REGULATION

Re: **Change Request – Draft Title V Permit No. 0870003-001-AV**

Dear Mr. Sheplak:

The Draft Title V Permit received by City Electric System States in **Section III. Emissions Units and Conditions; Subsection A. Two Medium Speed Diesel Generators; Test Methods and Procedures; A.15**, that CO and Be shall be included in *annual* compliance testing.

In the previous permit (No. A044-207419) the two parameters required testing "*within one year prior to the expiration date of this permit*", not annually. The contractor conducting our compliance testing has informed us that testing for the two (CO and Be) would require a substantial increase in time and expense compared to the parameters required in permit # A044-207419.

Please accept this letter as a request to establish the same annual compliance test parameters in the Final Title V Permit as were contained in the previous permit.

Please contact me at (305)-295-1148 if more information is needed.

Sincerely,

UTILITY BOARD - CITY OF KEY WEST
CITY ELECTRIC SYSTEM
Larry J. Thompson, General Manager

J. Stone
Environmental Services Supervisor

Js/

cc:
L. Thompson, General Manager
R. Rodriguez, Assistant General Manager
C. Jansen, T, D & G Manager
File:PLI-258

titleVchange.doc

UTILITY BOARD MEMBERS:

Robert R. Padron, Chairman • Dr. Otha P. Cox, Vice-Chairman
Leonard H. Knowles, Member • Gayle Swofford, Member • Lou Hernandez, Member

Appendix H-1, Permit History/ID Number Changes

Utility Board of the City of Key West
Stock Island Power Plant

FINAL Permit No. 0870003-001-AV
Facility ID No. 0870003

Permit History

E.U.

<u>ID No</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issued</u>	<u>Expiration</u> <u>Date</u>	
001	Steam Turbine (EPA ID #1)	AO44-245479 AC44-61820	05/03/94 12/17/82	04/25/99 06/15/83	RETIRED January, 1998
002	Diesel Peaking Unit #1	AO44-175804	02/20/90	02/20/95	Now in E.U. 010
003	Diesel Peaking Unit #2	AO44-175804	02/20/90	02/20/95	Now in E.U. 010
004	Diesel Peaking Unit #3	AO44-175804	02/20/90	02/20/95	Now in E.U. 010
005 & 006	8.8 MW Medium Speed Diesel Generators D-1 & D-2	AO44-207419 AC44-221256/ PSD-FL-135 AC4452197/ PSD-FL-135	03/19/93 03/19/93 06/05/89	12/31/97 03/18/94 04/01/91	
007	23.5 MW Simple Cycle Combustion Turbine CT-1	AC44-245399/ PSD-FL-210	09/28/95	12/31/96	
008 & 009	19.8 MW Simple Cycle Combustion Turbines CT-2 & CT-3	0870003-003-AC & 0870003-004- AC	01/08/98 04/13/98	01/08/00 05/19/00	
010	Unregulated Emissions Units	0870003-001-AV	01/01/00	12/31/04	

ID Number Changes: From: Facility ID No. 52FTM440003; To: Facility ID No. 0870003
From: E.U. ID No. 002, 003, 004; To: E.U. ID No. 010; Note: 010 units are all unregulated units.

Notes: 1 - AO permits automatic extensions in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.
{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

1999



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Mr. Raymond Rodriguez
General Manager
Utility Board of the City of Key West
Stock Island Power Plant
P.O. Drawer 6100
Key West, Florida 33041-6100

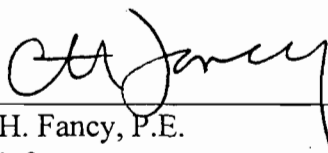
FINAL Permit No.: 0870003-001-AV

Enclosed is FINAL Permit Number 0870003-001-AV for the operation of the Stock Island Power Plant located at 6900 Front Street, Stock Island, Monroe County, issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the permitting authority in the Legal Office; 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 of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the permitting authority.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

for 
C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

"More Protection, Less Process"

Printed on recycled paper.

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 12/29/99 to the person(s) listed or as otherwise noted:

- Mr. Joe Stone, Environmental Services Supervisor, Stock Island Power Plant
- Mr. Carl Jansen, Jr., Designated Representative, Stock Island Power Plant
- Mr. Ivan L. Clark, P.E., R. W. Beck
- Mr. David Knowles, FDEP South District Office
- Mr. Jim Edds, FDEP Marathon Branch Office
- Ms. Gracy Danois, USEPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

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

Barbara J. Boutwell 12/29/99
(Clerk) (Date)

Cindy Phillips

STATEMENT OF BASIS

Utility Board of the City of Key West
Stock Island Power Plant
Facility ID No.: 0870003
Monroe County

Initial Title V Air Operation Permit
FINAL Permit No.: 0870003-001-AV

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

This facility consists of five regulated emission units with a total generating capacity of 80.7 MW. There are two regulated diesel generators, three simple cycle combustion turbines, and miscellaneous unregulated units. To reduce pollution, a combination of control techniques is used including water injection, ignition timing retardation, and low sulfur fuel oil. This facility has an Acid Rain Retired Unit Exemption (Ralph Garcia Steam Plant) and Phase II Acid Rain New Unit Exemptions (D-1, D-2, CT-1, CT-2, & CT-3). The Ralph Garcia Steam Plant [EPA ID #1] was retired January 1, 1998.

Emissions units 005 and 006 are each a 8.8 MW (nominal) electric Fairbanks Morse diesel generator (Model PC-2.6V) which burns No. 2 distillate fuel oil, and each has a maximum heat input rate of 85.4 million Btu per hour. Sulfur dioxide emissions are controlled by limiting the sulfur content of the No. 2 fuel oil to 0.05% by weight. Nitrogen oxides emissions are controlled by ignition timing retard and by limiting the hours operation. Visible emissions and NOx emissions are continuously monitored. Commercial operation commenced April 1, 1991. The Department has determined that the appropriate particulate matter testing frequency for the diesel generators is annually whenever fuel oil is used for more than 400 hours in the preceding year. This frequency is justified because the units 005 and 006 are uncontrolled and have documented low emissions in previous emissions tests while firing fuel oil. The applicant's historical PM test results show that the average results are well below the applicable standards of 8.5 lb/hr for each unit and 16 tpy for both units combined. The five-year average test results for 1995-1999 for these units are as follows:

	Each Unit (lb/hr)	Both Units Combined (tons/year)
Unit 005	2.67	-
Unit 006	2.84	-
Units 005 & 006	-	7.37

Emissions unit 007 is a General Electric (GE) Frame 5 model PG5341 CT equipped with water injection for fuel oil firing. It has a rated capacity of 23.5 MW at ISO conditions. The GE CT has a heat input of 312 MMBtu per hour (at 59° F) while burning oil. The CT is fired with No. 2 fuel oil with a sulfur content not to exceed 0.05 % by weight. NOx emissions are controlled by a water injection system. The water to fuel ratio is continuously monitored. This turbine, which began operation January 1, 1996, was tested for particulate matter in 1996. The particulate emissions were 6.2 lbs/hr, well below the limit of 18 lbs/hr. This unit operated only 23 hours in 1996, 114 hours in 1997, and 200 hours in 1998. The allowable hours of operation per year for this unit is 2,888.5 hours per year at full-load. Additional particulate matter testing has not been required because the unit has not fired fuel oil for more than 400 hours per year.

Emissions units 008 and 009 are two refurbished General Electric Model MS-5001R 19.77 MW combustion turbines. CT-2 had a startup date of June 1, 1998, and CT-3 had a startup date of August 1, 1998. These units were operated in 1998 for 4 hours and 5 hours, respectively, for testing purposes. The allowable hours of operation per year for both combustion turbines combined is 3740 hrs/yr.

The units 007, 008, and 009 are not affected by the Acid Rain Program, since they meet the requirements of 40 CFR 72.7 by serving a generator with less than 25 MW.

All emissions units at the Stock Island Power Plant are for peaking or emergency purposes only. This facility is used when the loads peak, usually during the summer, and when there are emergency situations such as hurricanes.

Also included in this permit are miscellaneous unregulated and insignificant emissions units and activities. Based on the initial Title V permit application received June 12, 1996, this facility is not a major source of hazardous air pollutants (HAPs).

Utility Board of the City of Key West
Stock Island Power Plant
Facility ID No. 0870003
Monroe County

Initial Title V Air Operation Permit
FINAL Permit No. 0870003-001-AV

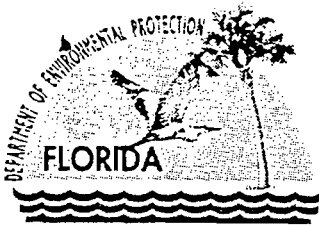
Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Section

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

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

December 28, 1999



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

Permittee:

Utility Board of the City of Key West
P.O. Drawer 6100
Key West, Florida 33041-6100

FINAL Permit No. 0870003-001-AV

Facility ID No. 0870003

SIC Nos. 49, 4911

Project: Initial Title V Air Operation Permit

This permit is for the operation of the Stock Island Power Plant. This facility is located at 6900 Front Street, Stock Island, Monroe County; UTM Coordinates: Zone 17, 425.65 km East and 2716.67 km North; Latitude: 24° 33' 49" North and Longitude: 81° 44' 03" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The Utility Board of the City of Key West is authorized to operate the Stock Island Power Plant as shown in the application and approved drawings, plans, and other documents, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units

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

APPENDIX TV-3, TITLE V CONDITIONS (Version Dated 4/30/99)

APPENDIX SS-1, STACK SAMPLING FACILITIES (Version dated 10/07/96)

TABLE 297.310-1, CALIBRATION SCHEDULE (Version Dated 10/07/96)

FIGURE 1 - SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM REPORT (version dated 7/96)

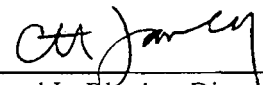
Acid Rain Retired Unit Exemption (Ralph Garcia Steam Plant)

Phase II Acid Rain New Unit Exemptions (D-1, D-2, CT-1, CT-2, & CT-3)

Effective Date: January 1, 2000

Renewal Application Due Date: July 5, 2004

Expiration Date: December 31, 2004


Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/clp/stw

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Section I. Facility Information

Subsection A. Facility Description

This facility consists of five regulated emission units with a total generating capacity of 80.7 MW. There are two regulated diesel generators, three simple cycle combustion turbines, and miscellaneous unregulated units. To reduce pollution, a combination of control techniques is used including water injection, ignition timing retardation, and low sulfur fuel oil. The Ralph Garcia Steam Plant [EPA ID #1] was retired January 1, 1998. Also included in this permit are insignificant emissions units and activities.

Based on the initial Title V permit application received June 12, 1996, this facility is not a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Units

E.U.

<u>ID No.</u>	<u>Brief Description</u>
005	8.8 MW Medium Speed Diesel Generator [Unit #1; EPA ID #D-1]
006	8.8 MW Medium Speed Diesel Generator [Unit #2; EPA ID #D-2]
007	23.5 MW Simple Cycle Combustion Turbine [CT-1]
008	19.77 MW Simple Cycle Combustion Turbine [CT-2]
009	19.77 MW Simple Cycle Combustion Turbine [CT-3]
010	Unregulated Emissions Units (See Appendix U-1.)

Emission units 002, 003, and 004 were moved to emissions unit 010.

Subsection C. Retired Acid Rain Unit

001	37 MW Ralph Garcia Steam Plant [EPA ID #1][Retired January 1998]
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Please reference the Permit No., Facility ID No., and appropriate Emissions Unit ID Nos. on all correspondence, test report submittals, applications, and other information.

Subsection D. Relevant Documents

The documents listed below are not a part of this permit; however they are specifically related to this permitting action.

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

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

Table 2-1, Summary of Compliance Requirements

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

Appendix H-1, Permit History/ID Number Transfers

These documents are on file with permitting authority:

Initial Title V Permit Application received June 12, 1996.

Letter received June 28, 1999, from Mr. Joe Stone, Environmental Services
Supervisor for Stock Island Power Plant.

Letter received November 15, 1999, from Mr. Joe Stone and Mr. Raymond
Rodriguez, General Manager, for Stock Island Power Plant.

Section II. Facility-wide Conditions

1. APPENDIX TV-3, TITLE V CONDITIONS (version dated April 30, 1999), is a part of this permit.

{Permitting note: APPENDIX TV-3, TITLE V CONDITIONS, is distributed to the Permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. **Not federally enforceable.** General Pollutant Emission Limiting Standards.

Objectionable Odor Prohibited. The Permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

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

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard.

Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.

[Rule 62-296.320(4)(b)1. & 4., F.A.C.]

{Permitting Note: Although the Permittee is not required to perform a visible emissions compliance test to demonstrate compliance with the facility-wide limitations annually or before renewal, if the Department believes that the general visible emissions standard is being violated, the Department may require that the owner or operator perform a visible emissions compliance test per Chapter 62-297.310(7)(b), Special Compliance Tests. In addition, Department personnel who are certified to perform visible emissions tests may determine compliance with the general visible emissions standard.}

4. Prevention of Accidental Releases (Section 112(r) of CAA). If required by 40 CFR 68, the Permittee shall submit to the implementing agency:

a. a risk management plan (RMP) when, and if, such requirement becomes applicable, and

b. certification forms and/or RMPs according to the promulgated rule schedule.

[40 CFR 68]

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

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

6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Exempt Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

7. **Not federally enforceable.** The Permittee shall take reasonable precautions to prevent emissions of unconfined particulate matter at this facility. These precautions include receiving delivery of fuel oil by barge rather than trucks, and using paved roads for the fuel trucks which deliver vehicle fuel. Additionally, watering will be used as needed to prevent emissions from unpaved areas.

[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received June 12, 1996]

8. The Permittee shall submit all compliance, annual operating reports and other correspondence required of this permit to the Department's South District and Marathon Branch offices:

Department of Environmental Protection
South District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida, 33901
Telephone: 941/332-6975
Fax: 941/332-6969

Department of Environmental Protection
Marathon Branch Office
2796 Overseas Highway, Suite 221
Marathon Florida, 33901
Telephone: 305/289-2310
Fax: 305/289-2314

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

United States Environmental Protection Agency
Region 4
Air, Pesticides, & Toxics Management Division
Air and EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155
Fax: 404/562-9163

{Permitting note: Condition no. 51 of Appendix TV-3, lists the necessary elements of a compliance certification required under 40 C.F.R. 70.6(c)(5)(iii).}

10. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.]

Section III. Emissions Units and Conditions

Subsection A. Two Medium Speed Diesel Generators

E.U.

ID No. Brief Description

005	8.8 MW Medium Speed Diesel Generator [Unit #1; EPA ID #D-1]
006	8.8 MW Medium Speed Diesel Generator [Unit #2; EPA ID #D-2]

Each of the two 8.8 MW (nominal) electric Fairbanks Morse diesel generators (Model PC-2.6V) burns No. 2 distillate fuel oil and has a maximum heat input rate of 85.4 million Btu per hour. Sulfur dioxide emissions are controlled by limiting the sulfur content of the No. 2 fuel oil to 0.05% by weight. Nitrogen oxides emissions are controlled by ignition timing retard and by limiting the hours operation. Visible emissions and NOx emissions are continuously monitored. Commercial operation commenced April 1, 1991. The units are exempt from acid rain regulations by the attached New Unit Exemptions, effective January 1, 1999 through December 31, 2003. {Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination dated 6/5/89, AO44-207419 & PSD-FL-135}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum heat input rate to each diesel generator shall not exceed 85.4 MMBtu per hour (606 gallons per hour). The sum total consumption of fuel oil for both diesel generators combined shall not exceed 2.27 million gallons in any consecutive 12-month period.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE) and AC44-207419/PSD-FL-135]

A.2. Emissions Unit Operating Rate Limitation During and After Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions 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.]

A.3. Methods of Operation - Fuels. The only fuel to be burned in this unit is new (virgin) No. 2 fuel oil. The sulfur content shall not exceed 0.05 percent by weight.

[Rules 62-213.440(1), F.A.C.; AC44-221256/PSD-FL-135; and Acid Rain Program New Unit Exemptions.]

A.4. Hours of Operation. For both units combined, the hours of operation shall not exceed a combined total of 3,740 full load equivalent engine hours in any consecutive 12-month period.

[Rule 62-212.400(6), F.A.C. and PSD-FL-135]

Emission Limitations and Standards

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

A.5. Oxides of Nitrogen. NO_x emissions shall not exceed any of the following limits:

- a. 160.9 pounds per hour from each engine;
- b. 6.0 grams per horsepower-hour from each engine;
- c. 300.9 tons in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

A.6. Sulfur Dioxide. SO₂ emissions shall not exceed either of the following limits:

- a. 43.6 pounds per hour from each engine;
- b. 81.6 tons in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

A.7.

a. **Particulate Matter.** PM/PM₁₀ emissions shall not exceed any of the following limits:

- a. 8.5 pounds per hour from each engine;
- b. 0.1 pound per million Btu heat input;
- c. 16.0 tons in any consecutive 12-month period for the combined sum total from both engines.

b. **Visible Emissions.** Visible emissions (VE) shall not exceed 20% opacity.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., AC44-221256 and PSD-FL-135]

A.8. Carbon Monoxide. CO emissions shall not exceed any of the following limits:

- a. 53.6 pounds per hour from each engine;
- b. 2.0 grams per horsepower-hour from each engine;
- c. 100.3 tons in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

A.9. Volatile Organic Compounds. VOC emissions shall not exceed any of the following limits:

- a. 26.8 pounds per hour from each engine;
- b. 1.0 grams per horsepower-hour from each engine;
- c. 50.1 tons in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

A.10. Beryllium (Be). Beryllium emissions shall not exceed 0.00054 pounds per hour from each engine and shall not exceed 2.0 pounds in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., AC44-221256]

A.11. Objectionable Odor. The Permittee shall not discharge air pollutants which cause or contribute to an objectionable odor.

[Rule 62-296.320(1)(a)2, F.A.C., AC44-221256]

Excess Emissions

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

A.12. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

A.13. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

Monitoring Requirements

A.14. The Permittee shall calibrate, maintain, and operate continuous monitoring equipment, in accordance with the manufacturer's instructions, to continuously monitor and record opacity and NOx emissions. The Permittee shall maintain a complete file of all measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; all continuous emissions monitoring system performance evaluations, all continuous emissions monitoring system or monitoring

device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required, recorded in an a permanent legible form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

Test Methods and Procedures

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any terms or conditions of this permit.}

A.15. The Permittee shall conduct a compliance test for each diesel generator on an *annual basis* for the following pollutants. Each compliance test shall be conducted in accordance with 40 CFR 60, Appendix A, using the method indicated.

- a) Oxides of Nitrogen (NO_x) - EPA Method 20.
- b) Sulfur Dioxide (SO₂) - EPA Method 6 or ASTM D 2880-71 for sulfur in oil.
- c) Visible Emissions - EPA Method 9.
- d) Particulate Matter (PM/PM₁₀) - EPA Method 5.

An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

[Rule 62-297.310(7)(a)4. & 5., F.A.C., AC44-152197]

A.16. The Permittee shall conduct a compliance test for each of the following pollutants *prior to obtaining a renewed operation permit*. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy this requirement. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of compliance test results for any emissions unit that, during the year prior to renewal: a) did not operate; or b) in the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours. Each compliance test shall be conducted in accordance with 40 CFR 60 Appendix A, using the method indicated.

- a) Carbon Monoxide (CO) – EPA Method 10.
- b) Beryllium (Be) – EPA Method 104.
- c) Volatile Organic Compounds (VOC) - EPA Method 25.

[Rule 62-297.310(7)(a)3., F.A.C., AC44-152197]

A.17. By this permit, annual emissions compliance testing for visible emissions and particulate matter is not required for these emissions units while burning liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

A.18. The specific conditions of Subsection D, Common Conditions I, apply to these emission units.

Reporting and Recordkeeping Requirements

A.19. In order to document compliance with the hours of operation limitation of specific condition A.4, the fuel oil consumption limit of specific condition A.1, and the annual NOx emission limit of specific condition A.5, the Permittee shall keep daily records of the hours of operation, the fuel oil consumption, and the NOx emissions. At a minimum, the records shall indicate:

- (a) the daily hours of operation for each individual diesel generator,
- (b) the daily hours of operation expressed as full load equivalent engine hours (both units combined);
- (c) the daily sum total fuel oil consumption in gallons for both units combined;
- (d) the daily sum total NOx emissions in pounds for both units combined;
- (e) a cumulative total hours of operation expressed as full load equivalent engine hours for the current month;
- (f) a cumulative sum total fuel oil consumed in gallons for the current month;
- (g) a cumulative sum total NOx emissions in tons for the current month;
- (h) a rolling cumulative total hours of operation expressed as full load equivalent engine hours for the previous 12 consecutive months;
- (i) a rolling cumulative sum total fuel oil consumed in gallons for the previous 12 months; and
- (j) a rolling cumulative sum total NOx emissions in tons for the previous 12 consecutive months.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

A.20. For each calendar quarter, the Permittee shall submit to the Department a written report of emissions in excess of the emission limiting standards as set forth in this permit. The report shall be postmarked by the 30th day following the end of each calendar quarter. The report shall include at least the following information:

1. The quarterly hours of operation for each individual diesel generator.
2. The magnitude of excess emissions, any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
3. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions.
4. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.
5. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

A.21. In order to document compliance with the hourly SO₂ emission limit of specific condition A.6 and the fuel sulfur limit of specific condition A.3, the Permittee shall keep records of the as-fired fuel sulfur content, in percent by weight. For each shipment of fuel oil, the sulfur content shall be based on either vendor provided analysis or other analysis using ASTM D2622-94, ASTM D4294-90 (95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or the latest editions). The records shall be maintained for a minimum of five years and shall be made available to the Department upon request.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

Source Commitments

A.22. If the Permittee requests relaxation of any federally enforceable limits for these units, then the Department will determine whether the NSR requirements of Rule 62-212.400, F.A.C. shall apply, as though the construction permit AC44-221256 had not been issued.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

A.23. Best Available Control Technology (BACT) will be re-evaluated if the Permittee requests an increase in or exceeds the permitted hours of operation. Selective Catalytic Reduction for NO_x control will be required at a minimum for BACT if deemed technologically feasible. In no event shall the BACT control installation and compliance testing occur later than 30 months from the date that the Permittee requested to exceed the permitted hours of operation or actually exceeded the permitted hours of operation.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

A.24. The three existing 16.5 MW steam units at the Key West Plant shall not operate.

[AC44-221256/PSD-FL-135 and AC44-152197]

Subsection B. 23.5 MW Combustion Turbine

E.U. Brief Description

ID No.

007 23.5 MW Simple Cycle Combustion Turbine [CT-1]

Emissions unit 007 is a General Electric (GE) Frame 5 model PG5341 CT equipped with water injection for fuel oil firing. It has a rated capacity of 23.5 MW at ISO conditions. The GE CT has a heat input of 312 MMBtu per hour (at 59° F) while burning oil. The CT is fired with No. 2 fuel oil with a sulfur content not to exceed 0.05 % by weight. NOx emissions are controlled by a water injection system. The water to fuel ratio is continuously monitored. This turbine began operation January 1, 1996.

{Permitting notes: This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C.; NSPS - 40 CFR 60 Subpart A; Rule 212.400, F.A.C., Prevention of Significant Deterioration; PSD-FL-210; and AC44-245399. The unit is not affected by the Acid Rain Program, since it meets the requirements of 40 CFR 72.7 by serving a generator with less than 25 MW.}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum heat input to the GE combustion turbine (CT) at an ambient temperature of 59° F shall not exceed 312 MMBtu/hr while firing fuel oil. Heat input may vary depending on ambient conditions and the CT's characteristics. The approved manufacturer's curves shall be used to establish heat input rates over a range of temperatures for the purpose of compliance determination.

[Rule 62-210.200, F.A.C., AC44-245399/PSD-FL-210]

B.2. Methods of Operation - Fuels. The only fuel to be burned in this unit is new No. 2 fuel oil. The sulfur content shall not exceed 0.050 percent by weight.

[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C., AC44-245399/PSD-FL-210]

B.3. Hours of Operation/Fuel Consumption. The maximum No. 2 fuel oil consumption allowed to be burned in the CT is 7.1 million gallons per year, which is equivalent to 2,888.5 hours per year at full-load; the CT may operate for more than this if operating at part-load.

[Rule 62-212.500(56), F.A.C., AC44-245399, PSD-FL-210]

Emission Limitations and Standards

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

B.4. Oxides of Nitrogen. NO_x emissions shall not exceed any of the following limits:

a. Nitrogen oxides emissions, expressed as NO_x, shall not exceed:

$$STD = 0.0075 (14.4)/Y + F$$

where:

STD = allowable NO_x 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 = NO_x emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(3).

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

Fuel-bound nitrogen (% by weight)	F (NO _x % 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. 75 ppmvd, based on a 1-hour average at 15% O₂;

c. 96 lbs./hour, based on a 1-hour average at 15% O₂;

d. 138 TPY.

[AC44-245399/PSD-FL-210, 40 CFR 60.332]

B.5. Sulfur Dioxide. SO₂ emissions shall be controlled by limiting the sulfur content of the fuel to a maximum of 0.05 percent by weight.

[AC44-245399/PSD-FL-210, 40 CFR 60.333]

B.6. Particulate Matter/PM₁₀. PM/PM₁₀ emissions shall be limited to 18 lbs./hour, based on a 1-hour average; 43 TPY.

[AC44-245399, PSD-FL-210]

B.7. Carbon Monoxide. CO shall be limited to 20 PPM at 100% load, and 136 PPM at 50% load; 64 lbs. per hour, based on a 1-hour average; 152 TPY.

[AC44-245399/PSD-FL-210]

B.8. Visible Emissions. Visible emissions shall be limited to 20 percent opacity.

[AC44-245399/PSD-FL-210]

Excess Emissions, Monitoring Requirements, and Test Methods & Procedures, and Reporting & Recordkeeping Requirements

B.9. Two copies of the results of the emission tests for the pollutants listed in conditions B.4. through B.7. shall be submitted within forty-five days of the last sampling run to the South District office in Ft. Myers. All reports shall be in a format consistent with and shall include the information in accordance with Rule 62-297.310 (8), F.A.C.

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

B.10. The specific conditions of Subsection D, Common Conditions I, and Subsection E, Common Conditions II, apply to these emissions units.

Subsection C. 19.77 MW Combustion Turbines

<u>E.U. ID No.</u>	<u>Brief Description</u>
008	19.77 MW Simple Cycle Combustion Turbine [CT-2]
009	19.77 MW Simple Cycle Combustion Turbine [CT-3]

These emissions units are two refurbished General Electric Model MS-5001R 19.77 MW combustion turbines. CT-2 had a startup date of June 1, 1998, while CT-3 had a startup date of August 1, 1998.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required; NSPS - 40 CFR 60, Subparts A (General Provisions) and GG, (Standards of Performance for Stationary Gas Turbines), adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C.; Rule 212.400, F.A.C., Prevention of Significant Deterioration; and AC0870003-003, issued January 8, 1998. The units are not affected by the Acid Rain Program, since they meet the requirements of 40 CFR 72.7 by serving a generator with less than 25 MW.}

General Provisions

Notification and Record Keeping

C.1. A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c) shall be postmarked not less than 30 days prior to such date. The notification shall be sent to the Department's South District Office and Marathon Branch Office.

[40 CFR 60.7(a)(5)]

C.2. When it has been demonstrated that these units meet the emission limitations established in permit AC-0870003-003, a properly signed and sealed certification from the permittee's Professional Engineer shall be submitted to the offices listed in C.1. stating that 1) the construction of CT-2 and CT-3 was completed in accordance with permit AC-870003-003 and, 2) the units have been tested and are in compliance with the terms and conditions contained within permit AC-870003-003.

[Rules 62-212.400(7)(b) and 62-213.420(1)(a)5., F.A.C., AC-870003-003]

Performance Tests

C.3. Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup, the Permittee shall conduct performance test(s) and furnish the offices listed in C.1. a written report of the results of such performance test(s).

[40 CFR 60.8(a)] {Permitting note: See Subsection E. for additional requirements.}

Essential Potential to Emit (PTE) Parameters

C.4. Hours of Operation. Each emission unit is allowed to operate 4,000 hours per year. The combined operation of both units shall also be limited to 4,000 hours per year. The facility is required to keep daily records of the operating hours.
[AC-870003-003].

C.5. Method of Operation - Fuels. Only No. 2 fuel oil can be fired in the combustion turbines. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight.
[AC-870003-003]

C.6. Permitted Capacity. The maximum heat input rate to each combustion turbine shall not exceed 305 million Btu per hour (MMBtu/hr).
[AC-870003-003]

C.7. Fuel Consumption. The maximum No. 2 fuel oil consumption allowed to be burned in either emission unit No. 008 or emission unit No. 009 is 8,840,000 gallons per year, which is equivalent to 4,000 hours per year of operation at full load. The combined fuel oil consumption for both units shall be limited to 8,840,000 gallons per year.
[AC-870003-003]

Emission Limitations and Standards

{Note: The emission limits of LB/hr apply to each unit, while the TPY limit apply to each unit individually and both units collectively.}

C.8. Oxides of Nitrogen. For each turbine, NO_x emissions shall not exceed any of the following limits:

a. Nitrogen oxides emissions, expressed as NO_x, shall not exceed:

$$STD = 0.0075(14.4)/Y + F$$

where:

STD = allowable NO_x 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 = NO_x emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(3).

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

Fuel-bound nitrogen (% bv weight)	F (NO _x % 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. 75 ppmvd, based on a 1-hour average at 15% O₂; and
- c. 93.8 lb./hour, based on a 1-hour average at 15% O₂; and 40 degrees F from each turbine.
- d. 172 TPY, based on an average hourly concentration of 86 pounds per hour at 85 degrees F ambient temperature from both turbines combined.
- e. no more than 4,000 hours per year of operation, from either or both turbines combined.
[40 CFR 60.332, AC-870003-003]

C.9. Sulfur Dioxide. For each turbine, SO₂ emissions shall be controlled by limiting the sulfur content of the fuel to a maximum of 0.05 percent by weight.
[40 CFR 60.333, AC-870003-003]

C.10. Particulate Matter/PM₁₀. For each turbine, PM/PM₁₀ emissions shall be limited to 16.6 lb./hour, based on a 1-hour average; PM and PM₁₀ from both turbines combined shall be limited to 55 TPY and 45 TPY, respectively.
[AC-870003-003]

C.11. Carbon Monoxide. For each turbine, CO shall be limited to 25.2 lb./hour, based on a 1-hour average; and from both turbines combined, 101 TPY.
[AC-870003-003]

C.12. Visible Emissions. Visible emissions shall be limited to 20 percent opacity.
[AC-870003-003]

Excess Emissions, Monitoring Requirements, Test Methods & Procedures, and Reporting & Recordkeeping Requirements

C.13. Two copies of the results of the emission tests for the pollutants listed in conditions C.8. through C.11. shall be submitted within forty-five days of the last sampling run to the South District office in Ft. Myers. All reports shall be in a format consistent with and shall include the information in accordance with Rule 62-297.310 (8), F.A.C.
[Rule 62-297.310(8), F.A.C.]

C.14. The specific conditions of Subsection D, Common Conditions I, and Subsection E, Common Conditions II, apply to these emissions units.

Subsection D. Common Conditions I

The following conditions apply to all emissions units listed in Section III, Subsections A., B., and C., of this permit.

Test Methods & Procedures

D.1. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

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

D.2. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

D.3. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. **Opacity Compliance Tests.** When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

Exceptions to these requirements are as follows:

- a. (not applicable)
 - b. (not applicable)
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1. (See attachment.)
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

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

D.4. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

D.5. Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

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

Subsection E. Common Conditions II

The following conditions apply only to the Combustion Turbines listed in listed in Section III, Subsections B. and C. of this permit.

Excess Emissions

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

E.1. Excess emissions from the CT resulting from start-up, shutdown, malfunction, or load change shall be acceptable providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for a longer duration.

[AC44-245399/PSD-FL-210, 0870003-003-AC]

E.2. Excess Emissions Defined. For the purpose of reports required under 40 CFR 60.7(c) (see specific condition C.24.), periods of excess emissions that shall be reported are defined as follows:

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

b. *Sulfur dioxide.* Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.05 percent.

[40 CFR 60.334(c)(1)&(c)(2), 0870003-003-AC]

Monitoring Requirements

E.3. CMS Requirements. The Permittee shall install, operate, and maintain a continuous monitoring system (CMS) to monitor and record the fuel consumption, the ratio of water to fuel being fired in the turbine, and the electrical output in MW. The system shall be accurate to within ± 5.0 percent and shall be approved by the Department. Quarterly calibrations shall be performed on the CMS.

[40 CFR 60.334(a); AC44-245399/PSD-FL-210, 0870003-003-AC]

E.4. Critical Fuel Parameters. The Permittee shall monitor sulfur content, nitrogen content, and the lower heating value of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

a. 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.

b. 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 Bureau of Air Regulation before they can be used to comply with 40 CFR 60.334(b).

[AC44-245399/PSD-FL-210, 40 CFR 60.334(b)(1)&(b)(2), 0870003-003-AC]

Test Methods & Procedures

E.5 Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 95 to 100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input versus inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 105 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report.

To demonstrate compliance with federal new source performance standard Subpart GG - Standards of performance Stationary Gas Turbines, the initial test shall be conducted at four load points and corrected to ISO conditions for comparison to the NSPS allowable. *Subsequent annual compliance tests conducted to establish compliance with NOx limits that are more stringent than the NSPS standard shall not require an ISO correction or testing at four load points; rather, the testing shall be done at capacity, as defined above.* However, when testing shows that NOx emissions exceed the standard when operating at capacity, the company shall recalibrate the NOx emission control system using emission testing at four loads as required in Subpart GG.

[Rule 62-4.070(3), F.A.C.]

E.6. Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Department (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Department's satisfaction that the affected facility is in compliance with the standard, or (3) approves shorter sampling times and smaller sample volumes when necessitated by process variables or

other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Department's authority to require testing under section 114 of the Act.

[40 CFR 60.8(b)(1), (4) & (5)]

E.7. Performance tests shall be conducted under such conditions as the Department shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Department such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c)].

E.8. The Utility Board of the City of Key West shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to such facility. This includes (a) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (b) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
2. Safe sampling platform(s).
3. Safe access to sampling platform(s).
4. Utilities for sampling and testing equipment.

[40 CFR 60.8(e)]

E.9. Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department's approval, be determined using the arithmetic mean of the results of the two other runs.

[40 CFR 60.8(f)].

E.10. Compliance tests shall be performed on the CT while firing oil. Testing of emissions shall be conducted at 95-100% of the manufacturer's rated heat input based on the average ambient air temperature during the test.

Annual compliance tests shall be performed on the CT if the No. 2 fuel was used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using

EPA reference methods in accordance with 40 CFR 60, Appendix A, as adopted by reference in Chapter 62-297, F.A.C.:

- a. Reference Method 5B for PM.
- b. Reference Method 9 for VE.
- c. Reference Method 10 for CO.
- d. Reference Method 20 for NO_x.
- e. Other methods may be used for compliance testing after obtaining prior Departmental approval, in writing.

[Rule 62-297.310(7)(a)(4), F.A.C., AC44-2445399, 0870003-003-AC]

E.11. Sulfur Content. The Permittee shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: ASTM D 2880-96, or more recent version, shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92, or more recent versions, shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Department. [40 CFR 60.335(d)]

E.12. To compute the nitrogen oxides emissions, the Permittee shall use analytical methods and procedures that are accurate to within +5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired. [40 CFR 60.335(a)]

E.13. The NO_x emission rate shall be computed for each run using the following equation:

$$NO_x = (NO_{xO}) (P_r/P_o)^{0.5} e^{19(H_o-0.00633)} (288^\circ K/T_a)^{1.53}$$

where:

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

NO_{xO} = observed NO_x concentration, PPM by volume.

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

P_o = observed combustor inlet absolute pressure at test, mm Hg.

H_o = observed humidity of ambient air, g H₂O/g air.

e = transcendental constant, 2.718.

T_a = ambient temperature, °K. [40 CFR 60.335(c)(1)]

1. : Compliance with the allowable emission limiting standards for NO_x given in...

E.14. The owner or operator may use the following as an alternative to the reference methods and procedures specified in 40 CFR 60.335:

Instead of using the equation in paragraph 40 CFR 60.335(c)(1), manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in 40 CFR 60.8 to ISO standard day conditions. These factors are developed for each gas turbine model they manufacture in terms of combustion inlet pressure, ambient air pressure, ambient air humidity, and ambient air temperature. They shall be substantiated with data and must be approved for use by the Department before the initial performance test required by 40 CFR 60.8. Notices of approval of custom ambient condition correction factors will be published in the Federal Register.

[40 CFR 60.335(f)(1)]

E.15. The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with 40 CFR 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer:

[40 CFR 60.335(c)(2)]

E.16. Compliance with the allowable emission limiting standards for NO_x given in Subsections B. and C. shall be determined by using EPA Reference Method 20 as described in 40 CFR 60, Appendix A (1996, version) adopted by reference in Rule 62-204.800, F.A.C. The span values shall be 300 PPM of nitrogen oxide and 21 percent oxygen. The NO_x emissions shall be determined 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. An annual compliance test shall be performed on the unit if operated for more than 400 hours in the preceding 12-month period.

[Rule 62-297.310, F.A.C. and 40 CFR 60.335(c)(3)]

E.17. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60 or other methods and procedures as specified in this permit, except as provided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph 40 CFR 60.335(f).

[40 CFR 60.335(b)]

E.18. (a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to 40

CFR 60, unless otherwise specified in an applicable subpart or by the Department. Appendix F is applicable December 4, 1987.

(b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under 40 CFR 60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

(c) If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he/she shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Department under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 40 CFR 60.8 and as described in 40 CFR 60.11(e)(5), shall furnish the Department two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 40 CFR 60.8 is conducted.

(2) Except as provided in 40 CFR 60.13(c)(1), the owner or operator of an affected facility shall furnish the Department within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

(d) (1) Permittee's of all continuous emission monitoring systems installed in accordance with the provisions of 40 CFR 60 shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Department, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and upscale (span) opacity condition using a certified neutral density

filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of 40 CFR 60 shall be used.

(g) When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Department. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

(h) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorder during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., PPM pollutant and percent O₂ or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same

number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).
[Rule 62-296.800, F.A.C.; 40 CFR 60.13(a)-(h)].

E.19. After receipt and consideration of written application, the Department may approve alternatives to any monitoring procedures or requirements of 40 CFR 60 including, but not limited to the following:

(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by 40 CFR 60 would not provide accurate measurements due to liquid water or other interferences caused by substances with the effluent gases.

(2) Alternative monitoring requirements when the affected facility is infrequently operated.

(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.

(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(5) Alternative methods of converting pollutant concentration measurements to units of the standards.

(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.

(7) Alternatives to the ASTM test methods or sampling procedures specified by any subpart.

(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Department may require that such demonstration be performed for each affected facility.

(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities are released to the atmosphere through more than one point.

[Rule 62-296.800, F.A.C.; 40 CFR 60.13(i)].

Reporting and Recordkeeping Requirements

E.20. To determine compliance with the fuel oil firing heat input limitation, the Permittee shall maintain daily records of fuel oil consumption for the turbine and the heating value for the fuel. All records shall be maintained for a minimum of five years after the date of each record and shall be made available to representatives of the Department upon request.

[Rule 62-4.070(3)]

E.21. Excess Emissions Report. The Permittee shall record the occurrence and duration of any startup, shutdown, or malfunctions of the turbine and any malfunction of the air pollution control equipment or CMS. Additionally, the Permittee shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C., and 40 CFR 60.7(b)]

E.22. Quarterly Report. The Permittee shall submit a quarterly excess emissions and monitoring systems performance report. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

1. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

2. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

3. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)]

E.23. Summary Report. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7(d) unless otherwise specified by the Department. One summary report form shall be submitted for each pollutant monitored.

1. If the total duration of excess emissions for the reporting period is less than one percent of the operating time for the reporting period and CMS downtime for the reporting period is less than five percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Department.

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

[40 CFR 60.7(d)]

E.24. Reporting Frequency.

- (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess

emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under 40 CFR 60 continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and

(iii) The Department does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Department in writing of his or her intention to make such a change and the Department does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Department may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Department to make a judgment about the source's potential for noncompliance in the future. If the Department disapproves the Permittee's request to reduce the frequency of reporting, the Department will notify the Permittee in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Department to the Permittee will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the Permittee shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the Permittee may again request approval from the Department to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)]

E.25. Records Retention. The Permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least

5 (five) years following the date of such measurements, maintenance, reports, and records.

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

Additional General Provisions - 40 CFR 60 Subpart A

E.26. Department Notification.

(a) The Permittee shall provide to the Department's South District office at least 15 days prior notice of any compliance or performance test, except as specified under other subparts, to afford the District office the opportunity to have an observer present. Test results shall be submitted to the District office no later than 45 days after completion of the test.

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

[40 CFR 60.8(d) and Rule 62-297.310(7)(a)9., F.A.C.]

Compliance with Standards and Maintenance Requirements

E.27. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 CFR 60, any alternative method that is approved by the Department, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

[40 CFR 60.11(b)].

E.28. The Permittee shall follow the manufacturer's instructions during periods of start-up, shutdown, malfunction, or load change to ensure that the best operational practices to minimize emissions will be adhered to and the duration of any excess emissions will be minimized. The instructions shall be kept on file at the plant site and made available for inspection upon request by the Department.

[40 CFR 60.11(d)]

E.29. Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in

compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
[40 CFR 60.11(g)].

E.30. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[40 CFR 60.12]

Monitoring Requirements

E.31. An alternative to the relative accuracy test specified in Performance Specification 2 of 40 CFR 60 Appendix B, may be requested as follows:

(1) An alternative to the reference method tests for determining relative accuracy is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Department to waive the relative accuracy test in section 7 of Performance Specification 2 and substitute the procedures in section 10 if the results of a performance test conducted according to the requirements in 40 CFR 60.8 of this subpart or other tests performed following the criteria in 40 CFR 60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Department to waive the relative accuracy test and substitute the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the relative accuracy test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Department will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).

(2) The waiver of a CEMS relative accuracy test will be reviewed and may be rescinded at such time following successful completion of the alternative RA procedure that the CEMS data indicate the source emissions approaching the level of the applicable standard. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven,

consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., 40 CFR 60.45(g)(2) and 40 CFR 60.45(g)(3), 40 CFR 60.73(e), and 40 CFR 60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of relative accuracy testing. If this criterion is exceeded, the owner or operator must notify the Department within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Department will review the notification and may rescind the waiver and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2.

[Rule 62-296.800, F.A.C.; 40 CFR 60.13(j)].

Modifications

E.32. Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(a)].

E.33. Emission rate shall be expressed as kg/hr (lbs./hour) of any pollutant discharged into the atmosphere for which a standard is applicable. The Department shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Department to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Department's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Department's satisfaction that there are reasonable grounds to dispute the result obtained by the Department utilizing emission factors as referenced in 40 CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 appendix C of 40 CFR 60 shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Department shall specify to the owner or operator based on representative performance of

the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(b)].

E.34. The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of 40 CFR 60 any other facility within that source.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(c)].

E.35. The following shall not, by themselves, be considered modifications under 40 CFR 60:

(1) Maintenance, repair, and replacement which the Department determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the date any standard under 40 CFR 60 becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Department determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(e)].

E.36. Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of this section.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(f)].

E.37. Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(g)].

Section IV. Acid Rain Part

Operated by: Utility Board of the City of Key West
ORIS code: 6584

The following emissions units are regulated under the Acid Rain Program:

E.U.

ID No.	Description
001	Ralph Garcia Steam Plant [EPA ID #1][Retired]
005	8.8 MW Medium Speed Diesel Generator [Unit #1; EPA ID #D-1]
006	8.8 MW Medium Speed Diesel Generator [Unit #2; EPA ID #D-2]
007	23.5 MW Simple Cycle Combustion Turbine [CT-1]
008	19.77 MW Simple Cycle Combustion Turbine [CT-2]
009	19.77 MW Simple Cycle Combustion Turbine [CT-3]

1. The Utility Board of the City of Key West must comply with all the requirements and provisions as set forth in the applications listed below:

Ralph Garcia Steam Plant: "Retired Unit Exemption" DEP Form No. 62-210.900(1)(a)3., effective 01/01/98.

D-1, D-2, CT-1, CT-2, & CT-3: "New Unit Exemption" DEP Form No. 62-210.900(1)(a)2., effective 01/01/99 through 12/31/03.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C. 40 CFR 72]

2. The following table lists the Phase II sulfur dioxide allowances for the above units:

E.U. ID No.	EPA ID #	YEAR	2000	2001	2002	2003
001 (retired)	1	SO ₂ allowances, under Table 2 of 40 CFR 73	2550*	2550*	2550*	2550*
005, 006	D-1, D-2	SO ₂ allowances, under Table 2 of 40 CFR 73	99	99	99	99

*The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the US EPA under Table 2 of 40 CFR 73.]

3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
- b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- c. Allowances shall be accounted for under the Federal Acid Rain Program.
[Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]

4. Where an applicable requirement of the Act is more stringent than applicable regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.
[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, F.A.C., Definitions – Applicable Requirements.]

5. Retired Unit Exemption - Ralph Garcia. The designated representative of this acid rain unit applied for an exemption from the requirements of the Federal Acid Rain Program by submitting a completed and signed “Retired Unit Exemption” form (DEP Form No. 62-210.900(1)(a)3., F.A.C.) to the Department. The date of permanent retirement is January 1, 1998. The unit has been completely dismantled and has ceased operation.
[Rule 62-214.340(2), F.A.C.; and, 40 CFR 72.8.]

6. New Unit Exemption - D-1, D-2, CT-1, CT-2, & CT-3. The designated representative of this acid rain unit applied for an exemption from 40 CFR 72.1 through 72.6, and 40 CFR 72.10 through 72.13 of the Federal Acid Rain Program by submitting a completed and signed “New Unit Exemption” form (DEP Form No. 62-210.900(1)(a)2., F.A.C.) to the Department. The date of exemption is effective 01/01/99 through 12/31/03. This exemption may be renewed.
[Rule 62-214.340(2), F.A.C.; and, 40 CFR 72.7.]

7. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition No. 51., Appendix TV-3, Title V Conditions.}
[Rule 62-214.420(11), F.A.C.]

8. Comments, notes, and justifications: Stock Island has no Phase I allowances.

Acid Rain Attachments and Relevant Documents:

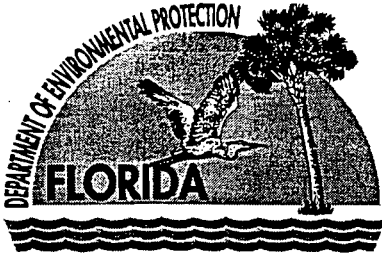
Ralph Garcia Steam Plant: “Retired Unit Exemption” DEP Form No. 62-210.900(1)(a)3., effective 01/01/98.

D-1, D-2, CT-1, CT-2, & CT-3: “New Unit Exemption” DEP Form No. 62-210.900(1)(a)2., effective 01/01/99 through 12/31/03.

FAX TO: JOE STONE

KEY WEST UTILITIES

305 295 1195



Florida
Department of
Environmental Protection

Jeb Bush
Governor

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

David Struhs
Secretary

F A X T R A N S M I T T A L S H E E T

DATE: 12/21/99
TO: Joe Stone
PHONE: _____

FAX: 305-295-1145

FROM: Cindy Phillips
Division of Air Resources Management

PHONE: 850-921-9534
FAX: 850.922.6979

RE: _____
CC: _____

Total number of pages including cover sheet: 5

Message

If there are any problems with this fax transmittal, please call the above phone number.

Date 12/17/99

TO: Gracy R. Danois, Environmental Engineer
Operating Source Section, ARTB
USEPA Region 4

FROM: Cindy L. Phillips, P.E.
Title III/V Section
Bureau of Air Regulation
Florida Department of Environmental Protection

RE: Utility Board of the City of Key West – Stock Island Power Plant
Proposed Title V Permit No. 0870003-001-AV
Response to Initial Comments

This is a response to EPA's initial comments, dated December 9, 1999, on the proposed Title V permit for Utility Board of the City of Key West – Stock Island Power Plant.

I. Significant Comments

1. Applicable Requirements - PSD-FL-135 Specific Condition 7 does not appear to have been incorporated into the title V permit for the 8.8 MW medium speed diesel generators (units 005 & 006), which are covered under subsection III.A. The "visible emission limit of 20%" for these units must be included the title V permit.

Response: The default visible emission limit as listed in the TV-3 conditions is 20%. However, a 20% limit will also be added in Subsection A specifically for units 005 and 006.

2. Periodic Monitoring: The permit does not contain adequate periodic monitoring for particulate matter emissions from units 005, 006, 007, 008 and 009. Although conditions A.15 and E.10 require that compliance tests for particulate matter be conducted, testing once per year if the units operate more than 400 hours is not sufficient to provide a reasonable assurance of compliance with emission limits. All Title V permits must contain monitoring that is sufficient to assure compliance with the applicable permit requirements. In particular, 40 C.F.R. Part 70.6 (a)(3)(B) requires that permits include periodic monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable emission limits. In addition to demonstrating compliance, a system of periodic monitoring will also provide the source with an indication of their emission unit's performance, so that periods of excess emissions and violations of the emission limits can be minimized or avoided. Therefore, the permit should include a periodic monitoring scheme that will provide data which is representative of the source's actual performance.

One option for these units, which are uncontrolled for particulate matter, would be for the permit to require the source to conduct more frequent testing or to include a technical demonstration in the statement of basis explaining why the State has chosen not to require any additional particulate matter testing. The demonstration would need to identify the rationale for basing the compliance certification on data from a test performed once a year.

Another option would be to address particulate emissions through expanded opacity monitoring. The permit indicates that units 005 and 006 are equipped with COMs to monitor opacity. Therefore, the facility could use the opacity data as an indicator of particulate emissions. In order to adequately use opacity as an indicator of particulate emissions, the facility should conduct a performance test to establish an opacity threshold that would guarantee that particulate emissions remain within the specified limit. COM data could then be used for periodic monitoring of particulate matter, such that visible emissions which would continue to remain below the opacity threshold would indicate compliance with the particulate matter limit. If the opacity threshold was exceeded, then a performance test for particulate matter would be required.

Response

The Stock Island Plant has regularly met the particulate standard for the diesel generators, Units 005 and 006, for 5 years. In addition, the FAC provides that an annual compliance test is not required for particulate matter emissions if liquid fuel is not burned for more than 400 hours per federal fiscal year. For Units 005 and 006 the Department suggests that the monitoring frequency be related to past compliance testing results as outlined in FDEP's periodic monitoring examples document. Accordingly, the following language has been added to the statement of basis: "The Department has determined that the appropriate particulate matter testing frequency for the diesel generators is annually whenever fuel oil is used for more than 400 hours in the preceding year. This frequency is justified because the units 005 and 006 are uncontrolled and have documented low emissions in previous emissions tests while firing fuel oil. The applicant's historical PM test results show that the average results are well below the applicable standards of 8.5 lb/hr for each unit and 16 tpy for both units combined. The five-year average test results for 1995-1999 for these units are as follows:

	Each Unit (lb/hr)	Both Units Combined (tons/year)
Unit 005	2.67	-
Unit 006	2.84	-
Units 005 & 006	-	7.37

Emissions unit 007 is a combustion turbine with a rated capacity of 23.5 MW. The CT is fired with No. 2 fuel oil with a sulfur content not to exceed 0.05 % by weight. This turbine, which began operation January 1, 1996, was tested for particulate matter in 1996. The particulate emissions were 6.2 lbs/hr, well below the limit of 18 lbs/hr. This unit operated only 23 hours in 1996, 114 hours in 1997, and 200 hours in 1998. The allowable hours of operation per year for this unit is 2,888.5 hours per year at full-load. Additional particulate matter ^{tests} has not been required because the unit has not fired fuel oil for more than 400 hours per year.

Emissions units 008 and 009 are 19.77 MW combustion turbines. Emissions unit 008 had a startup date of June 1, 1998, and emissions unit 009 had a startup date of August 1,

1998. These units were operated in 1998 for 4 hours and 5 hours, respectively, for testing purposes. The allowable hours of operation per year for both combustion turbines combined is 3740 hrs/yr.

The units 007, 008, and 009 are not affected by the Acid Rain Program, since they meet the requirements of 40 CFR 72.7 by serving a generator with less than 25 MW.

All emissions units at the Stock Island Power Plant are for peaking or emergency purposes only. This facility is used when loads peak during the summer and when there are emergency situations such as hurricanes.

3. Periodic Monitoring: Although the permit requires the facility to keep detailed records about fuel usage, it does not require the facility to maintain records of the hours of operation for units 008 and 009. Condition C.4 of the permit limits these units to operate for 4000 hrs per year, therefore the permit must require that records of the hours of operation be maintained.

Response

Recordkeeping requirements have been added to this condition.

II. General Comments

1. General Comment - Please note that our opportunity for review and comment on this permit does not prevent EPA from taking enforcement action for issues that have not been raised in these comments. After final issuance, this permit shall be reopened if EPA or the permitting authority determines that it must be revised or revoked to assure compliance with applicable requirements.

Response: This is noted.

2. Section II, Condition 1: Please include in the permit the most recent version of Appendix TV-3 which is dated April 30, 1999.

Response: This will be included.

3. Section III, Subsection A, Condition A.4: The citation for this requirements needs to also include the PSD permit for this facility (PSD-FL-135).

Response: The PSD permit citation will be included.

4. Section III, Subsection A, Condition A.7: It appears that there is a typographical error in item b of this condition. According to the PSD permit for this facility (PSD-FL-135), the limit should be 0.10 lb/MMBtu, not 0.10 million lbs/MMBtu. Please correct this.

Response: THIS WILL BE CORRECTED!

5. Section III, Conditions A.12, A.13, and E.1 - These conditions address the occurrence of excess emissions from all emission units. More specifically, excess emission resulting from malfunction are permitted provided that best operational practices to minimize emission are adhered to and the duration of

excess emissions are minimized. EPA has recently addressed the issue of excess emissions in a September 20, 1999 policy memorandum from Steven A. Herman, Assistant Administrator for Enforcement and Compliance Assurance and Robert Perciasepe, Assistant Administrator for Air and Radiation. The September 20, 1999 memo reaffirms and supplements the EPA's original policy regarding excess emissions during malfunction, startup, shutdown, and maintenance, which is contained in memoranda from Kathleen Bennett, formerly Assistant Administrator for Air, Noise and Radiation dated September 28, 1982 and February 15, 1983. The permit conditions that address excess emissions should be consistent with EPA's policy.

Response:

The Excess Emissions Rule 62-210.700, F.A.C. is currently a part of an EPA approved SIP and is therefore, by definition, an applicable requirement. As such, it must be included in the permit. Florida understands that the EPA disagrees with some of the terms of this rule, as currently written. To resolve this comment on a prior permit, a permitting note was crafted to be included in all NSPS, NESHAP, or Acid Rain permits. The note states "The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision." This note will be inserted prior to these conditions. The Department believes that the permit is correctly written, in regards to this issue.

6. Subsection B, Condition B.3: It appears that the last sentence in this condition is misplaced. Please check.

Response: It does not appear to have anything misplaced. Condition B.3. of the proposed permit reads "B.3. Hours of Operation/Fuel Consumption. The maximum No. 2 fuel oil consumption allowed to be burned in the CT is 7.1 million gallons per year, which is equivalent to 2,888.5 hours per year at full-load; the CT may operate for more than this if operating at part-load.[Rule 62-212.500(56), F.A.C., AC44-245399, PSD-FL-210]." This condition was taken almost verbatim from the permit PSD-FL-210.

(GRACY OANOIS CLARIFIED THAT SHE WANTED THE LEAD-IN SENTENCE PRIOR TO CONDITION B. & REMOVED)

7. Subsection E, Condition E.14: For clarity, please add the following to the first sentence of this condition: Compliance with the allowable emission limiting standards for NO_x given in...

Response: This has clarifying phrase had been added.

8. Appendix I-1: It appears that this appendix contains the text from the rule. The brief description of the emissions units and activities needs to be more specific in describing what activities are in the facility. For example, item number 9 describes "one or more emergency generators". The description needs to be more specific about the actual number of generators existing at this facility.

Response: As long as any emergency generators meet the criteria specified in Appendix I-1, it doesn't matter how many there are at any given time. They are insignificant.

JANUARY 1999 FLATWG TELECONFERENCE

DRAFT AGENDA

DATE: Wednesday, January 13, 1999

TIME: 9:30 - 11:00 a.m. EST

CALL-IN NUMBER: SC 994-1711, (850) 414-1711, CC 60c0108

I. DEP RULEMAKING

1. Update on Revised Title V General Permits
2. Compliance Simplification Rulemaking
3. Periodic Monitoring Rulemaking
4. BAR/BAMMS/OAPCO issues

II. EPA RULES/PROGRAMS

1. CEP update
2. 112(l) revisions
3. 112(r) update
4. POTW NESHAP proposed
5. Secondary Aluminum Smelting NESHAP status
6. Amino/Phenolic Resins NESHAP Proposed
7. Pharmaceutical Production NESHAP proposed
8. MSW Landfill NSPS amendments
9. Pulp and Paper Cluster Rule amendments, release of Plain English Guide
10. Halogenated Solvent Degreasing NESHAP amendments, Q&A fact sheet released
11. Wood Furniture Manufacturing NESHAP amendments
12. HON SOCFI facilities NESHAP amendments
13. Paint Stripping PMACT released
14. Wood Heaters NSPS amendments
15. Aerospace NESHAP revised Implementation Guidance Document AND Compliance Sector Notebook released
16. Technical Support Document for Evaluation of Thoroughly Mixed Biological Treatment Units released



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR, PESTICIDES & TOXICS MANAGEMENT DIVISION
61 Forsyth St., S. W.
Atlanta, Georgia 30303
Fax Number: 404/562-9095

Electronic Transmission

MEMORANDUM

DATE: December 9, 1999

SUBJ: Initial EPA Comments
Proposed Title V Permit for
Utility Board of the City of Key West
Stock Island Power Plant
Permit no. 0870003-01-AV

FROM: Gracy R. Danois, Environmental Engineer
Operating Source Section, ARTB

TO: Cindy Phillips
FDEP - Tallahassee

cc: Scott Sheplak, Title V Administrator
FDEP - Tallahassee

*Cindy,
Do you have time
to resolve? prior to 12/23
S.H.
12/10*

Below are initial comments from EPA Region 4 on the above referenced source. Our comments are divided into two categories: A. Significant Comments and B. General Comments. Significant comments are defined as those comments that would trigger an objection under 40 CFR Part 70. Given that EPA has several significant comments on this proposed permit, we would like to attempt resolution of all issues in order to avoid a formal objection on this permit. If resolution of our significant comments is not achieved, EPA Region 4 will issue an objection to the proposed permit pursuant to 40 CFR 70.8(c) on or before day-45 of the review period. For purposes of this permit review, day-45 is defined as December 23, 1999.

Another option available to you is withdrawal of the proposed permit from EPA review. If you choose to utilize this option, you must submit to EPA a written request that the permit be withdrawn including a statement that a proposed permit will be resubmitted for EPA review at a later date. Your written request to withdraw the proposed permit must be submitted to our office by no later than December 23, 1999.

Please contact me as soon as possible regarding resolution of this matter. You may reach me at (404) 562-9119.

1. Significant Comments

1. *as* Applicable Requirements - PSD-FL-135 Specific Condition 7 does not appear to have been incorporated into the title V permit for the 8.8 MW medium speed diesel generators (units 005 & 006), which are covered under subsection III.A. The "visible emission limit of 20%" for these units must be included the title V permit.
2. Periodic Monitoring: The permit does not contain adequate periodic monitoring for particulate matter emissions from units 005, 006, 007, 008 and 009. Although conditions A.15 and E.10 require that compliance tests for particulate matter be conducted, testing once per year if the units operate more than 400 hours is not sufficient to provide a reasonable assurance of compliance with emission limits. All Title V permits must contain monitoring that is sufficient to assure compliance with the applicable permit requirements. In particular, 40 C.F.R. Part 70.6 (a)(3)(B) requires that permits include periodic monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable emission limits. In addition to demonstrating compliance, a system of periodic monitoring will also provide the source with an indication of their emission unit's performance, so that periods of excess emissions and violations of the emission limits can be minimized or avoided. Therefore, the permit should include a periodic monitoring scheme that will provide data which is representative of the source's actual performance.

test history One option for these units, which are uncontrolled for particulate matter, would be for the permit to require the source to conduct more frequent testing or to include a technical demonstration in the statement of basis explaining why the State has chosen not to require any additional particulate matter testing. The demonstration would need to identify the rationale for basing the compliance certification on data from a test performed once a year.

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3. Periodic Monitoring: Although the permit requires the facility to keep detailed records about fuel usage, it does not require the facility to maintain records of the hours of operation for units 008 and 009. Condition C.4 of the permit limits these units to operate for 4000 hrs per year, therefore the permit must require that records of the hours of operation be maintained.

2. General Comments

1. General Comment - Please note that our opportunity for review and comment on this permit does not prevent EPA from taking enforcement action for issues that have not been raised in these comments. After final issuance, this permit shall be reopened if EPA or the permitting authority determines that it must be revised or revoked to assure compliance with applicable requirements.
2. Section II, Condition 1: Please include in the permit the most recent version of Appendix TV-3 which is dated April 30, 1999.
3. Section III, Subsection A, Condition A.4: The citation for this requirements needs to also include the PSD permit for this facility (PSD-FL-135).
4. Section III, Subsection A, Condition A.7: It appears that there is a typographical error in item b of this condition. According to the PSD permit for this facility (PSD-FL-135), the limit should be 0.10 lb/MMBtu, not 0.10 million lbs/MMBtu. Please correct this.
5. Section III, Conditions A.12, A.13, and E.1 - These conditions address the occurrence of excess emissions from all emission units. More specifically, excess emission resulting from malfunction are permitted provided that best operational practices to minimize emission are adhered to and the duration of excess emissions are minimized. EPA has recently addressed the issue of excess emissions in a September 20, 1999 policy memorandum from Steven A. Herman, Assistant Administrator for Enforcement and Compliance Assurance and Robert Perciasepe, Assistant Administrator for Air and Radiation. The September 20, 1999 memo reaffirms and supplements the EPA's original policy regarding excess emissions during malfunction, startup, shutdown, and maintenance, which is contained in memoranda from Kathleen Bennett, formerly Assistant Administrator for Air, Noise and Radiation dated September 28, 1982 and February 15, 1983. The permit conditions that address excess emissions should be consistent with EPA's policy.
6. Subsection B, Condition B.3: It appears that the last sentence in this condition is misplaced. Please check.

7. Subsection E, Condition E.14: For clarity, please add the following to the first sentence of this condition: Compliance with the allowable emission limiting standards for NO_x given in...

8. Appendix I-1: It appears that this appendix contains the text from the rule. The brief description of the emissions units and activities needs to be more specific in describing what activities are in the facility. For example, item number 9 describes “one or more emergency generators”. The description needs to be more specific about the actual number of generators existing at this facility.

excess emission language turned



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR, PESTICIDES & TOXICS MANAGEMENT DIVISION
61 Forsyth St., S. W.
Atlanta, Georgia 30303
Fax Number: 404/562-9095

Electronic Transmission

MEMORANDUM

DATE: December 9, 1999

SUBJ: Initial EPA Comments
Proposed Title V Permit for
Utility Board of the City of Key West
Stock Island Power Plant
Permit no. 0870003-01-AV

FROM: Gracy R. Danois, Environmental Engineer
Operating Source Section, ARTB

TO: Cindy Phillips
FDEP - Tallahassee

cc: Scott Sheplak, Title V Administrator
FDEP - Tallahassee

Below are initial comments from EPA Region 4 on the above referenced source. Our comments are divided into two categories: A. Significant Comments and B. General Comments. Significant comments are defined as those comments that would trigger an objection under 40 CFR Part 70. Given that EPA has several significant comments on this proposed permit, we would like to attempt resolution of all issues in order to avoid a formal objection on this permit. If resolution of our significant comments is not achieved, EPA Region 4 will issue an objection to the proposed permit pursuant to 40 CFR 70.8(c) on or before day-45 of the review period. For purposes of this permit review, day-45 is defined as December 23, 1999.

Another option available to you is withdrawal of the proposed permit from EPA review. If you choose to utilize this option, you must submit to EPA a written request that the permit be withdrawn including a statement that a proposed permit will be resubmitted for EPA review at a later date. Your written request to withdraw the proposed permit must be submitted to our office by no later than December 23, 1999.

Please contact me as soon as possible regarding resolution of this matter. You may reach me at (404) 562-9119.

1. Significant Comments

1. Applicable Requirements - PSD-FL-135 Specific Condition 7 does not appear to have been incorporated into the title V permit for the 8.8 MW medium speed diesel generators (units 005 & 006), which are covered under subsection III.A. The “visible emission limit of 20%” for these units must be included the title V permit.

2. Periodic Monitoring: The permit does not contain adequate periodic monitoring for particulate matter emissions from units 005, 006, 007, 008 and 009. Although conditions A.15 and E.10 require that compliance tests for particulate matter be conducted, testing once per year if the units operate more than 400 hours is not sufficient to provide a reasonable assurance of compliance with emission limits. All Title V permits must contain monitoring that is sufficient to assure compliance with the applicable permit requirements. In particular, 40 C.F.R. Part 70.6 (a)(3)(B) requires that permits include periodic monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable emission limits. In addition to demonstrating compliance, a system of periodic monitoring will also provide the source with an indication of their emission unit’s performance, so that periods of excess emissions and violations of the emission limits can be minimized or avoided. Therefore, the permit should include a periodic monitoring scheme that will provide data which is representative of the source’s actual performance.

One option for these units, which are uncontrolled for particulate matter, would be for the permit to require the source to conduct more frequent testing or to include a technical demonstration in the statement of basis explaining why the State has chosen not to require any additional particulate matter testing. The demonstration would need to identify the rationale for basing the compliance certification on data from a test performed once a year.

Another option would be to address particulate emissions through expanded opacity monitoring. The permit indicates that units 005 and 006 are equipped with COMs to monitor opacity. Therefore, the facility could use the opacity data as an indicator of particulate emissions. In order to adequately use opacity as an indicator of particulate emissions, the facility should conduct a performance test to establish an opacity threshold that would guarantee that particulate emissions remain within the specified limit. COM data could then be used for periodic monitoring of particulate matter, such that visible emissions which would continue to remain below the opacity threshold would indicate compliance with the particulate matter limit. If the opacity threshold was exceeded, then a performance test for particulate matter would be required.

3. Periodic Monitoring: Although the permit requires the facility to keep detailed records about fuel usage, it does not require the facility to maintain records of the hours of operation for units 008 and 009. Condition C.4 of the permit limits these units to operate for 4000 hrs per year, therefore the permit must require that records of the hours of operation be maintained.

2. General Comments

1. General Comment - Please note that our opportunity for review and comment on this permit does not prevent EPA from taking enforcement action for issues that have not been raised in these comments. After final issuance, this permit shall be reopened if EPA or the permitting authority determines that it must be revised or revoked to assure compliance with applicable requirements.
2. Section II, Condition 1: Please include in the permit the most recent version of Appendix TV-3 which is dated April 30, 1999.
3. Section III, Subsection A, Condition A.4: The citation for this requirements needs to also include the PSD permit for this facility (PSD-FL-135).
4. Section III, Subsection A, Condition A.7: It appears that there is a typographical error in item b of this condition. According to the PSD permit for this facility (PSD-FL-135), the limit should be 0.10 lb/MMBtu, not 0.10 million lbs/MMBtu. Please correct this.
5. Section III, Conditions A.12, A.13, and E.1 - These conditions address the occurrence of excess emissions from all emission units. More specifically, excess emission resulting from malfunction are permitted provided that best operational practices to minimize emission are adhered to and the duration of excess emissions are minimized. EPA has recently addressed the issue of excess emissions in a September 20, 1999 policy memorandum from Steven A. Herman, Assistant Administrator for Enforcement and Compliance Assurance and Robert Perciasepe, Assistant Administrator for Air and Radiation. The September 20, 1999 memo reaffirms and supplements the EPA's original policy regarding excess emissions during malfunction, startup, shutdown, and maintenance, which is contained in memoranda from Kathleen Bennett, formerly Assistant Administrator for Air, Noise and Radiation dated September 28, 1982 and February 15, 1983. The permit conditions that address excess emissions should be consistent with EPA's policy.
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8. Appendix I-1: It appears that this appendix contains the text from the rule. The brief description of the emissions units and activities needs to be more specific in describing what activities are in the facility. For example, item number 9 describes “one or more emergency generators”. The description needs to be more specific about the actual number of generators existing at this facility.

Phase II Permit Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is: New Revised

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

STOCK ISLAND POWER PLANT	FL	65B4-Boiler 1
Plant Name	State	ORIS Code

Compliance Plan

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

a Boiler ID#	b Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	c Repowering Plan	d New Units Commence Operation Date	e New Units Monitor Certification Deadline
1	Yes	NO		
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			

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

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

Plant Name (from Step 1)

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

Standard RequirementsPermit Requirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72, Rules 62-214.320 and 330, F.A.C. in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the permitting authority; and
 - (ii) Have an Acid Rain Part.

Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements. The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements.

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75;
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

Plant Name (from Step 1)

Recordkeeping and Reporting Requirements (cont.)

(iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability.

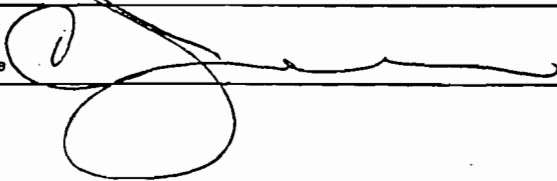
- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
- (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 75, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities. No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	CARL R. JANSEN, JR.	
Signature		Date 12-7-95

UTILITY BOARD OF THE CITY OF KEY WEST

POST OFFICE DRAWER 6100
KEY WEST, FLORIDA 33041-6100



TELEPHONE: (305) 295-1000
www.kwcityelectric.com

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

RECEIVED

NOV 15 1999

November 10, 1999

BUREAU OF AIR REGULATION

Ms. Cindy Phillips
Division of Air Resources Management
Bureau of Air Regulation – Title V Section
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Change Request – Draft Title V Permit # 0870003-001-AV – Authorized Representative

Dear Ms. Phillips:

As per our discussion, please change the Authorized Representative in the City Electric System's Title V Permit application. The original Authorized Representative, Mr. Leo Carey, should be replaced with Mr. Raymond Rodriguez, our current General Manager.

Please contact me at (305)-295-1148 if more information is needed.

Sincerely,

UTILITY BOARD - CITY OF KEY WEST
CITY ELECTRIC SYSTEM

Joe Stone
Environmental Services Supervisor

Raymond Rodriguez
General Manager

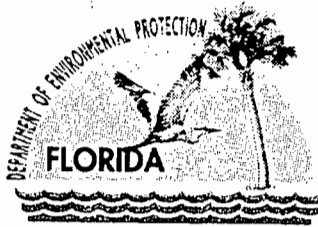
JS/jd

cc:
C. Jansen, Assistant General Manager
D. Cassel, Director of Generation
File

UTILITY BOARD MEMBERS:

Robert R. Padron, Chairman • Dr. Otha P. Cox, Vice-Chairman
Leonard H. Knowles, Member • Gayle Swofford, Member • Lou Hernandez, Member

Andrye Copy



Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

PROPOSED Permit Electronic Posting Courtesy Notification

Utility Board of the City of Key West
Stock Island Power Plant
Facility ID No.: 0870003
Monroe County

Initial Title V Air Operation Permit
PROPOSED Permit No.: 0870003-001-AV

The electronic version of the PROPOSED permit was posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review on November 9, 1999.

USEPA's review period ends on the 45th day after the permit posting date. Day 45 is December 23, 1999. If an objection (veto) is received from USEPA, the permitting authority will provide a copy of the objection to the applicant.

Provided an objection is not received from USEPA, the PROPOSED permit will become a FINAL permit by operation of law on the 55th day after the permit posting date. Day 55 is January 2, 2000.

The web site address is <http://www2.dep.state.fl.us/air>.



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

November 8, 1999

Mr. Raymond Rodriguez
General Manager
Utility Board of the City of Key West
P.O. Drawer 6100
Key West, Florida 33041-6100

Re: PROPOSED Title V Permit No.: 0870003-001-AV
Stock Island Power Plant

Dear Mr. Rodriguez:

One copy of the "PROPOSED PERMIT DETERMINATION" for the Stock Island Power Plant located at 6900 Front Street, Monroe County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit has become a PROPOSED permit.

An electronic version of this determination has been posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is <http://www2.dep.state.fl.us/air>.

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

If you should have any questions, please contact Ms. Cindy Phillips, P.E., at 850/921-9534.

Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/p
Enclosures
copy furnished to:
Mr. Carl Jansen, D.R.
Mr. Ivan Clark, P.E., R.W. Beck Engineering
Mr. Jerry Smith, FDEP - South District Office
Mr. Jim Edds, FDEP - Marathon Branch District Office
Ms. Elizabeth Bartlett, USEPA, Region 4 (INTERNET E-mail Memorandum)

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

PROPOSED PERMIT DETERMINATION

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" to Utility Board of the City of Key West for the Stock Island Power Plant located at 6900 Front Street, Monroe County was clerked on October 15, 1998. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published in The Key West Citizen on October 25, 1998. The DRAFT Title V Air Operation Permit was available for public inspection at the FDEP South Florida District Branch Office in Marathon, the FDEP South Florida District Office in Fort Myers, and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was received on October 29, 1998.

II. Comments.

No comments were received from the general public during the public comment period. Comments were received. Comments were received from Mr. Joe Stone, Environmental Services Supervisor for Stock Island Power Plant, on June 28, 1999. The comments were not considered significant enough to reissue the DRAFT Title V Permit and require another Public Notice. He requested that the same annual compliance test parameters in the Title V permit for the two medium speed diesel generators as were contained in the previous permit.

Response: A review of specific conditions A.15 and A.16 was made. The test parameters as shown in the draft permit were incorrect. As a result of this comment Specific Conditions A.15 and A.16 are changed:

From:

A.15. The Permittee shall conduct a compliance test for each diesel generator on an *annual basis* for the following pollutants. Each compliance test shall be conducted in accordance with 40 CFR 60, Appendix A, using the method indicated.

- a) Oxides of Nitrogen (NO_x) - EPA Method 20.
- b) Carbon Monoxide (CO) - EPA Method 10.
- c) Beryllium (Be) - EPA Method 104.
- d) Particulate Matter (PM/PM₁₀) - EPA Method 5.

An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

[Rule 62-297.310(7)(a)4. & 5., F.A.C., AC44-152197]

A.16. The Permittee shall conduct a compliance test for each of the following pollutants *prior to obtaining a renewed operation permit*. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy this requirement. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of compliance test results for any emissions unit that, during the year prior to renewal: a) did not operate; or b) in the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours. Each compliance test shall be conducted in accordance with 40 CFR 60 Appendix A, using the method indicated.

- a) Sulfur Dioxide (SO₂) - EPA Method 6 or ASTM D 2880-71 for sulfur in oil.
- b) Particulate Matter (PM/PM₁₀) - EPA Method 5.
- c) Volatile Organic Compounds (VOC) - EPA Method 25.

[Rule 62-297.310(7)(a)3., F.A.C., AC44-152197]

To:

A.15. The Permittee shall conduct a compliance test for each diesel generator on an *annual basis* for the following pollutants. Each compliance test shall be conducted in accordance with 40 CFR 60, Appendix A, using the method indicated.

- a) Oxides of Nitrogen (NO_x) - EPA Method 20.
- b) Sulfur Dioxide (SO₂) - EPA Method 6 or ASTM D 2880-71 for sulfur in oil.
- c) Visible Emissions - EPA Method 9.
- d) Particulate Matter (PM/PM₁₀) - EPA Method 5.

An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

[Rule 62-297.310(7)(a)4. & 5., F.A.C., AC44-152197]

A.16. The Permittee shall conduct a compliance test for each of the following pollutants *prior to obtaining a renewed operation permit*. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy this requirement. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of compliance test results for any emissions unit that, during the year prior to renewal: a) did not operate; or b) in the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours. Each compliance test shall be conducted in accordance with 40 CFR 60 Appendix A, using the method indicated.

- a) Carbon Monoxide (CO) – EPA Method 10.
- b) Beryllium (Be) – EPA Method 104.
- c) Volatile Organic Compounds (VOC) - EPA Method 25.

[Rule 62-297.310(7)(a)3., F.A.C., AC44-152197]

Minor formatting changes and edits were also made, such as changing “APPENDIX TV-1, TITLE V CONDITIONS” to the “APPENDIX TV-3, TITLE V CONDITIONS” and clarifying which units must comply with the common conditions sections of the permit. In addition, the following specific condition was added to the acid rain part of the permit:

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

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

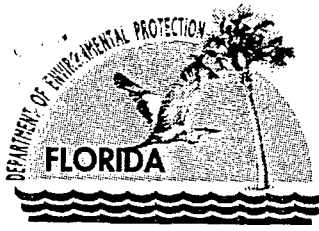
Additional Documents on file with the permitting authority:

-Letter received June 28, 1999, from Mr. Joe Stone, Environmental Services Supervisor for Stock Island Power Plant

The enclosed PROPOSED Title V Air Operation Permit includes the aforementioned changes to the DRAFT Title V Air Operation Permit.

III. Conclusion.

The permitting authority hereby issues the PROPOSED Permit No.: 0870003-001-AV, with the changes noted above. A copy of the PROPOSED permit has been printed for the applicant.



Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

October 28, 1999

Mr. R. Douglas Neeley, Chief
Air and Radiation Technology Branch
Air, Pesticides and Toxics Management Division
USEPA Region 4
61 Forsyth Street, SW
Atlanta, GA 30303-8909

RE: Orlando Utilities Commission – Indian River Plant
Proposed Title V Permit No. 0090008-001-AV
Response to Comments

Dear Mr. Neeley:

This is a response to EPA's objections/comments, dated August 5, 1999, on the proposed Title V permit for Orlando Utilities Commission – Indian River Plant.

I. EPA Objection Issues

1. Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable particulate matter limit for units 001 through 003. Condition III.A.5 requires annual compliance testing for particulate matter emissions to allow a 40 percent visible emissions limit for the three boilers, however permit condition III.A.21 appears to negate the annual test requirement if liquid fuel is not burned for more than 400 hours for that federal fiscal year. The permit must require the source to conduct more frequent testing or a technical demonstration must be included in the statement of basis explaining why the State has chosen not to require any additional PM testing. The demonstration needs to identify the rationale for basing the compliance certification on data from a test performed once a year.

Response

The Department issued an Order on March 28, 1989 that granted OUC a reduction in the frequency of particulate matter emissions compliance testing to one steady-state particulate matter compliance test annually under soot blowing conditions. (See attachment). The Florida Administrative Code (FAC) provides that the Department may reduce the frequency of particulate matter testing upon a demonstration that the particulate matter standard of 0.1 pounds per million Btu heat input has been regularly met. The petition and supporting documentation submitted by OUC on October 5, 1988, indicated that they had regularly met the particulate standard since January 8, 1980. In addition, the FAC provides that an annual compliance test is not required for particulate matter emissions if liquid fuel is not burned for more than 400 hours per federal fiscal year.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

For Steam Units 1, 2, & 3, OUC suggests that the monitoring frequency be related to past compliance testing results as outlined in FDEP's periodic monitoring examples document. Accordingly, the following language has been added to the statement of basis: "The Department has determined that the appropriate particulate matter testing frequency for the fossil fuel steam generators is annually whenever fuel oil is used for more than 400 hours in the preceding year. This frequency is justified because the units 001, 002, and 003 are uncontrolled and have documented low emissions in previous emissions tests while firing fuel oil. The applicant has presented historical PM test results which show that the steady-state and soot blowing average results are well below the applicable standards of 0.1 lb/mmBtu and 0.3 lb/mmBtu, respectively. The five-year average test results for 1994-1998 for these units are as follows:

	<u>Steady State</u> <u>(lb/mmBTU)</u>	<u>Soot-Blow</u> <u>(lb/mmBTU)</u>
Unit 001	0.058	0.080
Unit 002	0.061	0.131
Unit 003	0.056	0.103"

2. Periodic Monitoring - Conditions III.A.4, B.3, C.2.d, C.2.d, and C.3, contain limits on operating hours for each of the units associated with fuel use and/or limits on "potential to emit." In order for the operational limit to be enforceable as a practical matter, the permit must specify that the facility is required to keep daily records of the operating hours, and where applicable, associated fuel use.

Response

OUC keeps records in order to show compliance with these permit requirements. Recordkeeping requirements have been added to these conditions.

3. Periodic Monitoring - Condition III.F.1 contains operational limits for the number of hours per week during which loading can occur, and the maximum process loading rate for the lime storage silo. In order for the operational limits to be enforceable as a practical matter, the permit must require record keeping for the operating hours and process loading rate of the lime storage silo to ensure continuous compliance with these limits.

Response

Recordkeeping requirements have been added to this condition.

4. Periodic Monitoring - Condition III.F.4. requires the source to conduct a Method 9 visible emissions test for the lime storage silo. The permit needs to designate a required frequency for this compliance test. Additionally, EPA recommends that the permit contain a condition that requires the source to perform and record the results of a qualitative observation of opacity (40 C.F.R. Part 60, Method 22) at least once on each day while the loading operations are taking place. The records of these observations should indicate whether or not any abnormal visible emissions are detected and include color, duration, and density of the plume, as well as the cause and corrective action taken for any abnormal visible emissions. If an abnormal visible emission is detected, a Method 9 survey shall be conducted during lime loading operations, within 24 hours of the qualitative

survey. If lime filling does not occur within 24 hours of the detected visible emission, a Method 9 survey shall occur at the next time the silo is loaded.

Response

The permit has been revised to require an annual Method 9 compliance test and to require OUC to perform and record the results of a qualitative observation of opacity (40 C.F.R. Part 60, Method 22) at least once on each day while the loading operations are taking place. The records of these observations should indicate whether or not any abnormal visible emissions are detected and include color, duration, and density of the plume, as well as the cause and corrective action taken for any abnormal visible emissions. If an abnormal visible emission is detected, a Method 9 survey shall be conducted during lime loading operations, within 24 hours of the qualitative survey. If lime filling does not occur within 24 hours of the detected visible emission, a Method 9 survey shall occur at the next time the silo is loaded.

5. Appropriate Averaging Times - In order for the emissions standard for particulate matter in conditions III.A.7 and A.8 and for pollutants listed in conditions III.B.4, B.6, and C.5 (excluding NO_x and sulfur dioxide, for which "excess emissions" are defined in condition III.D.4) to be practicably enforceable, the appropriate averaging time must be specified in the permit. An approach that can be used to address this deficiency is to include general language in the permit to indicate that averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance.

Response

The following permitting note has been added following conditions III.A.7, A.8, B.4, and C.5: {Permitting Note: The averaging time shall correspond to the cumulative sample time, as specified in the reference test method.} As agreed upon during a telephone conversation between Elizabeth Bartlett and Cindy Phillips on October 27, 1999, this permitting note has not been added to condition III.B.6. because this condition is included in the permit for inventory purposes only.

6. Applicable Requirements - Condition III.B.7. allows the source to operate Combustion Turbines A and B "at or better than the minimum water to fuel ratios measured for the most recent (satisfactory) compliance demonstration." This condition conflicts with the requirements of 40 C.F.R. § 60.333(c)(1), which requires compliance with the "water-to-fuel ratio determined to demonstrate compliance with § 60.332 by the [initial] 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."

Response

Since the NSPS was written with only one performance test in mind (the initial one), it does appear to be at odds with the concept of more frequent testing. The Department feels it is more important to look at the most recent test parameters than to be concerned with those that are nine years old.

The following condition requiring utilization of water injection for NO_x control and specifying the appropriate water to fuel ratios has been revised: "B.7.

Water Injection. Water injection shall be used for NO_x control. The combustion turbines (CT) shall operate at the minimum water-to-fuel ratios measured for the most recent (satisfactory) compliance demonstration. The compliance test report shall document the required water-to-fuel ratios.”

7. Applicable Requirements - PSD-FL-173 Condition 15 does not appear to have been incorporated into the title V permit for this source. A condition requiring utilization of water injection for NO_x control and specifying the appropriate water to fuel ratios must be added to Subsection C for Combustion Turbines C & D. In accordance with PSD condition 15, “The water to fuel ratio at which annual compliance is achieved shall be incorporated into the permit and shall be continuously monitored. The system shall meet the requirements of 40 C.F.R. Part 60, Subpart GG.” Condition III.C.10. requires that the ratios be provided to demonstrate compliance with the permitted emission rate, but this condition alone does not meet the intent of Condition 15.

Response

The following condition requiring utilization of water injection for NO_x control has been revised to read: **“C.10. Water Injection. Water injection shall be used for NO_x control. OUC shall report the water-to-fuel ratios used during testing to demonstrate compliance with the permitted emission rate. Additionally, the water meters shall be calibrated semi-annually (once every six months). If, after two years [of initial use], the meters show less than two percent error, the calibration frequency shall be changed to annually.”**

8. Applicable Requirements - To comply with the applicable requirements of 40 C.F.R. Subpart GG, discussed in Objection Item #7, condition III.D.1. should be replaced with specific nitrogen oxide standards for Combustion Turbines A & B and C & D, calculated using the values for fuel-bound nitrogen used during the initial compliance tests for these units.

Response

The following permitting note has been added to III.D.1.: {Permitting Note: Fuel bound nitrogen is used to increase the NSPS limit to account for nitrogen in the fuel. The lowest NO_x limit that can be achieved with this equation is 0.0075% NO_x by volume (at 15 percent oxygen and on a dry basis.) Combustion Turbines A, B, C, and D are all BACT turbines and have much lower NO_x limits without regard for the fuel bound nitrogen. }

9. Acid Rain Requirements - In accordance with 40 C.F.R. 70.6(a)(1)(ii), the permit must state that, “where an applicable requirement of the Act is more stringent than an applicable requirement of the regulations promulgated under title IV of the Act, both provisions shall be incorporated in the permit and shall be enforceable by the Administrator.”

Response

This has been added to the Acid Rain Part of the permit.

II. General Comments

1. Public Comment Period - The transmittal memo sent to the facility containing response to comments indicates that the 30-day public comment period began on October 8, 1997. The response to comments section documents changes made to the permit in response to written comments dated October 17, 1997, and received on December 10, 1997, written comments dated April 12, 1999, and a meeting held with OUC personnel on May 4, 1998. All changes made to the draft permit appear to be based on comments received from OUC outside of the 30-day public comment period. Because changes of potential public concern were made to the draft permit after the public comment period (see Objection Item #6), the revised draft permit should have been renoticed to accommodate input from the entire public. If the October 17, 1997, letter from OUC was an extension request, the appropriate action would have been for FDEP to extend the public comment period for a specified amount of time allowing the entire public the opportunity to provide comments on the draft permit.

Response

The changes were made within the APA process (i.e. there was a petition filed) to resolve possible litigation. The Department can't go back to public notice every time we resolve APA litigation or we would have a never-ending process.

2. Page 2. Condition I.A. - The "Facility Description" indicates that the facility is a major source of hazardous air pollutants (HAPs), but does not identify which HAPs. The facility is also a major source of sulfur dioxide, particulate matter, carbon monoxide, and nitrogen oxides. For clarity, the permit and/or statement of basis should specify each pollutant for which the facility is a major source.

Response

The Florida Administrative Code does not require that each HAP be specified.

3. Page 4. Condition II.11. - Please correct the telephone and fax number for the Air Enforcement Section. The correct telephone and fax numbers are (404)562-9155 and (404)562-9163, respectively. This condition should also cross-reference condition 51 of Appendix TV-3, which lists the necessary elements of a compliance certification required under 40 C.F.R. 70.6(c)(5)(iii).

Response

This has been done.

4. Page 5. Condition III.A.1. - As specified in Appendix C of the permit application, this condition should also limit on-specification used oil firing such that the heat input is no more than 10 percent of the permitted heat input on No. 6 Fuel Oil while combusting either no. 6 Fuel Oil or Pipeline Natural Gas.

Response

This has been done.

5. Page 6, Condition III.A.5. - This condition limits the visible emissions from the three steam generating units to 40% opacity, and requires the source to conduct a compliance test for particulate matter annually. The Florida SIP Rule 62-296.405(1)(a), F.A.C., *Fossil Fuel Steam Generators with more than 250 million Btu per Hour Heat Input*, requires quarterly testing for particulate matter to comply with the 40 % opacity limit, unless the facility has petitioned and received approval from FDEP to allow annual particulate testing. Documentation was not available during the permit review to verify FDEP approval for annual testing. Please provide documentation of FDEP's approval for annual particulate testing or revise this condition to reflect the requirements of 62-296.405(1)(a), F.A.C.

Response

This has been provided. See Attachment 3.

6. Page 7, Condition III.A.11. - This condition mistakenly refers to condition A.24 for SO2 record keeping requirements. Please modify this condition to reference A.22.

Response

This has been done.

7. Page 7, Condition III.A.12(a) - This condition is vague as to how it applies to OUC. Specific equipment for which this requirement is applicable should be listed.

Response

This is a standard condition which has been routinely used in Title V permits without further clarification. For the sake of consistency, no changes will be made.

8. Page 15, Condition III.B.6. - The PM10 limit for oil was incorrectly copied from the PSD permit as 87.6 TPY per Unit. Please change this value to 43.8 TPY per Unit.

Response

This has been done.

9. Page 20, Condition III.D.5. - This condition refers to compliance test for each "diesel generator." Should this be changed to say "combustion turbine?"

Response

This has been changed to "combustion turbine."

10. Page 33, Subsection E - While this subsection is intended to apply to Units 001 through 007, this applicability should be stated as the first condition in this subsection, and references to this subsection should be provided as specific permit conditions in Subsections A, B, and C. As the permit stands, short paragraphs are provided in each of the other subsections which are mixed in with various, unrelated conditions.

Response

These changes have been made.

Resolution of these objections is necessary in order for Orlando Utilities Commission to receive a Final Title V permit by December 31, 1999. Upon your concurrence with these responses, the Department will issue a Final Title V permit that contains the changes indicated. If have any questions or comments concerning these revisions, please contact Mr. Scott Sheplak at (850)921-9532.

Sincerely,



C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

c: Bob Hicks, OUC

ATTACHMENT

THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the matter of:)
)
Petition for Reduction in)
Quarterly Particulate)
Emissions Compliance Testing)
)
Orlando Utilities Commission)
Indian River Plant)
Units 1, 2, and 3)
)
Petitioner)
_____)

OGC File No. 88-1257,88-1258,88-1259
PERMIT NOS: AO 05-105756
AO 05-107392
AO 05-107390

RECEIVED
MAR 30 1989
ORLANDO UTILITIES
COMMISSION

ORDER

On October 5, 1988, the Petitioner, Orlando Utilities Commission, filed a petition for Reduction in the Frequency of Particulate Matter Emissions Compliance Testing pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1. for the following fossil fuel-fired steam generating units:

Indian River Plant Units 1, 2 and 3

Pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1., Petitioner has conducted quarterly particulate matter emissions compliance testing. Florida Administrative Code Rule 17-2.600(5)(b)1. provides that the Department may reduce the frequency of particulate matter testing upon a demonstration that the particulate matter standard of 0.1 pounds per million Btu heat input has been regularly met. The petition and supporting documentation submitted by Petitioner indicate that, since January 8, 1980, Petitioner has regularly met the particulate matter standard. It is, therefore,

ORDERED that the Petition for Reduction in the Frequency of Particulate Matter Emissions Compliance Testing is GRANTED, and that:

1. Petitioner's Indian River Plant generating units 1, 2, and 3 shall be required to conduct one steady-state

one particulate matter emissions compliance test annually under soot blowing conditions.

2. Indian River Plant Units 1, 2, and 3 shall be subject to a steady-state visible emissions limiting standard of forty (40) percent opacity.
3. This order supercedes all conflicting conditions relating to frequency of particulate matter emissions compliance testing contained in operating permits A005-105756, A005-107392, and A005-107390 for Indian River Plant Units 1, 2, and 3 respectively.
4. If after investigation, the Department, or its designee, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emissions standard in Chapter 17-2 or in a permit issued to the applicant pursuant to Chapter 17-2 is being violated, the Department may require additional tests for particulate matter emissions pursuant to Florida Administrative Code Rule 17-2.700(2)(b).

This Order shall constitute final agency action by the Department pursuant to Section 120.57, F.S. A person whose substantial interests are affected by the Department's decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 21 days of receipt of this Order. Petitioner shall mail a copy of the petition to the applicant at the time of filing. 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

The Petition shall contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, and the Department OGC File Number;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends required reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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 position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the applicant have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 21 days of receipt of this notice in the Office of General Counsel at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, P.A.C.

10. Page 33. Subsection E - While this subsection is intended to apply to Units 001 through 007, this applicability should be stated as the first condition in this subsection, and references to this subsection should be provided as specific permit conditions in Subsections A, B, and C. As the permit stands, short paragraphs are provided in each of the other subsections which are mixed in with various, unrelated conditions.

Response

These changes have been made.

Resolution of these objections is necessary in order for Orlando Utilities Commission to receive a Final Title V permit by December 31, 1999. Upon your concurrence with these responses, the Department will issue a Final Title V permit that contains the changes indicated. If have any questions or comments concerning these revisions, please contact Mr. Scott Sheplak at (850)921-9532.

Sincerely,

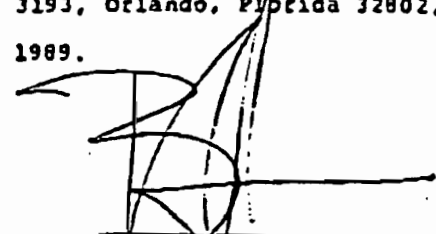


C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

c: Bob Hicks, OUC

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the foregoing order has been mailed, postage prepaid, to James S. Crall, OUC, 500 South Orange Avenue, Post Office Box 3193, Orlando, Florida 32802, this 25 day of March, 1989.



~~BETSY HEWITT~~
Assistant General Counsel

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

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

Telephone (904) 488-9730

INTEROFFICE MEMORANDUM

Sensitivity: PRIVATE

Date: 26-Apr-1999 11:07am
From: John Hughes TAL
HUGHES_J
Dept: Air Resources Management
Tel No: 850/921-9605

To: See Below
Subject: CARB 200 Training

CARB 200 Training will be offered July 12-15, 1999 in Tampa, Florida.

Monday - Landfill Gas Controls
Tuesday- VOC Control Devices/Scrubbers
Wed - Stationary Gas Turbines
Thurs - Industrial Boilers

Each day will be classroom instruction in the morning and a field trip in the afternoon. The hotel information is listed below. Please e-mail (hughes_j @dep.state.fl.us) or call (SC 291-9605) to register for each class you wish to attend.

Radisson Riverwalk
200 North Ashley Dr.
Tampa, Fl 33602
(813) 223-2222 Rate: \$79.00 Reservation Cutoff Date: 6/11/99

Distribution:

To: Patty Adams TAL	(ADAMS_P)
To: Kevin Adderly TAL	(ADDERLY_K)
To: Rebecca Ajhar TAL	(AJHAR_R)
To: David Ajayi TAL	(AJAYI_D)
To: Wendy Alexander TAL	(ALEXANDER_W)
To: Dick Arbes TAL	(ARBES_D)
To: Syed Arif TAL	(ARIF_S)
To: Jean Auxtinee TAL	(AUXTINEE_J)
To: Elsa Bishop TAL	(BISHOP_E)
To: Barbara Boutwell TAL	(BOUTWELL_B)
To: Sandy Bowman TAL	(BOWMAN_S)
To: Matthew Boze TAL	(BCZE_M)
To: Shannon Bratcher TAL	(BRATCHER_S)
To: Paul Brandl TAL	(BRANDL_P)
To: Marnie Brynes TAL	(BRYNES_M)
To: Rick Butler TAL	(BUTLER_R)
To: Gary Carroll TAL	(CARROLL_G)
To: Tom Cascio TAL	(CASCIO_T)
To: Lorraine Clark TAL	(CLARK_L)
To: Kenneth Colaw TAL	(COLAW_K)
To: Robert F. Collins TAL	(COLLINS_RF)
To: Martin Costello TAL	(COSTELLO_M)
To: William Davis TAL	(DAVIS_W)
To: Susan DeVore TAL	(DEVORE_S)
To: Dotty Diltz TAL	(DILTZ_D)

TALLAHASSEE TITLE V PERMITTING		Title V Permit Status															Comments					
File No.	Facility Owner / Company Name	Permit Engineer	P.E.	DRAFT issued (clerk date)	DEP published?	Public Notice Published	PROPOSED posted onto web site	F date (DAY 46)	F date by law (DAY 55)	FINAL issued (clerk date)	Extension of time/hearing	Petition filed (p=public)	EPA comments	EPA objection	EPA objection DAY 5?	1/1/98 effective date?		1/1/99 effective date?	1/1/2000 effective date?	Phase II NOx?	Existing Phase II SO2 unit?	new Phase II SO2 unit?
1050003-004-AV	Lakeland Electric & Water - Larsen Mem	Ed Svec	SM	4/23/97		5/14/97	6/23/97	8/8/97	8/17/97	8/18/97			y									
0250001-001-AV	FP&L - Cutler	Tom Cascio	SM	4/24/97		5/27/97	7/16/97	8/31/97	9/9/97	9/12/97												
1290001-001-AV	City of Tallahassee - Purdom	Jonathan Holt	SM	3/24/97		4/24/97	7/3/97	8/18/97	8/27/97	10/8/97												Revised to include new Unit# 8
0730003-001-AV	City of Tallahassee - A.B. Hopkins	Jonathan Holt	SM	5/23/97		6/9/97	7/23/97	9/7/97	9/16/97	10/22/97												
0610029-002-AV	City of Vero Beach	Susan DeVor	JK	7/17/97		7/28/97	9/17/97	11/2/97	11/11/97	12/16/97												
0550003-001-AV	FPC - Avon Park	Charles Loga	SM	4/4/97		5/7/97	6/23/97	8/8/97	8/17/97	12/29/97												
1050231-001-AV	Orange Cogen, L.P.	Joe Kahn	JK	7/30/97		8/21/97	10/24/97	12/9/97	12/18/97	12/30/97												
0570038-001-AV	TEC - Hooker's Point	Steve Welsh	SM	5/2/97		6/4/97	11/3/97	12/19/97	12/28/97	12/30/97												
1050221-002-AV	Auburndale Cogeneration	Scott Sheplak	SM	2/6/97		2/18/97	11/14/97	12/30/97	1/8/98	12/31/97												
0990045-002-AV	City of Lake Worth - T.G. Smith	Joe Kahn	JK	8/18/97		8/25/97	11/3/97	12/19/97	12/28/97	12/31/97												
1110003-003-AV	Fort Pierce Utilities - H.D. King	Ed Svec	SM	5/23/97		6/20/97	11/10/97	12/26/97	1/4/98	12/31/97												
0710002-001-AV	FP&L - Fort Myers	Tom Cascio	SM	8/19/97	Y	9/23/97	11/10/97	12/26/97	1/4/98	12/31/97												
1030012-001-AV	FPC - Higgins	Charles Loga	SM	9/9/97	Y	9/24/97	11/14/97	12/30/97	1/8/98	12/31/97												
0970014-001-AV	FPC - Intercession City	Charles Loga	SM	8/20/97	Y	9/3/97	10/16/97	12/1/97	12/10/97	12/31/97												y
0310047-001-AV	Jacksonville Electric Authority - J.D. Ke	Bruce Mitchell	SM	7/23/97		8/14/97	11/7/97	12/23/97	1/1/98	12/31/97												
0310045-002-AV	Jacksonville Electric Authority	Bruce Mitc	M	10/14/98		10/14/98	11/16/98	1/1/99	1/10/99	clerking												Revised draft issued.
0310046-001-AV	Jacksonville Electric Authority - Souths	Bruce Mitchell	SM	7/11/97		8/14/97	11/7/97	12/23/97	1/1/98	12/31/97												
1050217-001-AV	Polk Power Partners, L.P. - Mulberry	Lennon Ander	SM	6/30/97		7/10/97	10/7/97	11/22/97	12/1/97	12/31/97												
0950111/0110-005-AV	Walt Disney World Co./Reedy Creek	Bruce Mitchell	SM	10/13/97	Y	10/15/97	11/14/97	12/30/97	1/8/98	12/31/97												Cleanup / separate Reedy Creek?
0950111-017-AV	Walt Disney World Co./Resort Complex	Bruce Mitchell	SM	11/30/97	N	12/19/98	3/30/99															
0250003-002-AV*	FP&L - Turkey Point Nuclear	Steve Welsh	CP	9/8/97		9/26/97	1/26/98	3/13/98	3/22/98	4/14/98												
1050004-003-AV	Lakeland Electric - C.D. McInt	Ed Svec	M	9/9/98		9/29/98	12/10/98	1	1	1												Revised draft Issued.
0810010-001-AV	FP&L - Manatee	Susan DeVor	JK	8/22/97	Y	9/4/97	10/31/97	12/16/97	12/25/97	5/29/98			y	12/12/97	3/11/98	y						
0990042-001-AV	FP&L - Riviera Beach	Susan DeVor	JK	9/23/97	Y	10/8/97	11/12/97	12/28/97	1/6/98	5/29/98				12/12/97	3/11/98	y						
1070014-001-AV	FP&L - Putnam	Susan DeVor	JK	8/25/97		9/24/97	10/31/97	12/16/97	12/25/97	6/17/98				12/12/97	3/11/98	y						
0250003-001-AV*	FP&L - Turkey Point Fossil	Steve Welsh	CP	9/8/97		9/26/97	11/14/97	12/30/97	1/8/98	6/19/98				12/12/97	3/11/98	y						
0110037-002-AV	FP&L - Lauderdale	Tom Cascio	SM	9/11/97	Y	9/25/97	11/3/97	12/19/97	12/28/97	6/23/98				12/12/97	3/11/98	y						
0110036-001-AV	FP&L - Port Everglades	Joe Kahn	JK	9/23/97		10/8/97	11/12/97	12/28/97	1/6/98	6/24/98				12/12/97	3/11/98	y						
0850001-004-AV	FP&L - Martin	Tom Cascio	SM	8/13/97	Y	8/18/97	11/5/97	12/21/97	12/30/97	6/29/98				12/12/97	3/11/98	y						
0010005-001-AV	City of Gainesville - J.R. Kelly	Lennon Ander	CP	8/26/97		9/13/97	3/19/98	5/4/98	5/13/98	9/15/98				5/4/98	8/1/98	y						
0310337-002-AV	Cedar Bay Cogen Inc.	Wendy Alexa	SM	12/31/98	N	1/12/99																
0010006-001-AV	City of Gainesville - Deerhaven	Tom Cascio	SM	10/12/98		10/27/98					4/1/99											Revised draft issued.
0250013-001-AV	City of Homestead - G.W. Ivey	Ed Svec	SM	10/13/98		10/12/98	3/23/99															Escaping Phase II Acid Rain.
0870047-001-AV	City of Key West-Southmost Waste	Mike Halpin	SM	10/29/98		11/12/98	4/6/99															
0870003-001-AV	City of Key West - Stock Island	Steve Welsh	CP	10/15/98		10/25/98																Has retreating acid rain units.
0090006-001-AV	FP&L - Cape Canaveral	Tom Cascio	SM	6/10/97		10/21/97	9/4/98	10/20/98	10/29/98	2/2/99			y	10/20/98	1/17/99							
1270009-001-AV	FP&L - Sanford	Tom Cascio	SM	10/1/97		3/15/98	3/3/99	4/18/99	4/27/99		11/30/98	2/26/98										Petition dismissed 10/20/98.
1010017-003-AV	FPC - Anclote	Mike Halpin	SM	11/25/98	N	12/7/98					4/1/99	9/4/97										(Hearing in Obeyance 12/31/98)
1030013-001-AV	FPC - Bayboro	Ed Svec	SM	9/8/98		10/4/98					5/1/99											
0170004-004-AV	FPC - Crystal River	Ed Svec	SM	10/1/98		10/12/98					6/1/99											Revised draft issued. No P.E. seal on
1270028-001-AV	FPC - DeBary	Lennon Ander	SM	7/25/97		8/20/97	1/4/99	2/19/99	2/28/99					2/26/99	5/26/98							
1270020-001-AV	FPC - G.E. Turner	Bruce Mitchell	SM	8/25/97	Y	11/23/97	10/21/98						y	12/4/98	3/3/99							Has retreating acid rain units
1030011-002-AV	FPC - P.L. Bartow	Ed Svec	SM	10/1/97	Y	11/18/97					4/1/99	5/1/98										
1210003-001-AV	FPC - Suwannee River	Bruce Mitchell	SM	10/19/98	Y	0/24/97					4/1/00											

TALLAHASSEE TITLE V PERMITTING

TALLAHASSEE TITLE V PERMITTING				Title V Permit Status																			
File No.	Facility Owner / Company Name	Permit Engineer	P.E.	DRAFT issued (clerk date)	DEP published?	Public Notice Published	PROPOSED posted onto web site	F date (DAY 46)	F date by law (DAY 55)	FINAL issued (clerk date)	Extension of time/hearing *	Petition filed (p=public)	EPA comments	EPA objection	EPA objection DAY 90	1/198 effective date?	1/199 effective date?	1/12000 effective date?	Phase II NOx?	existing Phase II SO2 unit?	new Phase II SO2 unit?	Comments	
0010001-001-AV	FPC - U of Florida	Bruce Mitchell	SM	6/25/97		7/24/97					4/1/99									y			
1050223-002-AV	FPC-Tiger Bay Cogeneration Facility	Ross Pollock	SM	10/27/98	N	11/10/98					5/1/99										y		
0330045-001-AV	Gulf Power Company - Crist	Jonathan Holt	SM	11/3/98	Y						2/1/99		y						y	y			
0630014-001-AV	Gulf Power Company - Scholz	Jonathan Holt	SM	10/2/97	Y	10/4/97					5/1/99								y	y			SO2 standard reduced 23%; modeling
0050014-001-AV	Gulf Power Company - Smith Plant	Jonathan Holt	SM	10/8/97							6/1/99								y	y			SO2 standard reduced 23%; modeling
0490015-001-AV	Hardee Power Partners LTD	Scotm Shepl	SM	10/29/98	N	11/14/98																	
0850102-001-AV	Indiantown Cogen L.P.	Tom Cascio	SM	8/24/98		9/4/98																	
0970043-002-AV	Kissimmee Utility Authority - Cane Island	Mike Halpin	SM	10/16/98		10/16/98					1/30/99										y		Phase II app. due 1999 for new Unit #
0950203-001-AV	Orlando Cogen. Limited L.P.	Lennon Ander	SM	3/31/98		4/21/98	9/15/98	10/31/98	11/9/98	12/4/98											y		
0090008-001-AV	Orlando Utilities Commission - Indian River	Cindy Phillips	CP	10/1/97	Y	10/8/97					3/31/99										y		
0950137-001-AV	Orlando Utilities Commission - Stanton	Mike Halpin	SM	10/7/98	N	12/15/98													y	y			Revised draft issued.
1070025-001-AV	Seminole Electric Cooperative	Ed Svec	SM	8/18/98		9/4/98					3/1/99								y	y			Revised draft issued.
0570039-002-AV	TEC - Big Bend	Cindy Phillips	CP	10/3/97							4/2/99								y	y			24-hour SO2 standard reduced 25%;
0570040-002-AV	TEC - F.J. Gannon	Lennon Ander	SMS																y	y			9/30/98 permit withdrawn. SO2 NA
1050233-001-AV	TEC - Polk Power Station	Ed Svec	SM	1/29/98		5/1/98	8/24/98	10/9/98	10/18/98	3/19/99			y	10/12/98	1/9/99						y		
0530021-002-AV	Central Power & Lime	Bruce Mitchell	SMS																				
0530005-002-AV	Chemical Lime, Inc.	Bruce Mitchell	SMS																				
0530032-001-AV	Florida Crushed Stone Co.	Bruce Mitchell	SMS																				
0050031-002-AV	Bay County Energy Systems																						
0570127-001-AV	City of Tampa	Ed Svec																					
0570261-001-AV	Hillsborough County	Ed Svec																					
0710119-001-AV	Lee County Department of Solid Waste	Ross Pollock																					
0250348-001-AV	Metro-Dade County																						
1010056-002-AV	Pasco County	Tom Cascio																					
1030117-002-AV	Pinellas County	Wendy Alexander																					
0990234-001-AV	Solid Waste Authority of Palm Beach Co	Mike Halpin																					
0690046-001-AV	Ogden Martin Systems of Lake, Inc.	Cindy Phillips	CP																				
0112120-001-AV	Wheelabrator North Broward, Inc.	Teresa Heron																					
0112119-002-AV	Wheelabrator South Broward, Inc.	Teresa Heron																					
Totals =		73	71	63	58	20	55	38	34	34	32	16	3	6	12	12	19	10	1	11	48	6	11
7770029-002-AIF	Kleensoil Intl	Cindy Phillips	CP								1/7/1998												FESCIP denied.
TV Sources that have not commenced operation and contain a 'new' phase II SO2 acid rain unit.																							
1050234	FPC-Hines Energy Complex																				y		new Phase II SO2 acid rain app. due
	Santa Rosa Energy LLC	167 MW																					

INTEROFFICE MEMORANDUM

Date: 10-Mar-1999 03:09pm
From: Pierce.Kim
Pierce.Kim@epamail.epa.gov@PMDF@EPIC66
Dept:
Tel No:

To: See Below
Subject: State/Local Title V Conf. Call on Thurs., March 18

This message is a reminder about the Title V conference call next Thursday, March 18 from 10 AM to 12 Noon (EST). The call-in number is 202/260-8330 (access code: 0705#). Chris Sharp/Knox Co. will facilitate the state/local portion from 10 to 10:30 AM. If you have any suggestions for discussion topics, please contact Chris by phone at 423/215-2488 or via e-mail at jcsharp@esper.com.

EPA-Region 4 staff will join the call at 10:30 AM to follow up on the AIRS/AFS permit program data elements (PPDEs) letter send to the state/local air directors on January 22, 1999. We will also start following up on items from the Pensacola meeting, including several CAM questions that Joel received during his presentation.

Copy to: Bruce ✓ Cindy & Jonathan

Joel Huey Title V
new Region IV expert
Replaces Yolanda Adams

Bill Hahne brings up NSPS loopholes
Grace said she is trying to work out a solution.
No new rules

Distribution:

To: zahm_a (zahm_a@A1@ORL1)
To: woosley (woosley@coj.net@PMDF@EPIC66)
To: wncrapc (wncrapc@mindspring.com@PMDF@EPIC66)
To: wiseman (wiseman@nrepc.nr.state.ky.us@PMDF@EPIC66)
To: whahne (whahne@co.broward.fl.us@PMDF@EPIC66)
To: wayne_anderson (wayne_anderson@deq.state.ms.us@PMDF@EPIC66)
To: tso (tso@adem.state.al.us@PMDF@EPIC66)
To: treddy (treddy@mail.state.tn.us@PMDF@EPIC66)
To: tartkf (tartkf@co.forsyth.nc.us@PMDF@EPIC66)
To: tallam_l (tallam_l@A1@WPB1)
To: steve_allison (steve_allison@mail.dnr.state.ga.us@PMDF@EPIC66)
To: smith_jr (smith_jr@A1@FTM1)
To: sheplak_s (sheplak_s@A1@DER)
To: schwenmb (schwenmb@co.forsyth.nc.us@PMDF@EPIC66)
To: sammy_amerson (sammy_amerson@aq.ehnr.state.nc.us@PMDF@EPIC66)
To: robinson (robinson@coj.net@PMDF@EPIC66)
To: roberston (roberston@coj.net@PMDF@EPIC66)
To: rob_raney (rob_raney@mhd.nashville.org@PMDF@EPIC66)
To: richarcw (richarcw@columb31.dhec.state.sc.us@PMDF@EPIC66)
To: reksten_e (reksten_e@mail.chattanooga.gov@PMDF@EPIC66)
To: pdd (pdd@adem.state.al.us@PMDF@EPIC66)
To: noel_doharris (noel_doharris@mail.dnr.state.ga.us@PMDF@EPIC66)
To: mitchell_b (mitchell_b@A1@DER)
To: middleswar_e (middleswar_e@A1@PNS1)
To: mccaslsd (mccaslsd@columb31.dhec.state.sc.us@PMDF@EPIC66)

Appendix H-1, Permit History/ID Number Changes

Utility Board of the City of Key West
Stock Island Power Plant

DRAFT Permit No. 0870003-001-AV
Facility ID No. 0870003

Permit History

E.U.

<u>ID No</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issued</u>	<u>Expiration Date</u>	
001	Steam Turbine (EPA ID #1)	AO44-245479 AC44-61820	05/03/94 12/17/82	04/25/99 06/15/83	RETIRED January, 1998
002	Diesel Peaking Unit #1	AO44-175804	02/20/90	02/20/95	Now in E.U. 010
003	Diesel Peaking Unit #2	AO44-175804	02/20/90	02/20/95	Now in E.U. 010
004	Diesel Peaking Unit #3	AO44-175804	02/20/90	02/20/95	Now in E.U. 010
005 & 006	8.8 MW Medium Speed Diesel Generators D-1 & D-2	AO44-207419 AC44-221256/ PSD-FL-135 AC4452197/ PSD-FL-135	03/19/93 03/19/93	12/31/97 03/18/94 04/01/91	
007	23.5 MW Simple Cycle Combustion Turbine CT-1	AC44-245399/ PSD-FL-210	09/28/95	12/31/96	
008 & 009	19.8 MW Simple Cycle Combustion Turbines CT-2 & CT-3	0870003-003-AC & 0870003-004- AC	01/08/98 04/13/98	01/08/00 05/19/00	
010	Unregulated Emissions Units	0870003-001-AV	01/01/99	12/31/03	

ID Number Changes: From: Facility ID No. 52FTM440003; To: Facility ID No. 0870003
From: E.U. ID No. 002, 003, 004; To: E.U. ID No. 010; Note: 010 units are all unregulated units.

Notes: 1 - AO permits automatic extensions in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.
{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

Steve Walsh

RECEIVED

OCT 29 1998

THE CITIZEN KEY WEST

3420 Northside Drive

Key West Fl. 33040

Office 305-294-6641

Fax 305-294-0768
BUREAU OF AIR REGULATION

Published Daily
Key West, Monroe County, Florida 33040

STATE OF FLORIDA COUNTY OF MONROE

Before the undersigned authority personally appeared Randy G. Erickson, who on oath says that he is director of the Advertising Department of the Key West Citizen, a daily newspaper published at Key West, in Monroe County Florida; that the attached copy of advertisement, being a legal notice in the matter of

Notice of Intent to Issue permit - Title V Air Operation

In the October 25, 1998 Court, was published in said newspaper in the issues of

Affiant further says that The Key West Citizen is a newspaper published in Key West, in said Monroe County, Florida, and that the said newspaper has heretofore been continuously published in said Monroe County, Florida each day (except Saturdays) and has been entered as second-class mail matter at the post office in Key West, in said Monroe County, Florida, for a period of 1 year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Randy G. Erickson
Signature of Affiant

Sworn and subscribed before me this 27th day of October, 1998.

Crystal Bravo
Signature of Notary Public

Expires _____
Personally Known Produced Identification _____
Type of Identification Produced _____



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

**STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL
PROTECTION**

Title V DRAFT Permit No.
0870003-001-AV

Stock Island Power Plant
Monroe County

The Department of Environmental Protection (permitting authority), gives notice of its intent to issue a Title V air operation permit to Utility Board of the City of Key West for the **Stock Island Power Plant** located at 6900 Front Street, Stock Island Monroe County. The applicant's name and address are: Utility Board of the City of Key West, P.O. Drawer 6100, Key West, Florida 33041-6100

The permitting authority will issue the Title V **DRAFT** Permit, and subsequent the Title V **FINAL** permit, in accordance with the conditions of the Title V **DRAFT** Permit, unless a response received in accordance with the following procedures results in a different decision or significant change of term or conditions.

The Permitting authority will accept written comments concerning the proposed Title V **DRAFT** Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulations, 2600 Blair, Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400.

Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this **DRAFT** Permit the permitting authority shall issue a Revised Permit and acquire, if applicable, another Public Notice.

The permitting authority will issue the permit unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S. Media-

tion under Section 120.573, F.S. The petition must contain the information set forth below and must be filed (received in the Office of General Counsel of the Department of Environmental Protection,

3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone 850/488/9730; Fax 850/487-4938). Petitions must be filed within 14 (fourteen) days of publication of the public notice within 14 (fourteen) days of receipt of the notice of intent, whichever occurs first. A petitioner must mail a copy the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the applicable time period shall constitute a waiver of that persons right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S. or to intervene in this proceedings and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer the filing of a motion in compliance with the Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the permitting authority's action or proposed action;
- (c) A statement of how each petitioners substantial interests are affected by the permitting action or proposed action.
- (d) A state of the material facts disputed by the petitioner, if any;
- (e) A statement of the facts that the petitioner contends warrant reversal or modification of the permitting authority's action or proposed action;
- (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the permitting authority's action or proposed action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the permitting authority to take with respect to the action or proposed action addressed in this notice of intent. Because the administrative hearing process is designed to formulate final agency action, the filing of petition means that the permitting authority's final action may be different from the petition taken

by it in this notice of intent. Persons whose substantial interested

will be affected by any such final decision of the permitting authority to the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to the above pursuant to 42 United States Code (U.S.C) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 24 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrated to the Administrator of the EPA does not stay the effective the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of the EPA at 401 M. Street, SW, Washington, D.C. 20460/

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00p.m., Monday through Friday, except legal holidays, at:
Permitting Authority
Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-1344
Fax: 850/922-6979
Affected District
FDEP South Florida District Office 2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901
Telephone 941/332-6975
Fax 941/332-6969
FDEP South Florida District Branch Office
2796 Overseas Highway, Suite 221
Marathon, Florida 33050
Telephone 305/289-2310
Fax 305/289-2314.

The complete project file includes the **DRAFT** Permit, the application, and the information submitted by the responsible official, exclusive of Confidential records under Section 403.111, F.S. Interested persons may contact Scott M. Sheplak, P.E., at the above address, or call 850/488-1344, for additional information.
October 25, 1998.

Division of Air Resource Management

Select A Permit Summary to View Detailed Information

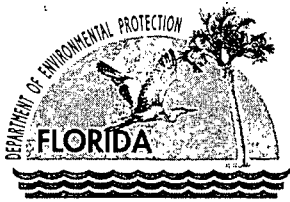
Permit No	Post Date	Update Date	Facility Na
0870003001AV	25-MAR-1997	15-OCT-1998	STOCK ISLAND POWER PLAN

This search retrieved 1 Title V Permitting Summaries.

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[Home](#)





Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

October 12, 1998

Mr. Larry Thompson
Manager
Utility Board of the City of Key West
P.O. Drawer 6100
Key West, Florida 33041-6100

Re: DRAFT Title V Permit No. 0870003-001-AV
Stock Island Power Plant

Dear Mr. Carey:

One copy of the DRAFT Title V Air Operation Permit for the Stock Island Power Plant located at 6900 Front Street, Stock Island, Monroe County, is enclosed. The permitting authority's "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" is also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" must be published as soon as possible upon receipt of this letter. This issue is important in order for you to receive your Title IV Acid Rain permit by January 1, 1999, pursuant to the Clean Air Act and Section 403.782, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the permitting authority's office within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in denial of the permit.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Scott M. Sheplak, P.E., at the above letterhead address. If you have any other questions, please contact Steve Welsh at 850/921-9585.

Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/w

Enclosures

cc: Ms. Carla E. Pierce, U.S. EPA, Region 4 (INTERNET E-mail Memorandum)
Ms. Gracy Danois, U.S. EPA, Region 4 (INTERNET E-Mail Memorandum)

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

In the Matter of an
Application for Permit by:
Utility Board of the City of Key West
P.O. Drawer 6100
Key West, Florida 33041-6100

DRAFT Permit No. 0870003-001-AV
Stock Island Power Plant
Monroe County

INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

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

The applicant, Utility Board of the City of Key West, applied on June 12, 1996, to the permitting authority for a Title V air operation permit for the Stock Island Power Plant located at 6900 Front Street, Stock Island, Monroe County.

The permitting authority has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. This source is not exempt from Title V permitting procedures. The permitting authority has determined that a Title V air operation permit is required to commence or continue operations at the described facility.

The permitting authority intends to issue this Title V air operation permit based on the belief that reasonable assurances have been provided to indicate that operation of the source will not adversely impact air quality, and the source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C.

Pursuant to Sections 403.815 and 403.0872, F.S., and Rules 62-103.150 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT." The notice shall be published one time only within 30 (thirty) days in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the permitting authority at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-1344; Fax: 850/922-6979), within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-103.150(6), F.A.C.

The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the enclosed Title V DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

The permitting authority will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, Florida Statutes. Mediation under Section 120.573, F.S., will not be available for this proposed action.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 (fourteen) days of receipt of this notice of intent. Petitions filed by any other person must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207, F.A.C.

A petition must contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number, and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the permitting authority's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the permitting authority's action or proposed action;
- (d) A statement of the material facts disputed by the petitioner, if any;
- (e) A statement of the facts that the petitioner contends warrant reversal or modification of the permitting authority's action or proposed action;

(f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the permitting authority's action or proposed action; and,

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the permitting authority to take with respect to the action or proposed action addressed in this notice of intent.

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

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

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
- (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
- (e) The type of action requested;
- (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and,

(h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

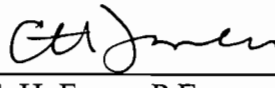
The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at 401 M. Street, SW, Washington, D.C. 20460.

Executed in Tallahassee, Florida.

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION**



C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE TITLE V AIR OPERATION PERMIT (including the PUBLIC NOTICE and the DRAFT permit) and all copies were sent by certified mail before the close of business on 10/15/98 to the persons listed:

Mr. Larry Thompson, Utility Board of the City of Key West
Mr. Carl R. Jansen, Jr., Utility Board of the City of Key West

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

Mr. Ivan Clark, P.E., R. W. Beck Engineering
South Florida District Office, FDEP, attn. David Knowles
South Florida District Branch Office, FDEP, attn. Jim Edds

Clerk Stamp

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

Barbara J. Boutwell 10/15/98
(Clerk) (Date)

PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Title V DRAFT Permit No. 0870003-001-AV
Stock Island Power Plant
Monroe County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation permit to Utility Board of the City of Key West for the Stock Island Power Plant located at 6900 Front Street, Stock Island, Monroe County. The applicant's name and address are: Utility Board of the City of Key West, P.O. Drawer 6100, Key West, Florida 33041-6100.

The permitting authority will issue the Title V DRAFT Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the Title V DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Title V DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

The permitting authority will issue the permit unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S. Mediation under under Section 120.573, F.S., will not be available for this proposed action.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of the notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number, and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the permitting authority's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the permitting authority's action or proposed action;

(d) A statement of the material facts disputed by the petitioner, if any;

(e) A statement of the facts that the petitioner contends warrant reversal or modification of the permitting authority's action or proposed action;

(f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the permitting authority's action or proposed action; and,

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the permitting authority to take with respect to the action or proposed action addressed in this notice of intent.

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

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at 401 M. Street, SW, Washington, D.C. 20460.

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

Permitting Authority:

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-1344
Fax: 850/922-6979

Affected District:

FDEP South Florida District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901
Telephone: 941/332-6975
Fax: 941/332-6969

FDEP South Florida District Branch Office
2796 Overseas Highway, Suite 221
Marathon, Florida 33050
Telephone: 305/289-2310
Fax: 305/289-2314

The complete project file includes the DRAFT Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Scott M. Sheplak, P.E., at the above address, or call 850/488-1344, for additional information.

Utility Board of the City of Key West
Stock Island Power Plant
Facility ID No. 0870003
Monroe County

Initial Title V Air Operation Permit
DRAFT Permit No. 0870003-001-AV

*Clerked Oct
19/15*

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

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Telephone: 850/488-1344
Fax: 850/922-6979

October 9, 1998

Initial Title V Air Operation Permit
DRAFT Permit No. 0870003-001-AV

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Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

Permittee:

Utility Board of the City of Key West
P.O. Drawer 6100
Key West, Florida 33041-6100

DRAFT Permit No. 0870003-001-AV

Facility ID No. 0870003

SIC Nos. 49, 4911

Project: Initial Title V Air Operation Permit

This permit is for the operation of the Stock Island Power Plant. This facility is located at 6900 Front Street, Stock Island, Monroe County; UTM Coordinates: Zone 17, 425.65 km East and 2716.67 km North; Latitude: 24° 33' 49" North and Longitude: 81° 44' 03" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The Utility Board of the City of Key West is authorized to operate the Stock Island Power Plant as shown in the application and approved drawings, plans, and other documents, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units

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

APPENDIX TV-1, TITLE V CONDITIONS (Version Dated 12/02/97)

APPENDIX SS-1, STACK SAMPLING FACILITIES (Version dated 10/07/96)

TABLE 297.310-1, CALIBRATION SCHEDULE (Version Dated 10/07/96)

FIGURE 1 - SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM REPORT (version dated 7/96)

ORDER EXTENDING PERMIT EXPIRATION DATE

Acid Rain Retired Unit Exemption (Ralph Garcia Steam Plant)

Phase II Acid Rain New Unit Exemptions (D-1, D-2, CT-1, CT-2, & CT-3)

Effective Date: January 1, 1999

Renewal Application Due Date: July 5, 2003

Expiration Date: December 31, 2003

Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/clp/stw

Section I. Facility Information

Subsection A. Facility Description

This facility consists of five regulated emission units with a total generating capacity of 80.7 MW. There are two regulated diesel generators, three simple cycle combustion turbines; and miscellaneous unregulated units. To reduce pollution, a combination of control techniques are used including water injection, ignition timing retardation, and low sulfur fuel oil. The Ralph Garcia Steam Plant [EPA ID #1] was retired January 1, 1998. Also included in this permit are insignificant emissions units and activities.

Based on the initial Title V permit application received June 12, 1996, this facility is not a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Units

E.U.

ID No.

Brief Description

005	8.8 MW Medium Speed Diesel Generator [Unit #1; EPA ID #D-1]
006	8.8 MW Medium Speed Diesel Generator [Unit #2; EPA ID #D-2]
007	23.5 MW Simple Cycle Combustion Turbine [CT-1]
008	19.77 MW Simple Cycle Combustion Turbine [CT-2]
009	19.77 MW Simple Cycle Combustion Turbine [CT-3]
010	Unregulated Emissions Units (See Appendix U-1.)

Emission units 002, 003, and 004 were moved to emissions unit 010.

Subsection C. Retired Acid Rain Unit

001	37 MW Ralph Garcia Steam Plant [EPA ID #1][Retired January 1998]
-----	--

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit ID Nos. on all correspondence, test report submittals, applications, and other information.

Subsection D. Relevant Documents

The documents listed below are not a part of this permit; however they are specifically related to this permitting action.

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

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

Table 2-1, Summary of Compliance Requirements

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

Appendix H-1, Permit History/ID Number Transfers

These documents are on file with permitting authority:

Initial Title V Permit Application received June 12, 1996.

Section II. Facility-wide Conditions

1. APPENDIX TV-1, TITLE V CONDITIONS (version dated 8/11/97), is a part of this permit.

{Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the Permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The Permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(b)1. & 4., F.A.C.]

{Permitting Note: Although the Permittee is not required to perform a visible emissions compliance test to demonstrate compliance with the facility-wide limitations annually or before renewal, if the Department believes that the general visible emissions standard is being violated, the Department may require that the owner or operator perform a visible emissions compliance test per Chapter 62-297.310(7)(b), Special Compliance Tests. In addition, Department personnel who are certified to perform visible emissions tests may determine compliance with the general visible emissions standard.}

4. Prevention of Accidental Releases (Section 112(r) of CAA). If required by 40 CFR 68, the Permittee shall submit to the implementing agency:

a. a risk management plan (RMP) when, and if, such requirement becomes applicable, and

b. certification forms and/or RMPs according to the promulgated rule schedule.

[40 CFR 68]

5. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The Permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]

6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Exempt Emissions Units and/or Activities, is a part of this permit.

[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

7. **Not federally enforceable.** The Permittee shall take reasonable precautions to prevent emissions of unconfined particulate matter at this facility. These precautions include receiving delivery of fuel oil by barge rather than trucks, and using paved roads for the fuel trucks which deliver vehicle fuel. Additionally, watering will be used as needed to prevent emissions from unpaved areas.

[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received June 12, 1996]

8. The Permittee shall submit all compliance, annual operating reports and other correspondence required of this permit to the Department's South District and Marathon Branch offices:

Department of Environmental Protection
South District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida, 33901
Telephone: 941/332-6975
Fax: 941/332-6969

Department of Environmental Protection
Marathon Branch Office
2796 Overseas Highway, Suite 221
Marathon Florida, 33901
Telephone: 305/289-2310
Fax: 305/289-2314

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

United States Environmental Protection Agency
Region 4
Air, Pesticides, & Toxics Management Division
Operating Permits Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9099
Fax: 404/562-9095

10. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. [Rule 62-213.440, F.A.C.]

Section III. Emissions Units and Conditions

Subsection A. Two Medium Speed Diesel Generators

E.U.

<u>ID No.</u>	<u>Brief Description</u>
005	8.8 MW Medium Speed Diesel Generator [Unit #1; EPA ID #D-1]
006	8.8 MW Medium Speed Diesel Generator [Unit #2; EPA ID #D-2]

Each of the two 8.8 MW (nominal) electric Fairbanks Morse diesel generators (Model PC-2.6V) burns No. 2 distillate fuel oil and has a maximum heat input rate of 85.4 million Btu per hour. Sulfur dioxide emissions are controlled by limiting the sulfur content of the No. 2 fuel oil to 0.05% by weight. Nitrogen oxides emissions are controlled by ignition timing retard and by limiting the hours operation. Visible emissions and NOx emissions are continuously monitored. Commercial operation commenced April 1, 1991. The units are exempt from acid rain regulations by the attached New Unit Exemptions, effective January 1, 1999 through December 31, 2003.

{Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination dated 6/5/89, AO44-207419 & PSD-FL-135}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum heat input rate to each diesel generator shall not exceed 85.4 MMBtu per hour (606 gallons per hour). The sum total consumption of fuel oil for both diesel generators combined shall not exceed 2.27 million gallons in any consecutive 12-month period.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE) and AC44-207419/PSD-FL-135]

A.2. Emissions Unit Operating Rate Limitation During and After Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions 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.]

A.3. Methods of Operation - Fuels. The only fuel to be burned in this unit is new (virgin) No. 2 fuel oil. The sulfur content shall not exceed 0.05 percent by weight.
[Rules 62-213.440(1), F.A.C.; AC44-221256/PSD-FL-135; and Acid Rain Program New Unit Exemptions.]

A.4. Hours of Operation. For both units combined, the hours of operation shall not exceed a combined total of 3,740 full load equivalent engine hours in any consecutive 12-month period.
[Rule 62-212.400(6), F.A.C.]

Emission Limitations and Standards

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

A.5. Oxides of Nitrogen. NO_x emissions shall not exceed any of the following limits:

- a. 160.9 pounds per hour from each engine;
- b. 6.0 grams per horsepower-hour from each engine;
- c. 300.9 tons in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

A.6. Sulfur Dioxide. SO₂ emissions shall not exceed either of the following limits:

- a. 43.6 pounds per hour from each engine;
- b. 81.6 tons in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

A.7. Particulate Matter. PM/PM₁₀ emissions shall not exceed any of the following limits:

- a. 8.5 pounds per hour from each engine;
- b. 0.1 million pound per million Btu heat input;
- c. 16.0 tons in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

A.8. Carbon Monoxide. CO emissions shall not exceed any of the following limits:

- a. 53.6 pounds per hour from each engine;
- b. 2.0 grams per horsepower-hour from each engine;

c. 100.3 tons in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

A.9. Volatile Organic Compounds. VOC emissions shall not exceed any of the following limits:

a. 26.8 pounds per hour from each engine;

b. 1.0 grams per horsepower-hour from each engine;

c. 50.1 tons in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

A.10. Beryllium (Be). Beryllium emissions shall not exceed 0.00054 pounds per hour from each engine and shall not exceed 2.0 pounds in any consecutive 12-month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., AC44-221256]

A.11. Objectionable Odor. The Permittee shall not discharge air pollutants which cause or contribute to an objectionable odor.

[Rule 62-296.320(1)(a)2, F.A.C., AC44-221256]

Excess Emissions

A.12. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

A.13. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

Monitoring Requirements

A.14. The Permittee shall calibrate, maintain, and operate continuous monitoring equipment, in accordance with the manufacturer's instructions, to continuously monitor

and record opacity and NOx emissions. The Permittee shall maintain a complete file of all measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; all continuous emissions monitoring system performance evaluations, all continuous emissions monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required, recorded in an a permanent legible form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

Test Methods and Procedures

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any terms or conditions of this permit. }

A.15. The Permittee shall conduct a compliance test for each diesel generator on an *annual basis* for the following pollutants. Each compliance test shall be conducted in accordance with 40 CFR 60, Appendix A, using the method indicated.

- a) Oxides of Nitrogen (NOx) - EPA Method 20.
- b) Carbon Monoxide (CO) - EPA Method 10.
- c) Beryllium (Be) - EPA Method 104.
- d) Particulate Matter (PM/PM₁₀) - EPA Method 5.

An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

[Rule 62-297.310(7)(a)4. & 5., F.A.C., AC44-152197]

A.16. The Permittee shall conduct a compliance test for each of the following pollutants *prior to obtaining a renewed operation permit*. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy this requirement. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of compliance test results for any emissions unit that, during the year prior to renewal: a) did not operate; or b) in the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours. Each compliance test shall be conducted in accordance with 40 CFR 60 Appendix A, using the method indicated.

- a) Sulfur Dioxide (SO₂) - EPA Method 6 or ASTM D 2880-71 for sulfur in oil.
- b) Particulate Matter (PM/PM₁₀) - EPA Method 5.
- c) Volatile Organic Compounds (VOC) - EPA Method 25.

[Rule 62-297.310(7)(a)3., F.A.C., AC44-152197]

A.17. By this permit, annual emissions compliance testing for visible emissions and particulate matter is not required for these emissions units while burning liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

{Permitting note: See also Subsection D.}

5

Reporting and Recordkeeping Requirements

A.18. In order to document compliance with the hours of operation limitation of specific condition A.4, the fuel oil consumption limit of specific condition A.1, and the annual NOx emission limit of specific condition A.5, the Permittee shall keep daily records of the hours of operation, the fuel oil consumption, and the NOx emissions. At a minimum, the records shall indicate:

- (a) the daily hours of operation for each individual diesel generator,
- (b) the daily hours of operation expressed as full load equivalent engine hours (both units combined);
- (c) the daily sum total fuel oil consumption in gallons for both units combined;
- (d) the daily sum total NOx emissions in pounds for both units combined;
- (e) a cumulative total hours of operation expressed as full load equivalent engine hours for the current month;
- (f) a cumulative sum total fuel oil consumed in gallons for the current month;
- (g) a cumulative sum total NOx emissions in tons for the current month;
- (h) a rolling cumulative total hours of operation expressed as full load equivalent engine hours for the previous 12 consecutive months;
- (i) a rolling cumulative sum total fuel oil consumed in gallons for the previous 12 months; and
- (j) a rolling cumulative sum total NOx emissions in tons for the previous 12 consecutive months.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

A.19. For each calendar quarter, the Permittee shall submit to the Department a written report of emissions in excess of the emission limiting standards as set forth in this permit. The report shall be postmarked by the 30th day following the end of each calendar quarter. The report shall include at least the following information:

1. The quarterly hours of operation for each individual diesel generator.
2. The magnitude of excess emissions, any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
3. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions.
4. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

5. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

A.20. In order to document compliance with the hourly SO₂ emission limit of specific condition A.6 and the fuel sulfur limit of specific condition A.3, the Permittee shall keep records of the as-fired fuel sulfur content, in percent by weight. For each shipment of fuel oil, the sulfur content shall be based on either vendor provided analysis or other analysis using ASTM D2622-94, ASTM D4294-90 (95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or the latest editions). The records shall be maintained for a minimum of five years and shall be made available to the Department upon request.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

Source Commitments

A.21. If the Permittee requests relaxation of any federally enforceable limits for these units, then the Department will determine whether the NSR requirements of Rule 62-212.400, F.A.C. shall apply, as though the construction permit AC44-221256 had not been issued.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

A.22. Best Available Control Technology (BACT) will be re-evaluated if the Permittee requests an increase in or exceeds the permitted hours of operation. Selective Catalytic Reduction for NO_x control will be required at a minimum for BACT if deemed technologically feasible. In no event shall the BACT control installation and compliance testing occur later than 30 months from the date that the Permittee requested to exceed the permitted hours of operation or actually exceeded the permitted hours of operation.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

A.23. The three existing 16.5 MW steam units at the Key West Plant shall not operate.

[AC44-221256/PSD-FL-135 and AC44-152197]

Subsection B. 23.5 MW Combustion Turbine

E.U. Brief Description
ID No.

007 23.5 MW Simple Cycle Combustion Turbine [CT-1]

Emissions unit 007 is a General Electric (GE) Frame 5 model PG5341 CT equipped with water injection for fuel oil firing. It has a rated capacity of 23.5 MW at ISO conditions. The GE CT has a heat input of 312 MMBtu per hour (at 59° F) while burning oil. The CT is fired with No. 2 fuel oil with a sulfur content not to exceed 0.05 % by weight. NOx emissions are controlled by a water injection system. The water to fuel ratio is continuously monitored. This turbine began operation January 1, 1996.

{Permitting notes: This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C.; NSPS - 40 CFR 60 Subpart A; Rule 212.400, F.A.C., Prevention of Significant Deterioration; PSD-FL-210; and AC44-245399. The unit is not affected by the Acid Rain Program, since it meets the requirements of 40 CFR 72.7 by serving a generator with less than 25 MW.}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum heat input to the GE combustion turbine (CT) at an ambient temperature of 59° F shall not exceed 312 MMBtu/hr while firing fuel oil. Heat input may vary depending on ambient conditions and the CT's characteristics. The approved manufacturer's curves shall be used to establish heat input rates over a range of temperatures for the purpose of compliance determination.
[Rule 62-210.200, F.A.C., AC44-245399/PSD-FL-210]

B.2. Methods of Operation - Fuels. The only fuel to be burned in this unit is new No. 2 fuel oil. The sulfur content shall not exceed 0.050 percent by weight.
[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C., AC44-245399/PSD-FL-210]

B.3. Hours of Operation/Fuel Consumption. The maximum No. 2 fuel oil consumption allowed to be burned in the CT is 7.1 million gallons per year, which is equivalent to 2,888.5 hours per year at full-load; the CT may operate for more than this if operating at part-load.
[Rule 62-212.500(56), F.A.C., AC44-245399, PSD-FL-210]

Emission Limitations and Standards

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

Pursuant to Rule 62-212.410, F.A.C., BACT, the maximum allowable emissions from the CT, when firing No. 2 fuel oil at 15% O₂, shall not exceed:

B.4. Oxides of Nitrogen. NO_x emissions shall not exceed any of the following limits:

a. Nitrogen oxides emissions, expressed as NO_x, shall not exceed:

$$STD = 0.0075 (14.4)/Y + F$$

where:

STD = allowable NO_x 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 = NO_x emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(3).

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

Fuel-bound nitrogen (% by weight)	F (NO _x % 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. 75 ppmvd, based on a 1-hour average at 15% O₂;

c. 96 lbs./hour, based on a 1-hour average at 15% O₂;

d. 138 TPY.

[AC44-245399/PSD-FL-210, 40 CFR 60.332]

B.5. Sulfur Dioxide. SO₂ emissions shall be controlled by limiting the sulfur content of the fuel to a maximum of 0.05 percent by weight.

[AC44-245399/PSD-FL-210, 40 CFR 60.333]

B.6. Particulate Matter/PM₁₀. PM/PM₁₀ emissions shall be limited to 18 lbs./hour, based on a 1-hour average; 43 TPY.

[AC44-245399, PSD-FL-210]

B.7. Carbon Monoxide. CO shall be limited to 20 PPM at 100% load, and 136 PPM at 50% load; 64 lbs. per hour, based on a 1-hour average; 152 TPY.
[AC44-245399/PSD-FL-210]

B.8. Visible Emissions. Visible emissions shall be limited to 20 percent opacity.
[AC44-245399/PSD-FL-210]

Excess Emissions

See Subsection E.

Monitoring Requirements

See Subsection E.

Test Methods & Procedures

See Subsection D. & E.

Reporting and Recordkeeping Requirements

B.9. Two copies of the results of the emission tests for the pollutants listed in conditions B.4. through B.7. shall be submitted within forty-five days of the last sampling run to the South District office in Ft. Myers. All reports shall be in a format consistent with and shall include the information in accordance with Rule 62-297.310 (8), F.A.C.
[Rule 62-297.310(8), F.A.C.]

Also, see Subsection E. for additional reporting and recordkeeping requirements.

Subsection C. 19.77 MW Combustion Turbines

<u>E.U. ID No.</u>	<u>Brief Description</u>
008	19.77 MW Simple Cycle Combustion Turbine [CT-2]
009	19.77 MW Simple Cycle Combustion Turbine [CT-3]

These emissions units are two refurbished General Electric Model MS-5001R 19.77 MW combustion turbines. CT-2 had a startup date of June 1, 1998, while CT-3 had a startup date of August 1, 1998.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required; NSPS - 40 CFR 60, Subparts A (General Provisions) and GG, (Standards of Performance for Stationary Gas Turbines), adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C.; Rule 212.400, F.A.C., Prevention of Significant Deterioration; and AC0870003-003, issued January 8, 1998. The units are not affected by the Acid Rain Program, since they meet the requirements of 40 CFR 72.7 by serving a generator with less than 25 MW. }

General Provisions

Notification and Record Keeping

C.1. A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c) shall be postmarked not less than 30 days prior to such date. The notification shall be sent to the Department's South District Office and Marathon Branch Office.

[40 CFR 60.7(a)(5)]

C.2. When it has been demonstrated that these units meet the emission limitations established in permit AC-0870003-003, a properly signed and sealed certification from the permittee's Professional Engineer shall be submitted to the offices listed in C.1. stating that 1) the construction of CT-2 and CT-3 was completed in accordance with permit AC-870003-003 and, 2) the units have been tested and are in compliance with the terms and conditions contained within permit AC-870003-003.

[Rules 62-212.400(7)(b) and 62-213.420(1)(a)5., F.A.C., AC-870003-003]

Performance Tests

C.3. Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup, the Permittee shall conduct performance test(s) and furnish the offices listed in C.1. a written report of the results of such performance test(s).

[40 CFR 60.8(a)] See Subsection E. for additional requirements.

Essential Potential to Emit (PTE) Parameters

C.4. Hours of Operation. Each emission unit is allowed to operate 4,000 hours per year. The combined operation of both units shall also be limited to 4,000 hours per year. [AC-870003-003].

C.5. Method of Operation - Fuels. Only No. 2 fuel oil can be fired in the combustion turbines. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight. [AC-870003-003]

C.6. Permitted Capacity. The maximum heat input rate to each combustion turbine shall not exceed 305 million Btu per hour (MMBtu/hr). [AC-870003-003]

C.7. Fuel Consumption. The maximum No. 2 fuel oil consumption allowed to be burned in either emission unit No. 008 or emission unit No. 009 is 8,840,000 gallons per year, which is equivalent to 4,000 hours per year of operation at full load. The combined fuel oil consumption for both units shall be limited to 8,840,000 gallons per year. [AC-870003-003]

Emission Limitations and Standards

Note: The emission limits of LB/hr apply to each unit, while the TPY limit apply to each unit individually and both units collectively.

C.8. Oxides of Nitrogen. For each turbine, NO_x emissions shall not exceed any of the following limits:

a. Nitrogen oxides emissions, expressed as NO_x, shall not exceed:

$$STD = 0.0075(14.4)/Y + F$$

where:

STD = allowable NO_x 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 = NO_x emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(3).

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

<u>Fuel-bound nitrogen (% by weight)</u>	<u>F (NO_x% by volume)</u>
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. 75 ppmvd, based on a 1-hour average at 15% O₂; and

c. 93.8 lb./hour, based on a 1-hour average at 15% O₂; and 40 degrees F from each turbine.

d. 172 TPY, based on an average hourly concentration of 86 pounds per hour at 85 degrees F ambient temperature from both turbines combined.

e. no more than 4,000 hours per year of operation, from either or both turbines combined.

[40 CFR 60.332, AC-870003-003]

C.9. Sulfur Dioxide. For each turbine, SO₂ emissions shall be controlled by limiting the sulfur content of the fuel to a maximum of 0.05 percent by weight.

[40 CFR 60.333, AC-870003-003]

C.10. Particulate Matter/PM₁₀. For each turbine, PM/PM₁₀ emissions shall be limited to 16.6 lb./hour, based on a 1-hour average; PM and PM₁₀ from both turbines combined shall be limited to 55 TPY and 45 TPY, respectively.

[AC-870003-003]

C.11. Carbon Monoxide. For each turbine, CO shall be limited to 25.2 lb./hour, based on a 1-hour average; and from both turbines combined, 101 TPY.

[AC-870003-003]

C.12. Visible Emissions. Visible emissions shall be limited to 20 percent opacity.

[AC-870003-003]

Excess Emissions

See Subsection E.

Monitoring Requirements

See Subsection E.

Test Methods & Procedures

See Subsections D. & E.

Reporting and Recordkeeping Requirements

C.13. Two copies of the results of the emission tests for the pollutants listed in conditions C.8. through C.11. shall be submitted within forty-five days of the last sampling run to the South District office in Ft. Myers. All reports shall be in a format consistent with and shall include the information in accordance with Rule 62-297.310 (8), F.A.C.
[Rule 62-297.310(8), F.A.C.]

Also, see Subsection E. for additional recordkeeping and reporting requirements.

Subsection D. Common Conditions I

The following conditions apply to all emissions units listed in Section III, Subsections A., B., and C., of this permit.

Test Methods & Procedures

D.1. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

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

D.2. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

D.3. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. **Opacity Compliance Tests.** When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

Exceptions to these requirements are as follows:

- a. (not applicable)
- b. (not applicable)
- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1. (See attachment.)
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

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

D.4. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

D.5. Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

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

Subsection E. Common Conditions II

The following conditions apply only to the Combustion Turbines listed in listed in Section III, Subsections B. and C. of this permit.

Excess Emissions

E.1. Excess emissions from the CT resulting from start-up, shutdown, malfunction, or load change shall be acceptable providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for a longer duration. ✓

[AC44-245399/PSD-FL-210, 0870003-003-AC]

E.2. Excess Emissions Defined. For the purpose of reports required under 40 CFR 60.7(c) (see specific condition C.24.), periods of excess emissions that shall be reported are defined as follows: ✓

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

b. *Sulfur dioxide.* Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.05 percent.

[40 CFR 60.334(c)(1)&(c)(2), 0870003-003-AC]

Monitoring Requirements

E.3. CMS Requirements. The Permittee shall install, operate, and maintain a continuous monitoring system (CMS) to monitor and record the fuel consumption, the ratio of water to fuel being fired in the turbine, and the electrical output in MW. The system shall be accurate to within ± 5.0 percent and shall be approved by the Department. Quarterly calibrations shall be performed on the CMS. ✓

[40 CFR 60.334(a); AC44-245399/PSD-FL-210, 0870003-003-AC]

E.4. Critical Fuel Parameters. The Permittee shall monitor sulfur content, nitrogen content, and the lower heating value of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows: ✓

a. 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.

b. 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 Bureau of Air Regulation before they can be used to comply with 40 CFR 60.334(b).

[AC44-245399/PSD-FL-210, 40 CFR 60.334(b)(1)&(b)(2), 0870003-003-AC]

Test Methods & Procedures

E.5 Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 95 to 100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input versus inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 105 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report. ✓

To demonstrate compliance with federal new source performance standard Subpart GG - Standards of performance Stationary Gas Turbines, the initial test shall be conducted at four load points and corrected to ISO conditions for comparison to the NSPS allowable. *Subsequent annual compliance tests conducted to establish compliance with NOx limits that are more stringent than the NSPS standard shall not require an ISO correction or testing at four load points; rather, the testing shall be done at capacity, as defined above.* However, when testing shows that NOx emissions exceed the standard when operating at capacity, the company shall recalibrate the NOx emission control system using emission testing at four loads as required in Subpart GG.

[Rule 62-4.070(3), F.A.C.]

E.6. Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Department (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Department's satisfaction that the affected facility is in compliance with the standard, or (3) approves shorter sampling times and smaller sample volumes when necessitated by process variables or ✓

other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Department's authority to require testing under section 114 of the Act.

[40 CFR 60.8(b)(1), (4) & (5)]

E.7. Performance tests shall be conducted under such conditions as the Department shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Department such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c)].

E.8. The Utility Board of the City of Key West shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to such facility. This includes (a) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (b) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

2. Safe sampling platform(s).

3. Safe access to sampling platform(s).

4. Utilities for sampling and testing equipment.

[40 CFR 60.8(e)]

E.9. Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department's approval, be determined using the arithmetic mean of the results of the two other runs.

[40 CFR 60.8(f)].

E.10. Compliance tests shall be performed on the CT while firing oil. Testing of emissions shall be conducted at 95-100% of the manufacturer's rated heat input based on the average ambient air temperature during the test.

Annual compliance tests shall be performed on the CT if the No. 2 fuel was used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods in accordance with 40 CFR 60, Appendix A, as adopted by reference in Chapter 62-297, F.A.C.:

- a. Reference Method 5B for PM.
- b. Reference Method 9 for VE.
- c. Reference Method 10 for CO.
- d. Reference Method 20 for NO_x.
- e. Other methods may be used for compliance testing after obtaining prior Departmental approval, in writing.

[Rule 62-297.310(7)(a)(4), F.A.C., AC44-2445399, 0870003-003-AC]

E.11. Sulfur Content. The Permittee shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: ASTM D 2880-96, or more recent version, shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92, or more recent versions, shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Department.

[40 CFR 60.335(d)]

E.12. To compute the nitrogen oxides emissions, the Permittee shall use analytical methods and procedures that are accurate to within +5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired.

[40 CFR 60.335(a)]

E.13. The NO_x emission rate shall be computed for each run using the following equation:

$$NO_x = (NO_{xO}) (P_r/P_o)^{0.5} e^{19(H_o-0.00633)} (288^\circ K/T_a)^{1.53}$$

where:

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

NO_{xO} = observed NO_x concentration, PPM by volume.

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

P_o = observed combustor inlet absolute pressure at test, mm Hg.

H_o = observed humidity of ambient air, g H₂O/g air.

e = transcendental constant, 2.718.

T_a = ambient temperature, °K. [40 CFR 60.335(c)(1)]

E.14. The owner or operator may use the following as an alternative to the reference methods and procedures specified in 40 CFR 60.335:

Instead of using the equation in paragraph 40 CFR 60.335(c)(1), manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in 40 CFR 60.8 to ISO standard day conditions. These factors are developed for each gas turbine model they manufacture in terms of combustion inlet pressure, ambient air pressure, ambient air humidity, and ambient air temperature. They shall be substantiated with data and must be approved for use by the Department before the initial performance test required by 40 CFR 60.8. Notices of approval of custom ambient condition correction factors will be published in the Federal Register.

[40 CFR 60.335(f)(1)]

E.15. The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with 40 CFR 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

[40 CFR 60.335(c)(2)]

E.16. Compliance with the allowable emission limiting standards given in Subsections B. and C. shall be determined by using EPA Reference Method 20 as described in 40 CFR 60, Appendix A (1996, version) adopted by reference in Rule 62-204.800, F.A.C. The span values shall be 300 PPM of nitrogen oxide and 21 percent oxygen. The NO_x emissions shall be determined 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. An annual compliance test shall be performed on the unit if operated for more than 400 hours in the preceding 12-month period.

[Rule 62-297.310, F.A.C. and 40 CFR 60.335(c)(3)]

E.17. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60 or other methods and procedures as specified in this permit, except as provided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph 40 CFR 60.335(f).

[40 CFR 60.335(b)]

E.18. (a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate

compliance with emission limits on a continuous basis, appendix F to 40 CFR 60, unless otherwise specified in an applicable subpart or by the Department. Appendix F is applicable December 4, 1987.

(b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under 40 CFR 60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. ✓

(c) If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he/she shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Department under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 40 CFR 60.8 and as described in 40 CFR 60.11(e)(5), shall furnish the Department two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 40 CFR 60.8 is conducted.

(2) Except as provided in 40 CFR 60.13(c)(1), the owner or operator of an affected facility shall furnish the Department within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

(d)(1) Permittee's of all continuous emission monitoring systems installed in accordance with the provisions of 40 CFR 60 shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(3) Unless otherwise approved by the Department, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum

procedures shall include a method for producing a simulated zero opacity condition and upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of 40 CFR 60 shall be used.

(g) When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Department. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

(h) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorder during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data

may be used. The data may be recorded in reduced or non reduced form (e.g., PPM pollutant and percent O₂ or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).
[Rule 62-296.800, F.A.C.; 40 CFR 60.13(a)-(h)].

E.19. After receipt and consideration of written application, the Department may approve alternatives to any monitoring procedures or requirements of 40 CFR 60 including, but not limited to the following:

(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by 40 CFR 60 would not provide accurate measurements due to liquid water or other interferences caused by substances with the effluent gases.

(2) Alternative monitoring requirements when the affected facility is infrequently operated.

(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.

(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(5) Alternative methods of converting pollutant concentration measurements to units of the standards.

(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.

(7) Alternatives to the ASTM test methods or sampling procedures specified by any subpart.

(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Department may require that such demonstration be performed for each affected facility.

(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities are released to the atmosphere through more than one point.

[Rule 62-296.800, F.A.C.; 40 CFR 60.13(i)].

Reporting and Recordkeeping Requirements

E.20. To determine compliance with the fuel oil firing heat input limitation, the Permittee shall maintain daily records of fuel oil consumption for the turbine and the heating value for the fuel. All records shall be maintained for a minimum of five years after the date of each record and shall be made available to representatives of the Department upon request. *don't need*

[Rule 62-4.070(3)]

E.21. Excess Emissions Report. The Permittee shall record the occurrence and duration of any startup, shutdown, or malfunctions of the turbine and any malfunction of the air pollution control equipment or CMS. Additionally, the Permittee shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. ✓

[Rule 62-210.700(6), F.A.C., and 40 CFR 60.7(b)]

E.22. Quarterly Report. The Permittee shall submit a quarterly excess emissions and monitoring systems performance report. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information: ✓

1. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

2. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

3. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)]

E.23. Summary Report. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Department. One summary report form shall be submitted for each pollutant monitored. ✓

1. If the total duration of excess emissions for the reporting period is less than one percent of the operating time for the reporting period and CMS downtime for the reporting period is less than five percent of the total operating time for the reporting

period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Department.

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

[40 CFR 60.7(d)]

E.24. Reporting Frequency. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under 40 CFR 60 continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and

(iii) The Department does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Department in writing of his or her intention to make such a change and the Department does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Department may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Department to make a judgment about the source's potential for noncompliance in the future. If the Department disapproves the Permittee's request to reduce the frequency of reporting, the Department will notify the Permittee in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Department to the Permittee will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the Permittee shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting

period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the Permittee may again request approval from the Department to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)]

E.25. Records Retention. The Permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least **5 (five)** years following the date of such measurements, maintenance, reports, and records.

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

Additional General Provisions - 40 CFR 60 Subpart A

E.26. Department Notification.

(a) The Permittee shall provide to the Department's South District office at least 15 days prior notice of any compliance or performance test, except as specified under other subparts, to afford the District office the opportunity to have an observer present. Test results shall be submitted to the District office no later than 45 days after completion of the test.

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

[40 CFR 60.8(d) and Rule 62-297.310(7)(a)⁹, F.A.C.]

Compliance with Standards and Maintenance Requirements

E.27. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of 40 CFR 60, any alternative method that is approved by the Department, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

[40 CFR 60.11(b)].

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E.28. The Permittee shall follow the manufacturer's instructions during periods of start-up, shutdown, malfunction, or load change to ensure that the best operational practices to minimize emissions will be adhered to and the duration of any excess emissions will be minimized. The instructions shall be kept on file at the plant site and made available for inspection upon request by the Department.

[40 CFR 60.11(d)]

E.29. Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[40 CFR 60.11(g)].

E.30. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

Monitoring Requirements

E.31. An alternative to the relative accuracy test specified in Performance Specification 2 of 40 CFR 60 Appendix B, may be requested as follows:

(1) An alternative to the reference method tests for determining relative accuracy is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Department to waive the relative accuracy test in section 7 of Performance Specification 2 and substitute the procedures in section 10 if the results of a performance test conducted according to the requirements in 40 CFR 60.8 of this subpart or other tests performed following the criteria in 40 CFR 60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Department to waive the relative accuracy test and substitute the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the relative accuracy test shall include a detailed

description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Department will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).

(2) The waiver of a CEMS relative accuracy test will be reviewed and may be rescinded at such time following successful completion of the alternative RA procedure that the CEMS data indicate the source emissions approaching the level of the applicable standard. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., 40 CFR 60.45(g)(2) and 40 CFR 60.45(g)(3), 40 CFR 60.73(e), and 40 CFR 60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of relative accuracy testing. If this criterion is exceeded, the owner or operator must notify the Department within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Department will review the notification and may rescind the waiver and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2.

[Rule 62-296.800, F.A.C.; 40 CFR 60.13(j)].

Modifications

E.32. Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(a)].

E.33. Emission rate shall be expressed as kg/hr (lbs./hour) of any pollutant discharged into the atmosphere for which a standard is applicable. The Department shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Department to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Department's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Department's satisfaction that there are reasonable grounds to dispute the result obtained by the Department utilizing emission factors as referenced in 40 CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 appendix C of 40 CFR 60 shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Department shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(b)].

E.34. The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of 40 CFR 60 any other facility within that source.

[Rule 62-296.800, F.A.C.; 40 CFR 60.14(c)].

E.35. The following shall not, by themselves, be considered modifications under 40 CFR 60:

(1) Maintenance, repair, and replacement which the Department determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the date any standard under 40 CFR 60 becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Department determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.
[Rule 62-296.800, F.A.C.; 40 CFR 60.14(e)].

E.36. Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of this section.
[Rule 62-296.800, F.A.C.; 40 CFR 60.14(f)].

E.37. Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved.
[Rule 62-296.800, F.A.C.; 40 CFR 60.14(g)].

Section IV. Acid Rain Part

Operated by: Utility Board of the City of Key West
ORIS code: 6584

The following emissions units are regulated under the Acid Rain Program:

E.U.

<u>ID No.</u>	<u>Description</u>
001	Ralph Garcia Steam Plant [EPA ID #1][Retired]
005	8.8 MW Medium Speed Diesel Generator [Unit #1; EPA ID #D-1]
006	8.8 MW Medium Speed Diesel Generator [Unit #2; EPA ID #D-2]
007	23.5 MW Simple Cycle Combustion Turbine [CT-1]
008	19.77 MW Simple Cycle Combustion Turbine [CT-2]
009	19.77 MW Simple Cycle Combustion Turbine [CT-3]

1. The Utility Board of the City of Key West must comply with all the requirements and provisions as set forth in the applications listed below:

Ralph Garcia Steam Plant: "Retired Unit Exemption" DEP Form No. 62-210.900(1)(a)3., effective 01/01/98.

D-1, D-2, CT-1, CT-2, & CT-3: "New Unit Exemption" DEP Form No. 62-210.900(1)(a)2., effective 01/01/99 through 12/31/03.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C. 40 CFR 72]

2. The following table lists the Phase II sulfur dioxide allowances for the above units:

E.U. ID No.	EPA ID #	YEAR	2000	2001	2002	2003
001 (retired)	1	SO ₂ allowances, under Table 2 of 40 CFR 73	2550*	2550*	2550*	2550*
005, 006	D-1, D-2	SO ₂ allowances, under Table 2 of 40 CFR 73	99	99	99	99

*The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the US EPA under Table 2 of 40 CFR 73.]

3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
- b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- c. Allowances shall be accounted for under the Federal Acid Rain Program.
[Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]

4. Retired Unit Exemption - Ralph Garcia. The designated representative of this acid rain unit applied for an exemption from the requirements of the Federal Acid Rain Program by submitting a completed and signed "Retired Unit Exemption" form (DEP Form No. 62-210.900(1)(a)3., F.A.C.) to the Department. The date of permanent retirement is January 1, 1998. The unit has been completely dismantled and has ceased operation.
[Rule 62-214.340(2), F.A.C.; and, 40 CFR 72.8.]

5. New Unit Exemption - D-1, D-2, CT-1, CT-2, & CT-3. The designated representative of this acid rain unit applied for an exemption from 40 CFR 72.1 through 72.6, and 40 CFR 72.10 through 72.13 of the Federal Acid Rain Program by submitting a completed and signed "New Unit Exemption" form (DEP Form No. 62-210.900(1)(a)2., F.A.C.) to the Department. The date of exemption is effective 01/01/99 through 12/31/03. This exemption may be renewed.
[Rule 62-214.340(2), F.A.C.; and, 40 CFR 72.7.]

6. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition No. 51., Appendix TV-1, Title V Conditions.}
[Rule 62-214.420(11), F.A.C.]

7. Comments, notes, and justifications: Stock Island has no Phase I allowances.

Acid Rain Attachments and Relevant Documents:

Ralph Garcia Steam Plant: "Retired Unit Exemption" DEP Form No. 62-210.900(1)(a)3., effective 01/01/98.

D-1, D-2, CT-1, CT-2, & CT-3: "New Unit Exemption" DEP Form No. 62-210.900(1)(a)2., effective 01/01/99 through 12/31/03.

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

Utility Board of the City of Key West
Stock Island Plant

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The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and Activities

1. Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight.
2. Cold storage refrigeration equipment, except for any such equipment located at a Title V source using an ozone-depleting substance regulated under 40 CFR Part 82.
3. Vacuum pumps in laboratory operations.
4. Equipment used for steam cleaning.
5. Belt or drum sanders having a total sanding surface of five square feet or less and other equipment used exclusively on wood or plastics or their products having a density of 20 pounds per cubic foot or more.
6. Equipment used exclusively for space heating, other than boilers.
7. Laboratory equipment used exclusively for chemical or physical analyses.
8. Brazing, soldering or welding equipment.
9. One or more emergency generators located within a single facility provided:
 - a. None of the emergency generators is subject to the Federal Acid Rain Program; and
 - b. Total fuel consumption by all such emergency generators within the facility is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
10. One or more heating units and general purpose internal combustion engines located within a single facility provided:
 - a. None of the heating units or general purpose internal combustion engines is subject to the Federal Acid Rain Program; and
 - b. Total fuel consumption by all such heating units and general purpose internal combustion engines within the facility is limited to 32,000 gallons per year of diesel

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

Utility Board of the City of Key West

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- fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
11. Fire and safety equipment.
 12. Surface coating operations within a single facility if the total quantity of coatings containing greater than 5.0 percent VOCs, by volume, used is 6.0 gallons per day or less, averaged monthly, provided:
 - a. Such operations are not subject to a volatile organic compound Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.; and
 - b. The amount of coatings used shall include any solvents and thinners used in the process including those used for cleanup.
 13. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.
 14. Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.

Note: No exemption shall be granted to any emissions unit or activity if:

1. Such unit or activity would be subject to any unit-specific applicable requirement;
2. Such unit or activity, in combination with other units and activities proposed for exemption, would cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s); or
3. Such unit or activity would emit or have the potential to emit:
 - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
 - b. 1,000 pounds per year or more of any hazardous air pollutant;
 - c. 2,500 pounds per year or more of total hazardous air pollutants; or
 - d. 5.0 tons per year or more of any other regulated pollutant.

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



Steve Welsh

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

P.E. Certification Statement

Permittee:
Utility Board of the City of Key West
Stock Island

DRAFT Permit No.: 0870003-001-AV
Facility ID No.: 0870003

Project type: Initial Title V Air Operation Permit

I HEREBY CERTIFY that the engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, geological features, and Acid Rain Part).

C. L. Phillips

10/9/98

C. L. Phillips, P.E.

date

Registration Number: 50246

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Section MS #5505
2600 Blair Stone Road
Tallahassee, FL 323992400

Telephone: 850/488-1344

Fax: 805/922-6979

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

Utility Board of the City of Key West
Stock Island

DRAFT Permit No. 0870003-001-AV

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

The below listed emissions units and activities are neither “regulated emissions units” nor “insignificant emissions units”.

E.U.

ID No. Brief Description of Emissions Units and Activities

010

Two No. 2 Fuel Oil Storage Tanks - 500,000 gallons each;
subject only to 40 CFR 60.116b (a) and (b)

No. 6 Fuel Oil Storage Tank - 1.9 million gallons; no applicable standards

Two No. 2 Fuel Oil Storage “day” Tanks - 16,000 gallons each

Eight Vehicular Fleet Fuel Tanks - 2,000 gallons each

Three Diesel Peaking Generators (2 MW): Units #1, #2, #3 (formerly E.U. 002, 003, & 004)

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

Utility Board of the City of Key West
Stock Island Power Plant

DRAFT Permit # 0870003-001-AV
Facility ID # 0870003

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. 005, 006 8.8 MW 85.4 MMBtu/hr Medium Speed Diesel Generators, Two Units

Emission Limits are for Each Engine

Pollutant/Parameter	Fuel	Hours/Year	Allowable Emissions			Equivalent Emissions		Regulatory Citations	See Permit Condition
			Standards	lbs/hour	TPY	lbs./hour	TPY		
SO2	#2 oil	3740 full-load equivalent engine hours	0.05% fuel	43.6	41.00			Rule 62-212.400, BACT	III.A.3, A.6
PM	#2 oil		0.1 lbs/MMBtu	8.5	8			Rule 62-296.702	III.A.7
VE	#2 oil		20% opacity					Rule 62-296.320(4)(b)1	II.3
NOx	#2 oil		6.0 grams/hp-hour	160.9	151			Rule 62-212.400, BACT	III.A.5
CO	#2 oil		2.0 grams/hp-hour	53.6	50			Rule 62-212.400, BACT	III.A.8
Beryllium (Be)	#2 oil		0.00054	1				Rule 62-212.400, BACT	III.A.10
VOC	#2 oil		1.0 grams/hp-hour	26.8	25			Rule 62-212.400, BACT	III.A.9

Notes:

* -- Equivalent Emissions provided for information only.

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

Utility Board of the City of Key West
 Stock Island Power Plant

DRAFT Permit # 0870003-001-AV
 Facility ID # 0870003

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. 007 23.5 MW 312 MMBtu/hour Simple Cycle Combustion Turbine

Pollutant/Parameter	Fuel	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citations	See Permit Condition
			Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
SO2	#2 oil		0.05% fuel only	-					III.B.2
PM	#2 oil			18	43	51.4	225**	PSD-FL-210	III.B.6
CO	#2 oil		20ppm@100% load & 136ppm@50% load	64	152			PSD-FL-210	III.B.7
NOx	#2 oil		75 ppm	96	138			PSD-FL-210	III.B.4
VE	#2 oil		20%	n/a				PSD-FL-210	III.B.8

Notes:

* – Equivalent Emissions provided for information only.

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

Utility Board of the City of Key West
 Stock Island Power Plant

DRAFT Permit # 0870003-001-AV
 Facility ID # 0870003

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. 008, 009 19.77 MW 305 MMBtu/hour Simple Cycle Combustion Turbine, Two Units

Pounds/hour apply to each turbine, while TPY limit is for both units combined

Pollutant/Parameter	Fuel	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citations	See Permit Condition
			Standard(s)	lbs/hour	TPY	lbs./hour	TPY		
SO2	#2 oil		0.05% fuel only			15.9	31.8	AC-0870003-003	III.C.5,C.9
PM	#2 oil			16.6	45	16.6	55	AC-0870003-003	III.C.10
CO	#2 oil			25.2	101	25.2	50.5	AC-0870003-003	III.C.11
NOx	#2 oil		75 ppm	93.8	172			AC-0870003-003	III.C.8
VE	#2 oil		20%				n/a	AC-0870003-003	III.C.11

Notes: ** -- Annual emissions (TPY) based on 3 hours per day at 0.3 lb/mmBtu and 21 hours per day at 0.1lb/MMBtu.
 * -- Equivalent Emissions provided for information only.

Table 2-1, Summary of Compliance Requirements

Utility Board of the City of Key West
Stock Island Power Plant

DRAFT Permit # 0870003-001-AV
Facility ID # 0870003

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. 005, 006

8.8 MW 85.4 MMBtu/hour Two Medium Speed Diesel Generators

Pollutant/ Parameter	Fuel	Compliance Method	Frequency of Sampling	Frequency Base Date *	Min. Compliance Test Duration	CMS**	Permit Condition
CO	#2 oil	EPA Method 10	annual	1-Jun			III.A.15
VE	#2 oil	DEP Method 9	permit renewal	1-Jun			II.3 & III.A.17
NOx	#2 oil	EPA Method 20	annual	1-Jun			III.A.15
SO2	#2 oil	EPA Method 6 or ASTM D 2880-71	permit renewal	1-Jun			III.A.16
PM	#2 oil	EPA Method 5	annual	1-Jun			III.A.15
VOC	#2 oil	EPA Method 25	permit renewal	1-Jun			III.A.16
Beryllium	#2 oil	EPA Method 104	annual	1-Jun			III.A.15

Notes:

*Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

**CMS = continuous monitoring system

Table 2-1, Summary of Compliance Requirements

Utility Board of the City of Key West
Stock Island Power Plant

DRAFT Permit # 0870003-001-AV
Facility ID # 0870003

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. 007 23.5 MW 312 MMBtu/hour Simple Cycle Combustion Turbine

E.U. 008, 009 19.77 MW 305 MMBtu/hour Simple Cycle Combustion Turbine, Two Units

Pollutant/ Parameter	Fuel	Compliance Method	Frequency of Sampling	Frequency Base Date *	Min. Compliance Test Duration	CMS**	Permit Condition
SO2	#2 oil	ASTM4294 or equivalent	After each fuel oil shipment	Per 40 CFR 60.334			III.E.11
PM	#2 oil	EPA Method 5B	annual				III.E.10
VE	#2 oil	DEP Method 9	annual				III.E.10
CO	#2 oil	EPA Method 10	annual				III.E.10
NOx	#2 oil	EPA Method 20	annual				III.E.10

Notes:

*Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

**CMS = continuous monitoring system

Steve Walsh

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SEP 08 1998

BUREAU OF
AIR REGULATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

UTILITY BOARD OF THE CITY OF KEY WEST,
Petitioner,

vs.

OGC CASE NO. 97-1714

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION,
Respondent.

_____ /

ORDER GRANTING REQUEST FOR EXTENSION
OF TIME TO FILE PETITION FOR HEARING

This cause has come before the Florida Department of Environmental Protection (Department) on receipt of a request made by Petitioner, Utility Board of the City of Key West, to grant an extension of time to file a petition for an administrative hearing on Application No. 0870003-001-AV. See Exhibit 1.

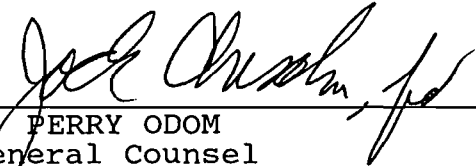
Respondent, State of Florida Department of Environmental Protection, has no objection to it. Therefore,

IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until **September 30, 1998**, to file a petition in this matter. Filing shall be complete on receipt by the Office of General Counsel, Mail Station 35, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

DONE AND ORDERED on this 28 day of August, 1998, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


F. PERRY ODOM
General Counsel

Douglas Building, MS #35
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000
Telephone: (850) 488-9314


CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed
to:

Carl R. Jansen, Jr.
Transmission, Distribution &
Generation Manager
Utility Board of the
City of Key West
Post Office Drawer 6100
Key West, FL 33041-6100

on this 3rd day of August, 1998.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


W. DOUGLAS BEASON
Assistant General Counsel
Florida Bar No. 379239

Mail Station 35
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000
Telephone: (850) 488-9314

UTILITY BOARD OF THE CITY OF KEY WEST

POST OFFICE DRAWER 6100
KEY WEST, FLORIDA 33041-6100



TELEPHONE: (305) 285-1000
www.kwcityelectric.com

July 16, 1998

Ms. Cindy L. Phillips, P.E.
Division of Air Resources Management
Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road, MS #5505
Tallahassee, FL 32399

RECEIVED

JUL 20 1998

BUREAU OF
AIR REGULATION

Subject: Title V Air Emission Operating Permit for Stock Island Power Plant - Utility Board of the City of Key West

Dear Ms. Phillips:

On February 24, 1998 the Florida Department of Environmental Protection (FDEP) approved an extension of time (OGC Case No. 97-1714) for finalization of the subject permit (see attached). The deadline established in the order was July 31, 1998 in anticipation of completing compliance testing for two refurbished combustion turbine units being installed at the Stock Island Power Plant site.

At the present time it appears that only one of the two combustion turbine units will have completed compliance testing by July 31, 1998. Due to a number of equipment and technical problems experienced by the construction contractor, at least one of the combustion turbines will most likely complete compliance testing during the early part of August. For this reason, the Utility Board of the City of Key West requests that FDEP approve an additional month of time August 31, 1998 to complete the required compliance testing and to incorporate the two refurbished combustion turbine units into the Title V permit for the subject facility.

If there are any questions concerning this request please contact Mr. Ivan Clark at RW Book (303) 200-5247.

Sincerely,

UTILITY BOARD - CITY OF KEY WEST
CITY ELECTRIC SYSTEM
Larry J. Thompson, General Manager

[Signature]
Carl R. Jansen, Jr.
Transmission, Distribution & Generation Manager

CJ/kw

cc:
L. Thompson, General Manager
R. Rodriguez, Assistant General Manager
J. Stone, Environmental Services Supervisor
File: SOF-301

TO: Heather
FR: Steve Welsh
AIR RESOURCES
MY DESK #
921-9585

UTILITY BOARD MEMBERS:

Robert A. Padron, Chairman - Dr. Otha P. Cox, Vice-Chairman
Leonard H. Knowles, Member - Gayle Swofford, Member - Lou Hernandez, Member

"006584000001", "Stock Island", 2000, 2550, 1598097, 1600646
"006584000001", "Stock Island", 2001, 2550, 1598097, 1600646
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"006584000001", "Stock Island", 2027, 2567, 1539770, 1542336
"006584000001", "Stock Island", 2028, 2567, 1539770, 1542336

also: " " " 610, 611

From EPA ATS. as of 9/5/98

Allowance Tracking System.

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May 30, 1998

Mr. Leo Carey
Manager
Utility Board of the City of Key West
P.O. Drawer 6100
Key West, Florida 33041-6100

Re: DRAFT Title V Permit No. 0870003-001-AV
Stock Island Power Plant

Dear Mr. Carey:

One copy of the PROPOSED Title V Air Operation Permit for the Stock Island Power Plant located at 6900 Front Street, Monroe County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit has become a PROPOSED permit.

An electronic version of this determination has been posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is <http://www.dep.state.fl.us/air>.

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

If you should have any questions, please contact Steve Welsh at 850/488-1344.

Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/w

Enclosures

copy furnished to:

Mr. Ivan Clark, P.E., R.W. Beck Engineering
South Florida District Office, FDEP, David Knowles
South Florida District Branch Office, FDEP, Jim Edds
Ms. Yolanda Adams, USEPA, Region 4 (INTERNET E-mail Memorandum)
Ms. Carla E. Pierce, USEPA, Region 4 (INTERNET E-mail Memorandum)

PROPOSED PERMIT DETERMINATION

PROPOSED Permit No. 0870003-001-AV

I. Public Notice

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" for the Stock Island Power Plant located 10 miles east of Florida City on Palm Drive Florida City, Palm Drive, 33035, Dade County was clerked on XXXXXX, 1998. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published in the Miami Herald on Septexxxx, 1997. The DRAFT Title V Air Operation Permit was available for public inspection at:

Permitting Authority:

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-1344
Fax: 850/922-6979

Affected District/Local Program:

FDEP - South Florida District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901
Telephone: 941/332-6975
Fax: 813/332-6969

FDEP - Marathon Brance Office
2796 Overseas Highway, Suite 900
Marathon, Florida 33901

Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was received on September 18, 1997.

II. Public Comment

Comments were received and the DRAFT Title V Operation Permit was changed. The comments were not considered significant enough to reissue the DRAFT Title V Permit and require another Public Notice. Comments were received from _____ in letters dated October 7, and October 9, 1997. Their comments and the Department's response are given below.

B. Documents on file with the permitting authority:

-Air Construction Permit 0870003-003-AC

III. Title V Permitting Formats

CHANGES TO TITLE V PERMITS ISSUED PRIOR TO 12/02/97

Title V permitting formats were updated due to recent rule changes and after considering comments received from the electric utilities. This permit reflects these changes. A brief summary of the changes is below.

1. Recent rule changes changed “exempt activities” to “insignificant activities.” Rules 62-213.430(6), F.A.C. and 62-210, F.A.C., reflecting this change went into effect November 13, 1997.

a. The department inserted a condition in Appendix TV-1 clarifying that a Title V source can add an “insignificant activity” at its facility in accordance with the criteria under Rule 62-213.430(6), F.A.C., and include it in the Title V permit’s list of “insignificant activities” at the next renewal, in accordance with Rule 62-213.430(6), F.A.C. See condition number 40.

b. Appendix E-1 has been changed to Appendix I-1, and the language of this appendix was revised to refer to insignificant emissions units where appropriate.

c. Appendix U-1 has been revised to refer to insignificant emissions units instead of exempt emissions units.

2. Several changes were made to Appendix TV-1 to reflect the rule changes discussed above, and to properly identify conditions that are not federally enforceable.

a. The following additional rules have been marked as “not federally enforceable”:

62-4.030, F.A.C., General Prohibition, (see condition number 1.)

62-4.220, F.A.C., Operation Permit for New Sources, (see condition number 14.)

62-210.300(5), F.A.C., Notification of Startup, (see condition number 19.)

b. Appendix TV-1, now carries a version date of “12/02/97”.

IV. Conclusion

The permitting authority hereby issues the PROPOSED Permit No. 0870003-001-AV, with the changes noted above.

UTILITY BOARD OF THE CITY OF KEY WEST

POST OFFICE DRAWER 6100
KEY WEST, FLORIDA 33041-6100



TELEPHONE: (305) 295-1000
www.kwcityelectric.com

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MAY 06 1998

BUREAU OF
AIR REGULATION

May 1, 1998

Mr. Steve Welsh
Bureau of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Combustion Turbine No. 2 & No. 3 - New Unit Exemption

Dear Mr. Welsh:

Enclosed are the *New Unit Exemption* forms for City Electric System's combustion turbines presently being installed - Draft Permit No. 0870003-003-AC.

Thank you for your continued cooperation and if we can be of any further assistance, please give us a call.

Sincerely,

UTILITY BOARD - CITY OF KEY WEST
"CITY ELECTRIC SYSTEM"
Larry Thompson, General Manager

Joe Stone
Environmental Services Supervisor

JS/jd

c:
L. Thompson
R. Rodriguez
C. Jansen
File Code: SOF-110

Enclosures

UTILITY BOARD MEMBERS:

Robert R. Padron, Chairman • Dr. Otha P. Cox, Vice-Chairman
Leonard H. Knowles, Member • Gayle Swofford, Member • Lou Hernandez, Member

Rec'd from Al Linero 3/26

Issued January 8, 1998 (per Syed)

PERMITTEE:

Utility Board of the City of Key West
1001 James Street
Key West, Florida 33041-6100

Authorized Representative:
Mr. Larry Thompson
General Manager

F.I.D. No.	0870003
SIC No.	4911
Project:	Combustion Turbines 2 and 3
Permit No.	0870003-003-AC
Expires:	September 30, 1999

PROJECT AND LOCATION:

Permit for the construction of two refurbished $2 \times 19.77 = 39.54$ MW **EU 008 009** 19.77 megawatt combustion turbine generating units at the Stock Island Power Plant, 6900 Front Street, Stock Island, Monroe County. UTM coordinates are Zone 17, 425.65 km E; 2716.67 km N.

STATEMENT OF BASIS:

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297. The above named permittee is authorized to modify the facility 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).

Attached appendices are made a part of this permit:

Appendix GC Construction Permit General Conditions
Appendix CSC Emission Unit(s) Common Specific Conditions

Howard L. Rhodes, Director
Division of Air Resources
Management

Syed Arif

AIR CONSTRUCTION PERMIT 0870003-003-AC

SECTION II. EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION A. FACILITY DESCRIPTION

The Utility Board of the City of Key West (Utility Board) Stock Island Power Plant presently consists of one 37.0 MW steam electric generating unit (Emission I.D. No. 001), two 8.8 MW medium speed diesel units (Emission I.D. Nos. 005 and 006), three 2.0 MW high speed diesel units (Emission I.D. Nos. 002, 003 and 004), and one 23.5 MW simple-cycle combustion turbine unit (Emission I.D. No. 007). This permit is to construct two refurbished 19.77 MW combustion turbine units (Emission I.D. Nos. 008 and 009). As part of this permitting action the Utility Board is also committing to the retirement of the 37 MW steam unit (Emission I.D. No. 001) and to the modification (stack height increase) of the high speed diesel units' stacks.

EMISSIONS UNIT NO.	SYSTEM	EMISSIONS UNITS DESCRIPTION
001#	Power	37.0 MW Steam Boiler (to be retired)
002#	Power	2.0 MW Diesel Electric Generator
003#	Power	2.0 MW Diesel Electric Generator
004#	Power	2.0 MW Diesel Electric Generator
008*	Power	19.77 MW Simple Cycle Combustion Turbine
009*	Power	19.77 MW Simple Cycle Combustion Turbine

Existing Emission units

* New Emission units

SUBSECTION B. REGULATORY CLASSIFICATION

The Stock Island Power Plant is classified as a Major Source of Air Pollution or Title V Source because it emits or has the potential to emit at least 100 tons per year of sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO) and particulates (PM). It is also a Major Facility with respect to preconstruction review because it emits or has the potential to emit at least 250 tons per year of SO₂, NO_x, CO and PM.

SUBSECTION C. PERMIT SCHEDULE:

- 09/11/97: Date of Receipt of Application
- 10/10/97: Department's Preliminary Incompleteness Letter
- 11/07/97: Company's Response to Department's Letter
- 11/10/97: Application Deemed Complete
- 12/10/97: Distributed Intent to Issue
- 12/15/97: Notice Published in Key West Citizen

SUBSECTION D. RELEVANT DOCUMENTS:

The documents listed form the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

- Application received 09/11/97.
- Department's letter dated 10/10/97.
- Company letter and addendum 1 dated 09/30/97.
- Company letter and addendum 2 dated 11/07/97.

AIR CONSTRUCTION PERMIT 0870003-003-AC

SECTION II. EMISSION UNIT(S) GENERAL REQUIREMENTS

SUBSECTION A. ADMINISTRATIVE

- A.1 Regulating Agencies: All documents related to applications for permits to operate, reports, tests, minor modifications and notifications shall be submitted to the Department of Environmental Protection, South District Office located at 2295 Victoria Avenue, Suite 364, Ft. Myers, Florida 33901, and phone number (941) 332-6975. All applications for permits to construct or modify an emission unit(s) subject to the Prevention of Significant Deterioration (PSD) should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP) located at 2600 Blairstone Road, Tallahassee, Florida 32399-2400 and phone number (850)488-1344.
- A.2 General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
- A.3 Emission Unit(s) Common Specific Conditions: The owner and operator is subject to and shall operate under the attached Emission Unit(s) Common Specific Conditions listed in Appendix CSC of this permit. The Emission Unit(s) Common Specific Conditions are binding and enforceable pursuant to Chapters 62-204 through 62-297 of the Florida Administrative Code.
- A.4 Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
- A.5 Forms and Application Procedures: 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. [Rule 62-210.900, F.A.C.]
- A.6 Expiration: This air construction permit shall expire on September 30, 1999. [Rule 62-210.300(1), F.A.C.]. The permittee may, for good cause, request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit. However, the permittee shall promptly notify the permitting authority office of any delays in completion of the project which would affect the startup day by more than 90 days. [Rule 62-4.090, F.A.C.]
- A.7 Applicable Regulations: The facility is subject to the following regulations: Florida Administrative Code Chapters 62-4; 62-103; 62-204; 62-210; 62-212, 62-213; 62-220; 62-296, and 62-297. 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.]

AIR CONSTRUCTION PERMIT 0870003-003-AC

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION A. SPECIFIC CONDITIONS

The following Specific Conditions apply to the following emission units:

EMISSION UNIT NO.	SYSTEM	EMISSION UNIT DESCRIPTION
008	Power	19.77 MW Simple Cycle Combustion Turbine
009	Power	19.77 MW Simple Cycle Combustion Turbine

EMISSION LIMITATIONS

Note: The emission limits of lb/hr apply to each unit, while the TPY limit apply to **each unit individually and both units collectively.** *what?!*

A.1 Oxides of Nitrogen. NO_x emissions shall not exceed any of the following limits:

a. Nitrogen oxides emissions, expressed as NO_x, shall not exceed:

$$STD = 0.0075(14.4)/Y + F$$

where:

STD = allowable NO_x 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 = NO_x emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(3). F shall be zero (0) for this facility as indicated by the applicant.

b. 75 ppmvd, based on a 1-hour average at 15% O₂ and ISO standard ambient conditions;

c. 93.8 lbs/hour, based on a 1-hour average at 15% O₂ and an ambient temperature of 40°F.

d. **172 TPY**, based on an average hourly concentration of 86 lbs/hour at 85°F ambient temperature and 4,000 hours per year of operation. [Rule 62-212.300, F.A.C., 40 CFR 60.332]

A.2 Sulfur Dioxide, SO₂ emissions shall be controlled by limiting the sulfur content of the fuel to a maximum of 0.05 percent by weight. [Rule 62-210.2000, F.A.C., 40 CFR 60.333]

A.3 Particulate Matter/PM₁₀. PM/PM₁₀ emissions shall be limited to 16.6 lbs/hour, based on a 1-hour average; PM shall be limited to **55 TPY**. PM₁₀ shall be limited to 45 TPY. [Rule 62-212.300, F.A.C.] *Method 5?*

A.4 Carbon monoxide. CO shall be limited to 25.2 lbs/hour, based on a 1-hour average; **101 TPY**. [Rule 62-212.300, F.A.C.]

A.5 Visible Emissions. Visible emissions shall be limited to 20 percent opacity. [Rule 62-296.310, F.A.C.]

✓A.6 In order to minimize excess emissions during startup/shutdown/malfunction this emission unit shall adhere to best operational practices. [Rule 62-210.700, F.A.C.]

*II
E.1*

AIR CONSTRUCTION PERMIT 0870003-003-AC

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

OPERATIONAL LIMITATIONS

- A.7 Each emission unit is allowed to operate 4,000 hours per year. The combined operation of both units shall also be limited to 4,000 hours per year. [Rule 62-210.200, F.A.C., Definitions: Potential-to-Emit].
- A.8 Only No. 2 fuel oil can be fired in the combustion turbines. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight. [Rule 62-210.200, F.A.C., Definitions: Potential-to-Emit].
- A.9 The maximum heat input rate to Emission Unit Nos. 008 and Emission Unit No. 009 shall not exceed 305 million Btu per hour (MMBtu/hr) [Rule 62-210.200, F.A.C., Definitions: Potential-to-Emit].
- A.10 The maximum No. 2 fuel oil consumption allowed to be burned in either Emission Unit No. 008 or Emission Unit No. 009 is 8,840,000 gallons per year, which is equivalent to 4000 hours per year of operation at full load. The combined fuel oil consumption for both units shall be limited to 8,840,000 gallons per year. [Rule 62-210.200, F.A.C., Definitions: Potential-to-Emit]

MONITORING OF OPERATIONS

- ✓ E.2 A.11 The permittee 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 Department. [40 CFR 60.334(a)]
- ✓ ~~E.12~~ E.5 A.12 The permittee shall monitor sulfur content, nitrogen content, and the lower heating value of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
 - a. 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.
 - b. 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 Department before they can be used to comply with 40 CFR 60.334(b). [40 CFR 60.334(b)(1) and (b)(2); 40 CFR 60.335]

Part of E.12 ✓ A.13 The permittee shall maintain records of fuel oil consumption for the emission unit. [Rule 62-210.200, F.A.C.]

CMS

✓ E.13 E.16 A.14 The permittee shall submit a quarterly excess emissions and monitoring systems performance report of the continuous monitoring system for any one-hour period during which the average water-to-fuel ratio falls below the water-to-fuel ratio determined to demonstrate compliance with Condition A.1. [40 CFR 60.7(c); 40 CFR 60.334(c)(1)]

TEST METHODS AND PROCEDURES

✓ ~~E.14~~ E.10 A.15 Compliance with the allowable emission limiting standards for NO_x in A.1 shall be determined by using EPA Reference Method 20 as described in 40 CFR 60, Appendix A (1996, version) adopted by reference in Rule 62-204.800, F.A.C. The NO_x emissions shall be determined 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.. An annual compliance test shall be performed on the unit if

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

operated for more than 400 hours in the preceding 12-month period. [Rule 62-297.310, F.A.C. and 40 CFR 60.335(3)]

✓A.16 The NO_x emission rate shall be computed for each run using the following equation:

E.16

NO_{x,iso} = (NO_{xo})(P_r/P_o)^{0.5} e^{19(H_o-0.00633)} (288°K/T_a)^{1.53}

where:

NO_{x,iso} = emission rate of NO_x at 15 percent O₂ and ISO standard ambient conditions, volume percent.

NO_{xo} = observed NO_x concentration, ppm by volume.

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

P_o = observed combustor inlet absolute pressure at test, mm Hg.

H_o = observed humidity of ambient air, g H₂O/ g air.

e = transcendental constant, 2.718.

T_a = ambient temperature, °K.

[40 CFR 60.335(c)(1)]

✓A.17 The continuous monitoring system shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with Condition A.1 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 equation provided in Condition A.16. [40 CFR 60.335(2)]

E.9

✓A.18 An initial compliance test shall be conducted for CO emissions using EPA Reference Method 10 as described in 40 CFR 60, Appendix A (1996, version) adopted by reference in Rule 62-204.800, F.A.C. [Rule 62-297.310, F.A.C.] An annual compliance test for CO shall be performed on the units if operated for more than 400 hours in the preceding 12-month period. [Rule 62-297-310, F.A.C.]

E.6 E.20

✓A.19 Compliance with the visible emission standard shall be demonstrated with EPA Reference Method 9 as described in 40 CFR 60, Appendix A (1996, version) adopted by reference in Rule 62-204.800, F.A.C. [Rule 62-297.401, F.A.C.]

Fac. Cond. #3

RECORDKEEPING AND REPORTING REQUIREMENTS

✓A.20 All measurements, records, and other data required to be maintained by this facility shall be retained for at least five (5) years following the data on which such measurements, records, or data are recorded. These data shall be made available to the Department upon request. [Rule 62-4.070(3), F.A.C.]

E.26 E.13

A.21 Two copies of the results of the emission tests for the pollutant listed in Condition A.1 for both Emission Unit Nos. 008 and 009 shall be submitted within forty-five days of the last sampling run to the South District office in Ft. Myers. All reports shall be in a format consistent with and shall include the information in accordance with Rule 62-297.310 (8), F.A.C. [Rule 62-297.310(8), F.A.C.]

initial tests only? -> could be annual test see a. 15.

GE model MS-5001R (Frames)

Re-Public notice?

Garcia shot down

~~This AC expires in June Syed to extend into July~~

AIR CONSTRUCTION PERMIT 0870003-003-AC

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION B. SPECIFIC CONDITIONS

The following Specific Conditions apply to the following emission units:

EMISSIONS UNIT NO.	SYSTEM	EMISSIONS UNITS DESCRIPTION
001	Power	37.0 MW Steam Boiler (to be retired)
002	Power	2.0 MW Diesel Electric Generator
003	Power	2.0 MW Diesel Electric Generator
004	Power	2.0 MW Diesel Electric Generator

OPERATIONAL LIMITATIONS

- B.1 Prior to issuance of this construction permit, the permittee shall supply to the Department an official certification of the retirement of the 37 MW steam boiler at Stock Island (Emission Unit Emission I.D. 001).
- B.2 The permittee shall install new or modified stacks for the three high-speed diesel units (Emission Unit I.D Nos. 002, 003, and 004) with an elevation of 40 feet above plant site grade. Completion of construction of these stacks shall be no later than June 1, 1998.

SS

§ 72.30

Environmental Protection Agency

as provided in § 72.23, no other communication submitted to the Administrator or the permitting authority concerning the authorization of the designated representative shall affect any submission, action, or inaction of the designated representative, or the finality of any decision by the Administrator or the permitting authority, under the Acid Rain Program. In the event of any communication, the Administrator and the permitting authority are not required to stay any allowance transfer, any submission, or the effect of any action or inaction under the Acid Rain Program.

(a) Neither the Administrator nor the permitting authority will adjudicate any private legal dispute concerning the authorization or any submission, action, or inaction of any designated representative, including private legal disputes concerning the proceeds of allowance transfers.

Subpart C—Acid Rain Permit Applications

§ 72.30 Requirement to apply.

(a) *Duty to apply.* The designated representative of any source with an affected unit shall submit a complete Acid Rain permit application by the applicable deadline in paragraphs (b) and (c) of this section, and the owners and operators of such source and any affected unit at the source shall not operate the source or unit without a permit that states its Acid Rain program requirements.

(b) *Deadlines.* (1) *Phase I.* (i) The designated representative shall submit a complete Acid Rain permit application governing an affected unit during Phase I to the Administrator on or before February 15, 1993 for:

(A) Any source with such a unit under § 72.6(a)(1); and

(B) Any source with such a unit under § 72.6(a) (2) or (3) that is designated a substitution or compensating unit in a substitution plan or reduced utilization plan submitted to the Administrator for approval or conditional approval.

(ii) Notwithstanding paragraph (1)(i) of this section, if a unit at a

source not previously permitted is designated a substitution or compensating unit in a submission requesting revision of an existing Acid Rain permit, the designated representative of the unit shall submit a complete Acid Rain permit application on the date of the submission requesting the revision.

(2) *Phase II.* (i) For any source with an existing unit under § 72.6(a)(2), the designated representative shall submit a complete Acid Rain permit application governing such unit during Phase II to the permitting authority on or before January 1, 1996.

(ii) For any source with a new unit under § 72.6(a)(3)(i), the designated representative shall submit a complete Acid Rain permit application governing such unit to the permitting authority at least 24 months before the later of January 1, 2000 or the date on which the unit commences operation. *after 11/15/90*

(iii) For any source with a unit under § 72.6(a)(3)(ii), the designated representative shall submit a complete Acid Rain permit application governing such unit to the permitting authority at least 24 months before the later of January 1, 2000 or the date on which the unit begins to serve a generator with a nameplate capacity greater than 25 MWe. *1/1/98*

(iv) For any source with a unit under § 72.6(a)(3)(iii), the designated representative shall submit a complete Acid Rain permit application governing such unit to the permitting authority at least 24 months before the later of January 1, 2000 or the date on which the auxiliary firing commences operation.

(v) For any source with a unit under § 72.6(a)(3)(iv), the designated representative shall submit a complete Acid Rain permit application governing such unit to the permitting authority before the later of January 1, 1998 or March 1 of the year following the three calendar year period in which the unit sold to a utility power distribution system an annual average of more than one-third of its potential electrical output capacity and more than 219,000 MWe-hrs actual electric output (on a gross basis).

Section I. Facility Information

Subsection A. Facility Description

This facility consists of five regulated emission units with a total generating capacity of 80.7 MW. There are two regulated diesel generators, three simple cycle combustion turbines, and miscellaneous unregulated units. To reduce pollution, a combination of control techniques are used including water injection, ignition timing retardation, and low sulfur fuel oil. The Ralph Garcia Steam Plant [EPA ID #1] was retired January 1, 1998. Also included in this permit are insignificant emissions units and activities.

Based on the initial Title V permit application received June 12, 1996, this facility is not a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Units

E.U.

<u>ID No.</u>	<u>Brief Description</u>	
005	8.8 MW Medium Speed Diesel Generator [Unit #1; EPA ID #D-1]	4/1/91
006	8.8 MW Medium Speed Diesel Generator [Unit #2; EPA ID #D-2]	4/1/91
007	23.5 MW Simple Cycle Combustion Turbine [CT-1]	1/1/96
008	19.77 MW Simple Cycle Combustion Turbine [CT-2]	6/1/98
009	19.77 MW Simple Cycle Combustion Turbine [CT-3]	8/1/98
010	Unregulated Emissions Units (See Appendix U-1.)	

Emission units 002, 003, and 004 were moved to emissions unit 010.

Subsection C. Retired Acid Rain Unit

001 37 MW Ralph Garcia Steam Plant [EPA ID #1][Retired January 1998]

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit ID Nos. on all correspondence, test report submittals, applications, and other information.

Section III. Emissions Units and Conditions

Subsection A. Two Medium Speed Diesel Generators

E.U.

ID No. Brief Description

005 8.8 MW Medium Speed Diesel Generator [Unit #1; EPA ID #D-1]

006 8.8 MW Medium Speed Diesel Generator [Unit #2; EPA ID #D-2]

Each of the two 8.8 MW (nominal) electric Fairbanks Morse diesel generators (Model PC-2.6V) burns No. 2 distillate fuel oil and has a maximum heat input rate of 85.4 million Btu per hour. Sulfur dioxide emissions are controlled by limiting the sulfur content of the No. 2 fuel oil to 0.05% by weight. Nitrogen oxides emissions are controlled by ignition timing retard and by limiting the hours operation. Visible emissions and NO_x emissions are continuously monitored. Commercial operation commenced April 1, 1991. The units are exempt from acid rain regulations by the attached New Unit Exemptions, effective January 1, 1999 through December 31, 2003.

{Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination dated 6/5/89, AO44-207419 & PSD-FL-135}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum heat input rate to each diesel generator shall not exceed 85.4 MMBtu per hour (606 gallons per hour). The sum total consumption of fuel oil for both diesel generators combined shall not exceed 2.27 million gallons in any consecutive 12-month period.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE) and AC44-207419/PSD-FL-135]

A.2. Emissions Unit Operating Rate Limitation During and After Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions 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.]

Subsection B. 23.5 MW Combustion Turbine

E.U. Brief Description

ID No.

007 23.5 MW Simple Cycle Combustion Turbine [CT-1]

Emissions unit 007 is a General Electric (GE) Frame 5 model PG5341 CT equipped with water injection for fuel oil firing. It has a rated capacity of 23.5 MW at ISO conditions. The GE CT has a heat input of 312 MMBtu per hour (at 59° F) while burning oil. The CT is fired with No. 2 fuel oil with a sulfur content not to exceed 0.05 % by weight. NOx emissions are controlled by a water injection system. The water to fuel ratio is continuously monitored. This turbine began operation January 1, 1996.

{Permitting notes: This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C.; NSPS - 40 CFR 60 Subpart A; Rule 212.400, F.A.C., Prevention of Significant Deterioration; PSD-FL-210; and AC44-245399. The unit is not affected by the Acid Rain Program, since it meets the requirements of 40 CFR 72.7 by serving a generator with less than 25 MW. }

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum heat input to the GE combustion turbine (CT) at an ambient temperature of 59° F shall not exceed 312 MMBtu/hr while firing fuel oil. Heat input may vary depending on ambient conditions and the CT's characteristics. The approved manufacturer's curves shall be used to establish heat input rates over a range of temperatures for the purpose of compliance determination.

[Rule 62-210.200, F.A.C., AC44-245399/PSD-FL-210]

B.2. Methods of Operation - Fuels. The only fuel to be burned in this unit is new No. 2 fuel oil. The sulfur content shall not exceed 0.050 percent by weight.

[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C., AC44-245399/PSD-FL-210]

B.3. Hours of Operation/Fuel Consumption. The maximum No. 2 fuel oil consumption allowed to be burned in the CT is 7.1 million gallons per year, which is equivalent to 2,888.5 hours per year at full-load; the CT may operate for more than this if operating at part-load.

[Rule 62-212.500(56), F.A.C., AC44-245399, PSD-FL-210]

Subsection C. 19.77 MW Combustion Turbines

E.U. Brief Description
ID No.

008	19.77 MW Simple Cycle Combustion Turbine [CT-2]
009	19.77 MW Simple Cycle Combustion Turbine [CT-3]

These emissions units are two refurbished General Electric Model MS-5001R 19.77 MW combustion turbines. CT-2 had a startup date of June 1, 1998, while CT-3 had a startup date of August 1, 1998.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required; NSPS - 40 CFR 60, Subparts A (General Provisions) and GG, (Standards of Performance for Stationary Gas Turbines), adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C.; Rule 212.400, F.A.C., Prevention of Significant Deterioration; and AC0870003-003, issued January 8, 1998. The units are not affected by the Acid Rain Program, since they meet the requirements of 40 CFR 72.7 by serving a generator with less than 25 MW. }

General Provisions

Notification and Record Keeping

C.1. A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c) shall be postmarked not less than 30 days prior to such date. The notification shall be sent to the Department's South District Office and Marathon Branch Office.

[40 CFR 60.7(a)(5)]

C.2. When it has been demonstrated that these units meet the emission limitations established in permit AC-0870003-003, a properly signed and sealed certification from the permittee's Professional Engineer shall be submitted to the offices listed in C.1. stating that 1) the construction of CT-2 and CT-3 was completed in accordance with permit AC-870003-003 and, 2) the units have been tested and are in compliance with the terms and conditions contained within permit AC-870003-003.

[Rules 62-212.400(7)(b) and 62-213.420(1)(a)5., F.A.C., AC-870003-003]

Performance Tests

C.3. Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup, the Permittee shall conduct performance test(s) and furnish the offices listed in C.1. a written report of the results of such performance test(s).

Section IV. Acid Rain Part

Operated by: Utility Board of the City of Key West
ORIS code: 6584

The following emissions units are regulated under the Acid Rain Program:

E.U.

<u>ID No.</u>	<u>Description</u>
001	Ralph Garcia Steam Plant [EPA ID #1][Retired]
005	8.8 MW Medium Speed Diesel Generator [Unit #1; EPA ID #D-1]
006	8.8 MW Medium Speed Diesel Generator [Unit #2; EPA ID #D-2]
007	23.5 MW Simple Cycle Combustion Turbine [CT-1]
008	19.77 MW Simple Cycle Combustion Turbine [CT-2]
009	19.77 MW Simple Cycle Combustion Turbine [CT-3]

1. The Utility Board of the City of Key West must comply with all the requirements and provisions as set forth in the applications listed below:

Ralph Garcia Steam Plant: “Retired Unit Exemption” DEP Form No. 62-210.900(1)(a)3., effective 01/01/98.

D-1, D-2, CT-1, CT-2, & CT-3: “New Unit Exemption” DEP Form No. 62-210.900(1)(a)2., effective 01/01/99 through 12/31/03.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C. 40 CFR 72]

2. The following table lists the Phase II sulfur dioxide allowances for the above units:

E.U. ID No.	EPA ID #	YEAR	2000	2001	2002	2003
001 (retired)	1	SO ₂ allowances, under Table 2 of 40 CFR 73	2550*	2550*	2550*	2550*
005, 006	D-1, D-2	SO ₂ allowances, under Table 2 of 40 CFR 73	99	99	99	99

*The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the US EPA under Table 2 of 40 CFR 73.]

3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
- b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- c. Allowances shall be accounted for under the Federal Acid Rain Program.
[Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]

4. Retired Unit Exemption - Ralph Garcia. The designated representative of this acid rain unit applied for an exemption from the requirements of the Federal Acid Rain Program by submitting a completed and signed "Retired Unit Exemption" form (DEP Form No. 62-210.900(1)(a)3., F.A.C.) to the Department. The date of permanent retirement is January 1, 1998. The unit has been completely dismantled and has ceased operation.
[Rule 62-214.340(2), F.A.C.; and, 40 CFR 72.8.]

5. New Unit Exemption - D-1, D-2, CT-1, CT-2, & CT-3. The designated representative of this acid rain unit applied for an exemption from 40 CFR 72.1 through 72.6, and 40 CFR 72.10 through 72.13 of the Federal Acid Rain Program by submitting a completed and signed "New Unit Exemption" form (DEP Form No. 62-210.900(1)(a)2., F.A.C.) to the Department. The date of exemption is effective 01/01/99 through 12/31/03. This exemption may be renewed.
[Rule 62-214.340(2), F.A.C.; and, 40 CFR 72.7.]

6. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition No. 51., Appendix TV-1, Title V Conditions.}
[Rule 62-214.420(11), F.A.C.]

7. Comments, notes, and justifications: Stock Island has no Phase I allowances.

Acid Rain Attachments and Relevant Documents:

Ralph Garcia Steam Plant: "Retired Unit Exemption" DEP Form No. 62-210.900(1)(a)3., effective 01/01/98.

D-1, D-2, CT-1, CT-2, & CT-3: "New Unit Exemption" DEP Form No. 62-210.900(1)(a)2., effective 01/01/99 through 12/31/03.

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION) 3. _____
 1. SCOTT SHEPLAK 4. _____
 2. DOUG BEASON 5. _____

PLEASE PREPARE REPLY FOR:

SECRETARY'S SIGNATURE

DIV/DIST DIR SIGNATURE

MY SIGNATURE

YOUR SIGNATURE

DUE DATE _____

ACTION/DISPOSITION

DISCUSS WITH ME

COMMENTS/ADVISE

REVIEW AND RETURN

SET UP MEETING

FOR YOUR INFORMATION

HANDLE APPROPRIATELY

INITIAL AND FORWARD

SHARE WITH STAFF

FOR YOUR FILES

COMMENTS:

PLEASE GRANT AN
 ADDITIONAL EXTENSION
 OF TIME UNTIL 7/31/98
 FOR THE CITY OF KEY
 WEST TITLE V PERMIT
 APPLICATION.

FROM: CINDY PHILLIPS DATE: 1/9/98 PHONE: 1-9534

KEY WEST

TELEPHONE: (305) 295-1000

www.kwcityelectric.com

ant -

On January 6, 1998, this letter
 the final Title V permit for the
 time for finalizing the subject

tion permit for the addition of
 art of this construction permit,
 ement of the existing 36 MW
 DEP and the Utility Board to
 es incorporated into the final

urbines will be completed on
 after. Reporting of test results
 oard requests an extension of
 mit. It is the Utility Board's
 emission sources at the Stock
 sting air operating permits for

se contact Ivan Clark at R.W.

DEP 15-026 (12/93)

Carl N. Jansen, Jr.
 Transmission, Distribution & Generation Manager

CRJ/me
 C:
 L. Thompson, General Manager
 R. Rodriguez, Assistant General Manager
 J. Stone, Environmental Services Supervisor
 title V.DOC

UTILITY BOARD MEMBERS:
 Robert R. Padron, Chairman • Dr. Otha P. Cox, Vice-Chairman
 Leonard H. Knowles, Member • Gayle Swofford, Member • Lou Hernandez, Member

UTILITY BOARD OF THE CITY OF KEY WEST

POST OFFICE DRAWER 6100

KEY WEST, FLORIDA 33041-6100

January 7, 1998



TELEPHONE: (305) 295-1000

www.kwcityelectric.com

Ms. Cindy L Phillips, P.E.
Division of Air Resources Management
Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road, MS #5505
Tallahassee, FL 32399-2400

Subject: Title V Air Emission Operating Permit for Stock Island Power Plant -
Utility Board of the City of Key West

Dear Ms. Phillips:

In accordance with your conversation with Ivan Clark of R.W. Beck on January 6, 1998, this letter documents our understanding with respect to the timing of processing the final Title V permit for the subject facility. Also with this letter we are requesting an extension of time for finalizing the subject permit.

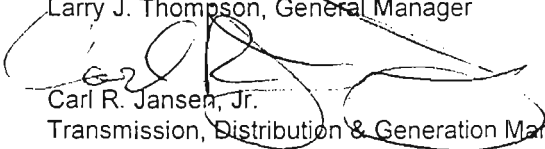
At the present time FDEP is in the final stages of issuing a final construction permit for the addition of two 19.77 NW combustion turbines at the Stock Island Plant site. As part of this construction permit, the Utility Board of the City of Key West is also committing to the retirement of the existing 36 MW steam electric generating unit at this site. It is the desire of both the FDEP and the Utility Board to finalize the subject Title V permit with these planned facilities changes incorporated into the final permit.

The Utility Board anticipates that construction of the two combustion turbines will be completed on approximately June 1, 1998, with compliance testing immediately thereafter. Reporting of test results to the FDEP would probably be in early July, 1998, therefore, the Utility Board requests an extension of time to July 31, 1998, to allow finalization of the subject Title V permit. It is the Utility Board's understanding that during the interim time, operation of the existing air emission sources at the Stock Island Plant site will continue under the terms and conditions of the existing air operating permits for those sources.

If there are any questions concerning the information and request, please contact Ivan Clark at R.W. Beck - (303) 299-5247.

Sincerely,

UTILITY BOARD - CITY OF KEY WEST
CITY ELECTRIC SYSTEM
Larry J. Thompson, General Manager


Carl R. Jansen, Jr.
Transmission, Distribution & Generation Manager

CRJ/me

c:

L. Thompson, General Manager
R. Rodriguez, Assistant General Manager
J. Stone, Environmental Services Supervisor

title V.DOC

UTILITY BOARD MEMBERS:

Robert R. Padron, Chairman • Dr. Otha P. Cox, Vice-Chairman
Leonard H. Knowles, Member • Gayle Swofford, Member • Lou Hernandez, Member



Florida Department of Environmental Regulation

South District

2295 Victoria Avenue

Fort Myers, Florida 33901

Lawton Chiles, Governor

Virginia B. Wetherell, Secretary

PERMITTEE:

Key West City Electric System
(KWCES)
1006 James Street
Key West, Florida 33041

I.D. No: 52FTM44000305 and
52FTM44000306
Permit/Certification
Number: A044-207419 PSD-FL-135
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997
County: Monroe
Latitude: 24° 33' 49" N
Longitude: 81° 44' 03" W
Section/Town/Range: 35/67S/25E
Project: Stock Island Diesel
Generators Units 1
and 2

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 17-296, 17-297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For operation of two 8.8 Megawatt electric (nominal) Fairbanks Morse diesel generators at the Stock Island Power Plant. The diesel generators burn No. 2 distillate fuel oil. The maximum heat input rate to each diesel generator is 85.4 million Btu per hour (606 gallons per hour).

Sulfur dioxide emissions are controlled by limiting the sulfur content of the No. 2 distillate fuel oil to 0.50% by weight. Nitrogen oxides emissions are controlled by timing retardation and limiting the hours of operation.

The facility is located on Front Street (extended), on Stock Island.

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

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 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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

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

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305

and 52FTM44000306

Permit/Cert. No.: A044-207419

Date of Issue: March 18, 1993

Expiration Date: December 31, 1997

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

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

- a. Have access to and copy any records that must be kept under 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 non-compliance, 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 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

PERMITTEE:

Key West City Electric
System (KWCEs)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

GENERAL CONDITIONS:

or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and 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. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 17-3.051, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with F.A.C. Rules 17-4.120 and 17-30.300, 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 (BACT)
- (b) Determination of Prevention of Significant Deterioration (PSD)

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

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

GENERAL CONDITIONS:

records of all data used to complete the application for 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;
6. the results of such analyses.

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

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

1. Nitrogen oxides (NOx) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

(A) 160.9 pounds per hour from each engine.

(B) 6.0 grams per (horsepower*hour) from each engine.

(C) 300.9 tons in any 12 consecutive month period for the combined sum total from both engines.

2. Sulfur dioxide (SO₂) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

(A) 43.63 pounds per hour from each engine.

(B) 81.59 tons in any 12 consecutive month period for the combined sum total from both engines.

3. Particulate matter (PM)/PM₁₀ emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

(A) 8.54 pounds per hour from each engine.

(B) 0.10 pound per million Btu heat input from each engine.

(C) 15.97 tons in any 12 consecutive month period for the combined sum total from both engines.

4. Carbon monoxide (CO) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

(A) 53.62 pounds per hour from each engine.

(B) 2.0 grams per (horsepower*hour) from each engine.

(C) 100.27 tons in any 12 consecutive month period for the combined sum total from both engines.

5. Volatile organic compound (VOC) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

- (A) 26.81 pounds per hour from each engine.
 - (B) 1.0 gram per (horsepower*hour) from each engine.
 - (C) 50.13 tons in any 12 consecutive month period for the combined sum total from both engines.
6. Beryllium (Be) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:
- (A) 0.00054 pounds per hour from each engine.
 - (B) 2.0 pounds in any 12 consecutive month period for the combined sum total from both engines.
7. Visible emissions from each diesel generator shall not be equal to nor greater than 20% opacity.
[Rule 17-296.310(2)(a), F.A.C.].
8. KWCES shall not discharge air pollutants which cause or contribute to an objectionable odor. [Rule 17-296.320(2), F.A.C.].
9. The hours of operation for this facility shall not exceed 1,870 full load equivalent hours in any 12 consecutive month period (total of 3,740 full load equivalent engine hours).
[Rule 17-296.330, F.A.C.].
10. KWCES is permitted to burn only new/virgin No. 2 fuel oil with a maximum sulfur content of 0.50% by weight.
[Rule 17-296.330, F.A.C.].
11. The heat input rate to each diesel generator shall not exceed 85.4 million Btu per hour (606 gallons per hour).
[Requested by applicant].
12. The sum total consumption of fuel oil at this facility (both diesel generators combined) shall not exceed 2.27 million gallons in any 12 consecutive month period.
[Requested by applicant].
13. KWCES shall test each diesel generator for the following pollutants on an annual basis within 45 days of the date June 1. Each compliance test shall be conducted in accordance with 40 CFR 60, Appendix A, using the method indicated. [Permit AC44-152197].

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

- (A) NOx - EPA Method 20.
- (B) SO₂ - EPA Method 6 or ASTM D 2880-71 for sulfur in oil.
- (C) PM/PM₁₀ - EPA Method 5.
- (D) Visible emissions - EPA Method 9.

14. KWCES shall test each diesel generator for the following pollutants within one year prior to the expiration date of this permit. Each compliance test shall be conducted in accordance with 40 CFR 60, Appendix A, using the method indicated. [Rule 17-297.340(1)(c), F.A.C.].

- (A) CO - EPA Method 10.
- (B) VOC - EPA Method 25. (Note: On May 17, 1991, the Department denied a request to utilize EPA Method 25A; see ASP-91-F-01).
- (C) Be - EPA Method 104. (Note: On May 17, 1991, the Department denied a request to utilize fuel sampling in lieu of EPA Method 104; see ASP-91-F-01).

15. KWCES shall conduct emissions testing on each diesel generator while operating within 90% - 100% of the maximum heat input rate of 85.4 million Btu per hour. The actual heat input rate, electrical generator output, and diesel engine horsepower output shall be specified in each test report. [Rule 17-4.070(3), F.A.C.].

16. KWCES shall file all test reports with the South District Office of the Department as soon as practical, but no later than 45 days after the test is complete. [Rule 17-297.570(2), F.A.C.].

17. KWCES shall notify the South District Office of the Department at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. [Rule 17-297.340(1)(i), F.A.C.].

18. In order to document continuing compliance with the hourly SO₂ emission limit of specific condition 2 and the fuel sulfur limit of specific condition 10, KWCES shall keep records of the sulfur content, in percent by weight, of all the fuel burned. The records shall be based upon either vendor provided as-shipped

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

analyses or upon analyses of as-received samples. The records shall be maintained for a minimum of 2 years and shall be made available to the Department upon request. [Rule 17-4.070(3), F.A.C.].

19. In order to document compliance with the hours of operation limitation of specific condition 9, the fuel oil consumption limit of specific condition 12, and the annual NOx emission limit of specific condition 1, KWCES shall keep daily records of the hours of operation, the fuel oil consumption, and the NOx emissions. At a minimum, the records shall indicate (a) the daily hours of operation for each individual diesel generator, (b) the daily hours of operation expressed as full load equivalent engine hours (both units combined), (c) the daily sum total fuel oil consumption in gallons for both units combined, (d) the daily sum total NOx emissions in pounds for both units combined, (e) a cumulative total hours of operation expressed as full load equivalent engine hours for the current month, (f) a cumulative sum total fuel oil consumed in gallons for the current month, (g) a cumulative sum total NOx emissions in tons for the current month, (h) a rolling cumulative total hours of operation expressed as full load equivalent engine hours for the previous 12 consecutive months, (i) a rolling cumulative sum total fuel oil consumed in gallons for the previous 12 consecutive months, and (j) a rolling cumulative sum total NOx emissions in tons for the previous 12 consecutive months.
[Rule 17-4.070(3), F.A.C.].

20. KWCES shall install, calibrate, maintain, and operate continuous monitoring equipment, in accordance with the manufacturer's instructions, to continuously monitor and record opacity and NOx emissions. KWCES shall maintain a complete file of all measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; all continuous emissions monitoring system performance evaluations, all continuous emissions monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required, recorded in a permanent legible form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.
[Permit AC 44-152197 and Rule 17-4.070(3), F.A.C.].

21. For each calendar quarter, KWCES shall submit to the Department a written report of emissions in excess of the emission limiting standards as set forth in this permit. The

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: A044-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

report shall be postmarked by the 30th day following the end of each calendar quarter. The report shall include at least the following information [Rules 17-4.070(3), 17-210.700(1), 17-210.700(4), and 17-210.700(6), F.A.C.]:

- (A) The quarterly hours of operation for each individual diesel generator.
- (B) The magnitude of excess emissions, any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
- (C) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions.
- (D) The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted.
- (E) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.
- (F) When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

22. KWCES shall submit an annual operation report (DER Form 17-210.900(4), attached) to the South District Office of the Department by March 1st each year. The attached form should be reproduced and used for the annual submittals. [Rule 17-4.070(3), F.A.C.].

23. KWCES shall take all reasonable precautions to prevent emissions of unconfined particulate matter. [Rule 17-296.310(3), F.A.C.].

24. If the Department has reason to believe that any applicable emission standard is being violated, then the Department may require KWCES to conduct compliance tests which identify the nature and quantity of pollutant emissions and to provide a report on the results of said tests. [Rule 17-297.340(2), F.A.C.].

25. Construction/modification permit number AC 44-221256 might have been subject to the new source review (NSR) requirements of Rule 17-212.400, F.A.C. if the federally enforceable limits for

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

NOx emissions had been relaxed any further, or if the federally enforceable hours of operation limit had been relaxed. If KWCES requests relaxation of any federally enforceable limits, then the Department will determine whether the NSR requirements of Rule 17-212.400, F.A.C. shall apply as though modification AC 44-221256 had not occurred. [Rule 17-212.400(2)(g), F.A.C.].

26. Best Available Control Technology (BACT) will be re-evaluated if KWCES requests an increase in or exceeds the permitted hours of operation. Selective Catalytic Reduction for NOx control will be required at a minimum for BACT if deemed technologically feasible. In no event shall the BACT control installation and compliance testing occur later than 30 months from the date that KWCES requested to exceed the permitted hours of operation or actually exceeded the permitted hours of operation. [Permit AC 44-152197].

27. The three existing 16.5 MW steam units at the Key West Plant shall not operate. KWCES shall surrender the operation permits for the three 16.5 MW steam units within 30 days after this permit becomes final agency action. [Permit AC 44-152197].

28. KWCES shall send all notifications and reports required by this permit to (a) the South District Office of the Department in Fort Myers, and (b) the South District Branch Office in Marathon, FL.

29. Issuance of this permit does not relieve KWCES from complying with applicable emission limiting standards or other requirements of Rules 17-210, 17-212, 17-252, 17-272, 17-273, 17-275, 17-296, and 17-297, F.A.C., or any other requirements under federal, state, or local law. Future regulations may impact this facility at some future date. KWCES shall comply with any applicable future regulations when they become effective. [Rule 17-210.300, F.A.C.].

30. In order to renew this operation permit, KWCES must submit an application for renewal by November 1, 1997. [Rule 17-4.090(1), F.A.C.].

PERMITTEE:

Key West City Electric
System (KWES)

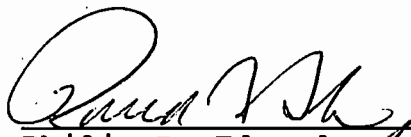
I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: A044-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

• SPECIFIC CONDITIONS:

NOTE: In the event of an emergency the permittee shall contact the Department by calling (904)488-1320. During normal business hours, the permittee shall call (813)332-6975.

Issued this 18th day of March, 1993.

STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL REGULATION


Philip R. Edwards
Director of
District Management

PRE/GAM/jw

14 Pages Attached



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:
Utility Board of the
City of Key West
1001 James Street
P.O. Drawer 6100
Key West, FL 33041

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996
County: Monroe
Latitude/Longitude: 24°33'49"N
81°44'03"W
Project: 23.5 MW Simple Cycle
Combustion Turbine

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.). 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 specifically described as follows:

For the relocation of a simple cycle combustion turbine (CT) generator from Key West Power Plant to the existing Stock Island Power Plant (near Key West) in Monroe County. This generator is a General Electric (GE) Frame 5 model PG5341 CT (equipped with water injection for fuel oil firing) with a rated capacity of 23.5 megawatts at ISO conditions. The GE CT will have a heat input at 59°F of 312 MMBtu/hr (oil). The CT will be fired with No. 2 low sulfur fuel oil with a sulfur content not to exceed 0.05% by weight. NO_x emissions are controlled by a water injection system.

The source/emission unit(s) shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Key West City Electric System application received February 14, 1994.
2. DEP's letter dated March 10, 1994.
3. R.W. Beck's letter dated June 10, 1994.
4. DEP's letter dated July 28, 1994.
5. R.W. Beck's letter dated March 3, 1995.
6. DEP's letter dated April 10, 1995.
7. R.W. Beck's letter dated April 20, 1995.

PERMITTEE:
City Electric System

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996

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, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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

3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed 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.

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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 any 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 F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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

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11. This permit is transferable only upon Department approval in accordance with 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:

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

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least 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 dates analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and,
 - the results of such analyses.

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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.

SPECIFIC CONDITIONS:

The construction and operation of the Project shall be in accordance with all applicable provisions of Chapters 62-210 to 62-297, F.A.C. In addition to the foregoing, the Project shall comply with the following conditions as indicated.

A. General Requirements

1. Pursuant to Rule 62-212.200(56), F.A.C., Potential to Emit (PTE), the maximum heat input to the GE combustion turbine (CT) at an ambient temperature of 59°F shall not exceed 312 MMBtu/hr while firing fuel oil. Heat input may vary depending on ambient conditions and the CT characteristics. Manufacturer's curves or equations for correction to other temperatures shall be provided to DEP for review and approval 90 days prior to the initial compliance test. The approved manufacturer's curves shall be used to establish heat input rates over a range of temperatures for the purpose of compliance determination.

2. Pursuant to Rule 62-212.200(56), F.A.C., only No. 2 fuel oil is allowed to be fired in the CT. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight.

3. Pursuant to Rule 62-212.200(56), F.A.C., the maximum No. 2 fuel oil consumption allowed to be burned in the CT is 7,100,000 gallons per year, which is equivalent to 2888.5 hours per year of operation at full-load. The CT may operate for more than 2888.5 hours per year if operating at part-load.

4. Pursuant to Rule 62-296.310(3), F.A.C., Unconfined Emissions of Particulate Matter, the emissions of unconfined particulate matter shall be minimized during the relocation and construction period by covering or watering dust generating areas.

5. The facility shall comply with all the requirements of 40 CFR Part 60 Subpart GG.

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SPECIFIC CONDITIONS:

B. Emission Limits

1. Pursuant to Rule 62-212.410, F.A.C., BACT, the maximum allowable emissions from the CT, when firing No. 2 fuel oil at 15% O₂, shall not exceed:

ALLOWABLE EMISSIONS LIMITATIONS - GE CT

<u>POLLUTANT</u>	<u>BASIS</u>	<u>lbs/hr(a)</u>	<u>TPY</u>
NO _x	75 ppmvd(b)	96	138
PM/PM ₁₀		18	43
CO	20/136 ppmvd(c)	64	152
Visible Emissions	20 percent opacity		

(a) Emission limitations in lbs/hr are a 1-hour average as determined pursuant to the Performance Testing conducted pursuant to Condition C.1 below.

(b) Fuel oil NO_x emissions are based on BACT at 15% oxygen. Compliance shall be determined through the initial and annual compliance tests. The annual compliance test will be required if the fuel oil operation is more than 400 hrs/yr.

(c) The ppmvd numbers are at 100% / 50% load respectively. The mass emission rates for CO emissions are based on 136 ppmvd.

2. Excess emissions from the CT resulting from start-up, shutdown, malfunction, or load change shall be acceptable providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for a longer duration. The permittee shall provide a general description of the procedures to be followed during periods of start up, shutdown, malfunction, or load change to ensure that the best operational practices to minimize emissions will be adhered to and the duration of any excess emissions will be minimized. The description should be submitted to the Department along with the initial compliance test data. The description may be updated as needed by submitting such update to the Department within thirty (30) days of implementation.

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SPECIFIC CONDITIONS:

C. Performance Testing

1. Initial (I) compliance tests shall be performed on the CT while firing oil. Testing of emissions shall be conducted at 95-100% of the manufacturer's rated heat input based on the average ambient air temperature during the test. Annual (A) compliance tests shall be performed on the CT if the No. 2 fuel was used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods in accordance with 40 CFR 60, Appendix A, as adopted by reference in Chapter 62-297, F.A.C.:

- a. Reference Method 5B for PM (I, A).
- b. Reference Method 9 for VE (I, A).
- c. Reference Method 10 for CO (I, A).
- d. Reference Method 20 for NOx (I, A).

e. ASTM D4294 (or equivalent) for sulfur content of distillate oil (I, A). Compliance with SO₂ emission limits will be demonstrated if the fuel oil analysis indicates a sulfur content of 0.05% by weight or less.

f. Other methods may be used for compliance testing after obtaining prior Departmental approval, in writing.

2. The No. 2 fuel oil shall be monitored for the sulfur content. The frequency of determination shall be in accordance with the requirements of 40 CFR 60.334. Testing for sulfur content of the fuel oil in the storage tanks shall be conducted upon each occasion that fuel is transferred to the storage tanks. Testing for fuel oil lower heating value shall also be conducted on the same schedule.

D. Monitoring Requirements

1. For the simple cycle unit, the permittee shall install, operate, and maintain a continuous monitoring system (CMS) to monitor and record the fuel consumption, the ratio of water to fuel being fired in the turbine, and the electrical output in MW. The system shall be accurate to within ± 5.0 percent and shall be approved by the Department.

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2. For purposes of the reports required under this permit, excess emissions are defined as any calculated average emission rate, as determined pursuant to Specific Condition B.2 herein, which exceeds the applicable emission limits in Specific Condition B.1.

E. Notification, Reporting and Recordkeeping

1. To determine compliance with the fuel oil firing heat input limitation, the permittee shall maintain daily records of fuel oil consumption for the turbine and the heating value for the fuel. All records shall be maintained for a minimum of two years after the date of each record and shall be made available to representatives of the Department upon request.

2. The project shall comply with all the applicable requirements of Chapter 62-297, F.A.C. and 40 CFR 60, Subpart A. The requirements shall include:

a. 40 CFR 60.7(a)(1) - By postmarking or delivering notification of the start of construction no more than 30 days after such date.

b. 40 CFR 60.7(a)(2) - By postmarking or delivering notification of the anticipated date of the initial start up of the CT not less than 30 days prior to such date.

c. 40 CFR 60.7(a)(3) - By postmarking or delivering notification of the actual start up of the turbine within 15 days after such date.

d. 40 CFR 60.7(a)(6) - By postmarking or delivering notification of the anticipated date for conducting the opacity observations no less than 30 days prior to such date.

e. 40 CFR 60.7(b) - By initiating a recordkeeping system to record the occurrence and duration of any start up, shutdown or malfunction of the turbine, and of any malfunction of the air pollution control equipment.

f. 40 CFR 60.7(c) - By postmarking or delivering a quarterly excess emissions and monitoring system performance report within 30 days after the end of each calendar quarter. This report shall contain the information specified in 40 CFR 60.7(c) and (d).

g. 40 CFR 60.8(a) - By conducting all performance tests within 60 days after achieving the maximum turbine firing rates, but not more than 180 days after the initial start up of the CT.

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SPECIFIC CONDITIONS:

h. 40 CFR 60.8(d) - By postmarking or delivering notification of the date of each performance test required by this permit at least 30 days prior to the test date; and,

i. Rule 62-297.345, F.A.C. - By providing stack sampling facilities for the turbine.

j. All notifications and reports required by this Specific Condition shall be submitted to the Department's Air Program of the South District office. Performance test results shall be submitted within 45 days of completion of such test.

3. The following protocols shall be submitted to the Department's Air Program of the South District office for approval;

a. CMS Protocol - Within 60 days after selection of the CMS, but prior to the initial startup, a CMS protocol describing the system, its installation, operating and maintenance characteristics and requirements.

b. Performance Test Protocol - At least 90 days prior to conducting the initial performance tests required by this permit, the permittee shall submit to the Department's Air Program of the South District office a protocol outlining the procedures to be followed and the test methods that will be used to verify compliance with the conditions of this permit. The Department shall approve the testing protocol provided that it meets the requirements of this permit.

F. Modifications

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

G. No. 2 Fuel Oil Storage Tank

The permittee shall be in compliance with the monitoring requirements specified in 40 CFR 60.116b(b), which requires maintaining a record of the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

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SPECIFIC CONDITIONS:

H. Additional General Conditions

1. Pursuant to Rule 62-4.090, F.A.C., the permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit.

2. Pursuant to Rules 62-4.055 and 62-4.220, F.A.C., an application for an operation permit must be submitted to the Department's South District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Howard L. Rhodes, Director
Division of Air Resources
Management

Best Available Control Technology (BACT) Determination
 Key West City Electric System
 Monroe County
 PSD-FL-210

The applicant proposes to relocate a simple cycle combustion turbine (CT) generator from the Key West Power Plant, where it is currently permitted, to the existing Stock Island Power Plant (near Key West) in Monroe County. The CT is a General Electric Frame 5 model PG5341 unit with a nominal base load rating of 23.5 megawatt (MW) at ISO conditions [ISO standard day conditions means 288 degrees Kelvin (59°F), 60 percent relative humidity and 101.3 kilopascals pressure]. The Stock Island Power Plant currently consists of a nominal 37 MW steam-electric generating unit, two nominal 8.6 MW medium speed diesel-electric generating units, three nominal 2 MW high speed diesel-electric generating units, fuel storage tanks, and other electrical generating support equipment. The CT will be fired with No. 2 low sulfur fuel oil with a sulfur content not to exceed 0.05 percent, by weight, and a fuel oil consumption limit of 7.1 million gallons per year.

The applicant has indicated that the maximum annual air pollutant emission rates for the CT, based on consumption of 7.1 million gallons of No. 2 fuel oil, with a maximum sulfur content of 0.05%, by weight, will be:

Pollutant	Emissions (TPY)	PSD Significant Emission Rate (TPY)	Subject to PSD review?
NO _x *	138	40	Yes
SO ₂	24	40	No
PM/PM ₁₀ **	43	25/15	Yes
CO**	152	100	Yes
VOC	15	40	No
Lead	0.004	0.6	No

* - Based on firing No. 2 fuel oil (0.05% sulfur by weight) at a maximum of 7.1 million gals/yr at full load.

** - Based on firing No. 2 fuel oil (0.05% sulfur by weight) at a maximum of 7.1 million gals/yr at 50% load.

Rule 62-212.400, Florida Administrative Code (F.A.C.), Stationary Source Preconstruction Review, requires a BACT review for all regulated pollutants emitted in an amount equal to or greater than the significant emission rates listed in the previous table.

Date of Receipt of a BACT Application:
February 14, 1994

Date Application Complete:
May 5, 1995

BACT Determination Requested by the Applicant:

Pollutant	Emission Limits & Control Technology
NOx	75 ppmvd @ 15% O ₂ and ISO conditions; Water Injection; Use of Good Quality Fuel Oil (<0.05% Sulfur) and Limited Operation
CO	20 ppmvd @ 15% O ₂ / 100% load 136 ppmvd @ 15% O ₂ / 50% load Combustion Control
PM/PM ₁₀	Combustion Control; use of good quality fuel oil (<0.05% Sulfur) and Limited Operation

BACT Determination Procedure

In accordance with Rule 62-212.410, F.A.C., Best Available Control Technology Review, Stationary Source - Preconstruction Review, the BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that, in making the BACT determination, the Department shall give consideration to:

- (a) Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- (b) All scientific, engineering, and technical material and other information available to the Department.
- (c) The emission limiting standards or BACT determinations of any other state.
- (d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission source in question the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objection.

The air pollutant emissions from simple cycle power plants can be grouped into categories based upon what control equipment and techniques are available to control emissions from these facilities. Using this approach, the emissions can be classified as follows:

- o Combustion Products (e.g., particulate matter and trace metals). Controlled generally by good combustion of clean fuels.
- o Products of Incomplete Combustion (e.g., CO and VOCs). Control is largely achieved by proper combustion techniques.
- o Acid Gases (e.g., SO₂, NO_x). Controlled generally by gaseous control devices and fuel quality.

Grouping the pollutants in this manner facilitates the BACT analysis because it enables the equipment available to control the type or group of pollutants emitted and the corresponding energy, economic, and environmental impacts to be examined on a common basis. Although all of the pollutants addressed in the BACT analysis may be subject to a specific emission limiting standard as a result of PSD review, the control of "nonregulated" air pollutants is considered in imposing a more stringent BACT limit on a "regulated" pollutant (i.e., particulates, sulfur dioxide, fluorides, sulfuric acid mist, etc.), if a reduction in "nonregulated" air pollutants can be directly attributed to the control device selected as BACT for the abatement of the "regulated" pollutants.

BACT POLLUTANT ANALYSIS

COMBUSTION PRODUCTS

Particulate Matter (PM/PM₁₀)

The design of the CT system ensures that particulate matter emissions will be minimized by combustion control and the use of clean fuels. The particulate matter emissions from the combustion turbine, when burning No. 2 fuel oil (0.05% sulfur, by weight), will not exceed 18 lb/hr at 50% load.

PRODUCTS OF INCOMPLETE COMBUSTION

Carbon Monoxide (CO)

The emissions of carbon monoxide exceed the PSD significant emission rate of 100 TPY with the GE CT. The applicant has indicated that the carbon monoxide emissions from the proposed simple cycle turbine is 20 ppmvd at 15 % O₂ and 100% load for No. 2 fuel oil firing with water injection. The emissions at 50% load will be 136 ppmvd at 15% O₂.

The majority of BACT emissions limitations have been based on combustion controls for carbon monoxide and volatile organic compounds minimization. Additional control is achievable through the use of catalytic oxidation. Catalytic oxidation is a post-combustion control that has been employed in CO nonattainment areas where regulations have required CO emission levels to be less than those associated with wet injection. These installations have been required to use LAER technology and typically have CO limits on the order of 10 ppm (corrected to dry conditions).

In an oxidation catalyst control system, CO emissions are reduced by allowing unburned CO to react with oxygen at the surface of a precious metal catalyst such as platinum. Combustion of CO starts at about 300°F, with efficiencies above 90 percent occurring at temperatures above 600°F. Catalytic oxidation occurs at temperatures 50 percent lower than that of thermal oxidation, which reduces the amount of thermal energy required. For CT/HRSG combinations, the oxidation catalyst can be located directly after the CT or in the HRSG. Catalyst size depends upon the exhaust flow, temperature, and desired efficiency.

The application of oxidation catalyst is not technically feasible for combustion turbines fired with fuel oil due to the oxidation of sulfur compounds and excessive formation of H₂SO₄ mist emissions. Catalytic oxidation has not been demonstrated on a continuous basis when using fuel oil.

ACID GASES

Nitrogen Oxides (NO_x)

The emissions of nitrogen oxides represent a significant portion of the total emissions generated by this project and need to be controlled. The applicant presented an extensive analysis of the different available technologies for NO_x control.

The applicant stated that BACT for nitrogen oxides will be met by using water injection to limit emissions to 75 ppmvd @ 15% O₂ when burning fuel oil.

A review of the EPA's BACT/LAER Clearinghouse indicates that the lowest NO_x emission limit established to date for a combustion turbine is 6 ppmvd at 15% oxygen. This level of control was accomplished through the use of water injection and a selective catalytic reduction (SCR) system.

SCR is a post-combustion method for control of NO_x emissions. The SCR process combines vaporized ammonia with NO_x in the presence of a catalyst to form nitrogen and water. The vaporized ammonia is injected into the exhaust gases prior to passage through the catalyst bed. The SCR process can achieve up to 90% reduction of NO_x with a new catalyst. As the catalyst ages, the NO_x reduction efficiency at constant ammonia slip will decrease.

The effect of exhaust gas temperature on NO_x reduction depends on the specific catalyst formulation and reactor design. Generally, SCR units can be designed to achieve effective NO_x control over a 100-300°F operating window within the bounds of 450-800°F. The preferable operating window is within the bounds of 600-750°F for effective NO_x control.

Most commercial SCR systems operate over a temperature range of about 600-750°F. At levels above and below this window, the specific catalyst formulation will not be effective and NO_x reduction will decrease. Operating at high temperatures can permanently damage the catalyst through sintering of surfaces. Increased water vapor content in the exhaust gas (as would result from water or steam injection in the gas turbine combustor) can shift the operating temperature window of the SCR reactor to slightly higher levels.

As stated by the applicant, the exhaust temperature of the proposed simple cycle CT is approximately 1000°F. At temperatures of 1000°F and above, the zeolite catalyst (reported to operate within 600-950°F) will be irreparably damaged, and the temperature is high enough to oxidize ammonia to NO_x. The heat recovery steam generator allows attainment of, and provides relative stability for catalyst operation within the optimum temperature range (600-750°F) for a combined cycle operation. In this case, application of an SCR system to a simple cycle combustion turbine appears to be technically infeasible.

The applicant further looked at the dry low-NO_x burner technology for this project. The dry low-NO_x combustors are primarily utilized when natural gas is the fuel fired. However, when the fuel fired is distillate oil, water or steam injection must be utilized along with dry low-NO_x combustors to obtain emission levels comparable to those which are obtained by the use of conventional combustors with the application of water or steam

injection. Therefore, the use of a dry combustor when firing fuel oil does not offer any distinct advantages over conventional water or steam injection systems. Further, the applicant states that dry low-NO_x burners are not available for this existing combustion turbine.

The applicant reviewed water or steam injection technologies for NO_x control on simple cycle combustion turbine. Major manufacturers such as General Electric, and ASEA Brown Boveri, have recently begun to offer commercial guarantees of 25 ppmvd @ 15% O₂ using steam or water injection for large new gas-fired gas turbines even though the commercial operating experience at these levels is limited. NO_x emissions reduction to 65 ppmvd @ 15% O₂ for the relocated unit is technically feasible. However, meeting this limit would require modifications to the turbine existing water injection system and an increase in demineralized water supply. The total capital cost for a water injection system capable of meeting 65 ppmvd @ 15% O₂ is estimated at \$820,000. The total annualized cost is estimated at \$727,000 per year. This equates to cost per ton NO_x removed of \$2,754 based on full load operation and the annual fuel consumption limit. The incremental cost for additional water injection capacity to reduce NO_x emissions from the current 75 ppmvd @ 15% O₂ to 65 ppmvd @ 15% O₂ is estimated to be \$15,505 per ton. This cost is excessive for a unit which is being relocated within the same county.

BACT Determination by DEP:

Simple Cycle Combustion Turbine

NO_x Control

The applicant presented information on different control technologies for the simple cycle combustion turbine. The information that the applicant presented and the Department's calculations indicate that the incremental cost per ton of reducing NO_x with additional water injection from the current 75 ppmvd @ 15% O₂ to 65 ppmvd @ 15% O₂ for the GE Frame 5 model PG5341 turbine to be \$15,505. This cost is excessive. Based on the information presented by the applicant, the Department believes that the use of additional water injection for NO_x control is not justifiable as BACT at this time.

The cost and other concerns expressed by the applicant are considered valid by the Department. Therefore, the Department accepts water injection to limit NO_x emissions to 75 ppmvd @ 15% O₂ as BACT for this project.

CO Control

The Department is in agreement with the applicant's proposal of combustor design and good operating practices as BACT for CO for this project.

Other Emissions Control

The emission limitations for PM and PM₁₀ is based on previous BACT determinations for similar facilities. Although the emissions of this pollutant could be controlled by particulate matter control devices, such as a baghouse or scrubber, the amount of emission reductions would not warrant the added expense. Therefore, the Department does not believe that the BACT determination would be affected by the emissions of this pollutant. The Department accepts the applicant's proposed control of fuel quality for this pollutant as BACT for the simple cycle unit.

The emission limits for the Key West City Electric System project of the simple cycle unit for 23.5 MW are thereby established as follows at 15% O₂:

23.5 MW SIMPLE CYCLE COMBUSTION TURBINE

Pollutant	Emission Standards/Limitations(a)		Method of Control
NO _x	75 ppmvd @ 15% O ₂		Water Injection
CO	20 ppmvd @ 15% O ₂ @100% load	136 ppmvd @ 15% O ₂ @50% load	Combustion Controls Use of Good Quality Fuel Oil and Limited Operation
PM & PM ₁₀	18 lb/hr		Combustion Controls, Fuel Quality

(a) No. 2 fuel oil with a maximum of 0.05% sulfur, by weight, and consumption of 7.1 million gallons per year.

Details of the Analysis May be Obtained by Contacting:

Mr. A. A. Linero, P.E., Administrator
New Source Review Section
Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Recommended by:

CH Fancy
C. H. Fancy, P.E., Chief
Bureau of Air Regulation

Date 9/27, 1995

Approved by:

Howard L Rhodes
Howard L. Rhodes, Director
Division of Air Resources Management

Date 9/22, 1995

Final Determination

**Key West City Electric System
Monroe County, Florida**

**SIMPLE CYCLE COMBUSTION TURBINE
(23.5 megawatts)**

**Construction Permit No. AC 44-245399
PSD-FL-210**

**Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation**

September 20, 1995

Final Determination

The Technical Evaluation and Preliminary Determination for the permit to relocate a 23.5 megawatt simple cycle gas turbine generator from the Key West Power Plant to the existing Stock Island Power Plant in Key West, Monroe County, Florida, was distributed on July 31, 1995. The Notice of Intent to Issue was published in the Key West Citizen on August 13, 1995. Copies of the evaluation were available for public inspection at the Department offices in Fort Myers and Tallahassee.

No comments were submitted by the public, National Park Service, or the applicant. No adverse comments were submitted by U.S. Environmental Protection Agency in their letter dated September 12, 1995.

The final action of the Department will be to issue the PSD permit (PSD-FL-210) as proposed.



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:

Key West City Electric
System
1006 James Street
Key West, Florida 33041

Permit Number: AC 44-152197
PSD-FL-135
Expiration Date: April 1, 1991
County: Monroe
Latitude/Longitude: 24°33'49"N
81°44'03"W
Project: Two Diesel Generators

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 drawing(s), 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 two Fairbanks Morse diesel generators, each combusting about 700 gals/hr No. 2 fuel oil, 100 MMBtu/hr heat input, generating almost 10-MW of electricity, at the existing Stock Island plant in Monroe County, Florida.

The UTM coordinates of the facility are Zone 17, 425 km East and 2716 km North. The Source Classification Code for the diesel generators is 2-01-001-02.

Construction shall be in accordance with the permit application and plans, documents, and reference material submitted unless otherwise stated herein.

Attachments:

1. Key West's (KW) application received July 15, 1988.
2. DER's letter of incompleteness dated August 11, 1988.
3. RWB's letter received August 24, 1988.
4. RWB's letter received September 20, 1988.
5. DER's letter dated September 21, 1988.
6. RWB's letter received September 23, 1988.
7. EPA's letter dated September 29, 1988.
8. NPS's letter dated October 11, 1988.
9. KW's letter received November 22, 1988.
10. KW's letter received December 15, 1988.
11. RWB's letter received January 18, 1989.
12. RWB's letter received February 10, 1989.
13. RWB's letter received March 2, 1989.
14. RWB's letter received March 6, 1989.

PERMITTEE:

Key West City Electric System

Permit Number: AC 44-152197
PSD-FL-135
Expiration Date: April 1, 1991

Attachments continued:

15. DER's Preliminary Determination dated March 21, 1989.
16. EPA's letter dated April 19, 1989.
17. KW's letter dated April 25, 1989.
18. KW's letter dated May 24, 1989.
19. DER's Final Determination dated June 2, 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:

Key West City Electric System

Permit Number: AC 44-152197
PSD-FL-135

Expiration Date: April 1, 1991

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 non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

PERMITTEE:

Key West City Electric System

Permit Number: AC 44-152197

PSD-FL-135

Expiration Date: April 1, 1991

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:

- (x) Determination of Best Available Control Technology (BACT)
- (x) Determination of Prevention of Significant Deterioration (PSD)
- () 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:

Key West City Electric System

Permit Number: AC 44-152197

PSD-FL-135

Expiration Date: April 1, 1991

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 record 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 facility shall not operate for more than 1870 full load equivalent hours per year (total of 3740 full load equivalent engine hours). The BACT will be re-evaluated at the time the permittee requests an increase in or exceeds the permitted hours of operation (see Specific Condition 10). Selective Catalytic Reduction for NOx control will be required at a minimum for BACT if deemed technologically feasible. In no event shall the BACT control installation and compliance testing occur later than thirty (30) months from the date that the permittee requested or exceeded the permitted hours of operation.

2. Only No. 2 fuel oil with a maximum of 0.5% sulfur content shall be fired in the engines.

3. The maximum heat input to each engine shall not exceed 10 MMBtu/hr (approx. 700 gals/hr). The derated electrical output (with timing retardation) is expected to be about 8.8 MW for each unit.

3166111AC
COND,

PERMITTEE:
Key West City Electric System

Permit Number: AC 44-152197
PSD-FL-135
Expiration Date: April 1, 1991

SPECIFIC CONDITIONS:

4. The maximum allowable emissions from the project, in accordance with the attached BACT determination, shall not exceed:

Pollutant	Basis	Maximum Allowable Emissions	
		Per Engine lb/hr	Facility Total TPY
PM/PM ₁₀ *	0.10 lb/MMBtu	19.7	37.4
NOx	6 g/hp-hr	155	290
SO ₂	0.5% S oil	50.4	96
CO *	2 g/hp-hr	51.7	98
VOC *	1 g/hp-hr	25.8	50
Be	-	0.00054	0.001

* PM₁₀, CO, and VOC emission limitations are maximum allowables and are subject to change based on stack testing results.

The facility may fire up to 2.6 million gallons per year of diesel oil, or operate up to 1870 full load equivalent hours annually (total of 3740 full load equivalent engine hours), as long as the total NOx emissions do not exceed 290 TPY. The fuel usage, NOx emissions, and hours of operation will be based on a 365-day rolling average.

Visible emissions (VE) shall not exceed 20% opacity. This limit is subject to change after testing.

5. Initial (I) and annual (A) compliance tests shall be performed using EPA Methods in accordance with 40 CFR 60 Appendix A, 1987 version:

- a. EPA Method 5 for PM (I,A)
- b. EPA Method 6 for SO₂, or ASTM D 2880-71 for sulfur in oil (I,A)
- c. EPA Method 9 for VE (I,A)
- d. EPA Method 10 for CO (I)
- e. EPA Method 20 for NOx (I,A)
- f. EPA Method 25 for VOC (I)
- g. EPA Method 104 for Be, or EPA SW846 Method 3040, 7090/7091 (I)

Other DER approved test methods may be used only after Departmental approval.

Continuous emission monitors shall be installed, calibrated, maintained and operated for opacity and NOx.

6. The project shall comply with all the applicable requirements of Chapters 17-2 and 17-4 of the Florida Administrative Code (F.A.C.).

PERMITTEE:
Key West City Electric System

Permit Number: AC 44-152197
PSD-FL-135
Expiration Date: April 1, 1991

SPECIFIC CONDITIONS:

7. DER's South Florida District office shall be notified in writing a minimum of 15 days prior to source testing. Written reports of the test results shall be submitted to the district office within 45 days of test completion.

8. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).


9. An application for an operation permit must be submitted to the South Florida District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

10. Any change in the method of operation, fuels, equipment or operating hours shall be submitted for approval to the South Florida District office.

11. The three existing 16.5 MW steam units at the Key West Plant shall be shut down and operation permits shall be surrendered for cancellation when operation permits are issued for the two new engines authorized by this permit.

Issued this 5 day
of June, 1989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


Dale Twachtmann, Secretary

ATTACHMENTS AVAILABLE UPON REQUEST



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

P.E. Certification Statement

Permittee:
Utility Board of the City of Key West
Stock Island Power Plant

[DRAFT] Permit No.: 0870003-001-AV
Facility ID No.: 0870003

Project type: Initial Title V Air Operation Permit

I HEREBY CERTIFY that the engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited, to the electrical, mechanical, structural, hydrological, and geological features and the Acid Rain Part).

C. L. Phillips 9-12-97

C. L. Phillips date
Registration Number: 50246

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Section
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/921-9534
Fax: 850/922-6979

UTILITY BOARD OF THE CITY OF KEY WEST

POST OFFICE DRAWER 6100

KEY WEST, FLORIDA 33041-6100



TELEPHONE: (305) 295-1000

Handwritten signature
x: Cindy
Clove

October 3, 1997

Office of General Counsel
Florida Department of Environmental Protection
3900 Commonwealth Boulevard
Mail Station #35
Tallahassee, FL 32399-3000

RECEIVED

OCT 09 1997

BUREAU OF
AIR REGULATION

Subject: Draft Title V Air Operating Permit for Stock Island Power Plant, Utility Board of the City of Key West, Permit No. 0870003-001-AV

Dear Sir:

In accordance with Sections 120.5469 and 120.57, F.S. and provisions of the subject draft permit, the Utility Board of the City of Key West (City Electric System) hereby petitions the Florida Department of Environmental Protection (FDEP) for an extension of time to comment and finalize the subject permit. The facts and information that support this petition are as follows:

Petitioner

Utility Board of the City of Key West, Florida
P.O. Drawer 6100
1001 James Street
Key West, Florida 33041-6100
Permit No. 0870003-001-AV
Monroe County, Florida
Contact Person: Mr. Joe Stone (305) 295-1148

Receipt of Notice of Intent

The subject draft permit intent to Issue, dated September 12, 1997, was received by the Utility Board on September 22, 1997 by certified mail.

Petitioner's Substantial Interests

The subject permit provides authorization to operate the electric generating facilities at the Stock Island Power Plant site, which provides electricity to the residential, commercial, and industrial customers of Key West and nearby Florida Keys.

Statement of Facts

The Utility Board and the Florida Municipal Power Agency (FMPA) are in the process of obtaining an air emission source construction permit for the addition of two used combustion turbine units at the subject Stock Island Plant site. Also, with the addition of these two units, the existing on-site steam electric generating unit will be retired from the State of Florida's emission inventory for the site. Application for a construction permit for the project was submitted and received by FDEP on September 11, 1997. Based on telephone conversations with Ms. Cindy Phillips of FDEP concerning the subject draft permit, FDEP recommended that the Utility Board request an extension of time, using the petition for hearing provisions, to allow review of the subject draft permit and to allow modification of the subject draft permit to include the proposed units and retirement of the steam unit. The anticipated permitting schedule for the combustion turbine units is to have a final construction permit by December 31, 1997. Construction of the units would follow in early of 1998 with operation beginning in June or July 1998.

UTILITY BOARD MEMBERS:

Robert R. Padron, Chairman • Marty Arnold, Vice-Chairman
Otha P. Cox, Member • Leonard H. Knowles, Member • John H. Robinson, Jr., Member

At the time of public notice of the planned construction permit, it is proposed that the Utility Board would contact FDEP to discuss a final schedule for processing Title V permit.

Based on these facts the Utility Board is requesting an extension of time to January 31, 1998, to public notice the subject draft permit and to allow modification of the subject draft permit to include the addition of two used combustion turbine units and the retirement of the existing steam unit at the Stock Island Plant site.

Rules and Statues

This request is based on the petition for hearing/administrative determination provisions included in Section 120.569 and 120.57, F.S.

Statement of Relief Sought

The Utility Board requests approval to extend the date for final processing and public notice of the subject Title V permit to January 31, 1998.

If there are any questions concerning this request, please contact Mr. Joe Stone at (305)-295-1148.

Sincerely,

UTILITY BOARD - CITY OF KEY WEST
"CITY ELECTRIC SYSTEM"
Larry J. Thompson, General Manager



Joe Stone
Environmental Services Supervisor

JS/pd

cc:

L. Thompson, General Manager
R. Rodriguez, Assistant General Manager
C. Jansen, T, D & G Manager
C. Fancy, FDEP ✓
A. Linero, FDEP
R. Williams, FMPA
W. Reynolds, R.W. Beck
i. Clark, R.W. Beck
File: SOF-110

Utility Board of the City of Key West
Stock Island Power Plant
Facility ID No.: 0870003
Monroe County

Initial Title V Air Operation Permit
DRAFT Permit No.: 0870003-001-AV

DRAFT

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

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Telephone: 850/488-1344
Fax: 850/922-6979

two extension

September 12, 1997

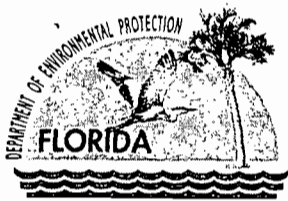
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Joe Stone 305-295-1148

Initial Title V Air Operation Permit
DRAFT Permit No.: 0870003-001-AV

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Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

Permittee:

Utility Board of the City of Key West
P.O. Drawer 6100
Key West, Florida 33041-6100

DRAFT Permit No.: 0870003-001-AV

Facility ID No.: 0870003

SIC Nos.: 49, 4911

Project: Initial Title V Air Operation Permit

This permit is for the operation of the Stock Island Power Plant. This facility is located at 6900 Front Street, Stock Island, Monroe County; UTM Coordinates: Zone 17, 425.65 km East and 2716.67 km North; Latitude: 24° 33' 49" North and Longitude: 81° 44' 03" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The Utility Board of the City of Key West is authorized to operate the Stock Island Power Plant as shown in the application and approved drawings, plans, and other documents, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units

Appendix E-1, List of Exempt Emissions Units and/or Activities

APPENDIX TV-1, TITLE V CONDITIONS (Version Dated 08/11/97)

APPENDIX SS-1, STACK SAMPLING FACILITIES (Version dated 10/07/96)

TABLE 297.310-1, CALIBRATION SCHEDULE (Version Dated 10/07/96)

FIGURE 1 - SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM REPORT (version dated 7/96)

Phase II Acid Rain Application received December 11, 1995

Phase II Acid Rain New Unit Exemptions issued February 7 and 9, 1995

Effective Date: January 1, 1998

Renewal Application Due Date: July 5, 2002

Expiration Date: December 31, 2002

Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/clp/stw

Section I. Facility Information

Subsection A. Facility Description

This facility consists of seven emission units (including several unregulated emissions units), with a total plant generating capacity of 84.1 MW. There is one fossil fuel-fired steam generator, one simple cycle combustion turbine, and two medium speed diesel generators. Low sulfur fuel is the primary fuel. To reduce pollution, a combination of control techniques are used including water injection, multiple cyclones, ignition timing retardation, and low sulfur fuel. Also included in this permit are miscellaneous unregulated/exempt emissions units and/or activities.

Based on the initial Title V permit application received June 12, 1996, this facility is not a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No.s and Brief Descriptions

E.U.

ID No. Brief Description

-001	Ralph Garcia Steam Plant, 37 MW [EPA ID #: 1]
-005	(2) 8.8 MW Medium Speed Diesel Generators (Unit #1 & Unit #2) [EPA ID # D-1 & D-2]
-007	Simple Cycle Combustion Turbine, 23.5 MW
-xxx	Unregulated Emissions Units (See Appendix U-1.)

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit ID Nos. on all correspondence, test report submittals, applications, and other information.

Subsection C. Relevant Documents

The documents listed below are not a part of this permit; however they are specifically related to this permitting action.

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

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

Table 2-1, Summary of Compliance Requirements

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

Appendix H-1, Permit History / ID Number Transfers

These documents are on file with permitting authority:

Initial Title V Permit Application received June 12, 1996.

Section II. Facility-wide Conditions

1. APPENDIX TV-1, TITLE V CONDITIONS (version dated 8/11/97), is a part of this permit.

{Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard.
Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(b)1.& 4., F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA). If required by 40 CFR 68, the permittee shall submit to the implementing agency:
a. a risk management plan (RMP) when, and if, such requirement becomes applicable, and
b. certification forms and/or RMPs according to the promulgated rule schedule.
[40 CFR 68]

5. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]

6. Exempt Emissions Units and/or Activities. Appendix E-1, List of Exempt Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

7. Not federally enforceable. The permittee shall take reasonable precautions to prevent emissions of unconfined particulate matter at this facility. These precautions include receiving delivery of fuel oil by barge rather than trucks, and using paved roads for the fuel trucks which deliver vehicle fuel. Additionally, watering will be used as needed to prevent emissions from unpaved areas.

[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received June 12, 1996]

8. The permittee shall submit all compliance, annual operating reports and other correspondence required of this permit to the Department's South District and Marathon Branch offices:

Department of Environmental Protection
South District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida, 33901
Telephone: 813/332-6975
Fax: 813/332-6969

Department of Environmental Protection
Marathon Branch Office
2796 Overseas Highway, Suite 221
Marathon Florida, 33901
Telephone: 305/289-2310
Fax: 305/289-2314

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

United States Environmental Protection Agency
Region 4
Air, Pesticides, & Toxics Management Division
Operating Permits Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9099
Fax: 404/562-9095

10. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.]

Section III. Emissions Units and Conditions

Subsection A.

This section addresses the following emissions units:

E.U.

ID No. Brief Description

-001 Ralph Garcia Steam Plant, 37 MW [EPA ID #:1]

The Ralph Garcia Steam Plant is a Zurn Model 17995 normally fired steam generator that fires low sulfur No. 2 or No. 6 fuel oil, or propane, with a maximum heat input of 515 MMBtu per hour. Sulfur dioxide emissions are controlled by limiting the sulfur content of the fuel. Particulate emissions are controlled by a multicyclone dust collector with a control efficiency of 46% for particulate matter and 37% for PM₁₀. Sulfur dioxide, carbon dioxide, nitrogen oxides, visible emissions, and gas flow rate are all continuously monitored.

{Permitting notes: The emissions unit is regulated under Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input. The unit began commercial operation in December of 1972, however it was relocated to its current location in December of 1982. It is a Phase II Acid Rain Unit.}

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

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum heat input shall not exceed 515 MMBtu per hour.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE) and 62-296.405, F.A.C.]

A.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition A.22.

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

A.3. Methods of Operation - Fuels. The only fuels authorized to be burned in this unit are, new/virgin No. 6 residual fuel oil, or new/virgin No. 2 fuel oil, or propane. The sulfur content shall not exceed 2.5 percent by weight.

[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.]

A.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year.

[Rule 62-210.200 (PTE), F.A.C.]

Emission Limitations and Standards

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

A.5. Visible Emissions. Visible emissions shall not exceed 20 percent opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent. Emissions units governed by this visible emissions limit shall compliance test for particulate matter emissions annually and as otherwise required by Chapter 62-297, F.A.C.

[Rule 62-296.405(1)(a), F.A.C.]

A.6. Visible Emissions - Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

[Rule 62-210.700(3), F.A.C.]

A.7. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods.

[Rule 62-296.405(1)(b), F.A.C.]

A.8. Particulate Matter - Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

[Rule 62-210.700(3), F.A.C.]

A.9. Sulfur Dioxide. When burning liquid fuel, sulfur dioxide emissions shall not exceed 2.75 pounds per million Btu heat input, as measured by applicable compliance methods.

[Rule 62-296.405(1)(c)1.j., F.A.C.]

A.10. Sulfur Dioxide - Sulfur Content. The fuel oil sulfur content shall not exceed 2.5 percent, by weight. See specific condition **A.20**.
[Rule 62-296.405(1)(e)3., F.A.C.; AO44-245479]

Excess Emissions

A.11. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

A.12. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C.]

A.13. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Monitoring Requirements

A.14. Sulfur Dioxide. **The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor upon each fuel delivery.** This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. See specific conditions **A.10., A.19. and A.20.**
[Rule 62-296.405(1)(f)1.b., F.A.C.]

A.15. Determination of Process Variables.

(a) **Required Equipment.** The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) **Accuracy of Equipment.** Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process

variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.16. Visible emissions. The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. See specific condition **A.17.**
[Rule 62-296.405(1)(e)1., F.A.C.]

A.17. DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.

2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:

a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.

b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.

[Rule 62-297.401, F.A.C.]

A.18. Particulate Matter. The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17.
[Rules 62-296.405(1)(e)2. and 62-297.401, F.A.C.]

A.19. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. **The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor upon each fuel delivery.** See specific conditions A.10. and A.20.

[Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C. and AO44-245479.]

A.20. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91. If a test method is updated, the latest edition of the method may be used.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

A.21. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions 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. [Rules 62-297.310(2) & (2)(b), F.A.C.]

A.22. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

1. (not applicable)
2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid for more than 400 hours other than during startup.
3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.
6. (not applicable)
7. (not applicable)
8. (not applicable)

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
10. An annual compliance test conducted for visible emissions shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62-210.300(4), F.A.C.

(b) See Common Conditions.

(c) See Common Conditions.

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

A.23. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

A.24. Annual and permit renewal compliance testing for particular matter emissions is not required for these emissions units while burning:

- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)3. & 5., F.A.C., and ASP 97-B-01]

Reporting and Recordkeeping Requirements

A.25. In order to document continuing compliance with the fuel oil sulfur limit in specific condition A.3, the permittee shall keep records of the sulfur content, in percent by weight, of all the fuel burned based on either vendor provided as-shipped analyses or on analyses of as-received samples. The records shall be maintained for a minimum of two years and shall be made available to the Department upon request. The permittee shall submit a copy of the fuel oil analysis for the fuel oil burned during each compliance test with the results from the test.

[Rule 62-4.070(3), F.A.C.]

A.26. As required by the AC permit (AC-44-61820), a report stating the quantity of fuel oil received and sulfur content of the fuel oil shall be submitted to the Department monthly.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

A.27. In case of excess emissions resulting from malfunctions, the permittee shall notify the Department's South District Office and Marathon Branch Office in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C]

A.28. The permittee shall submit to the Department's South District Office and Marathon Branch Office a written report of emissions in excess of the emission limiting standards as set forth in rule 62-296.405, F.A.C., for each calendar quarter. The nature and cause of the excessive emissions shall be explained. The report shall state the cause, period of non-compliance, steps taken for corrective action, and steps taken to prevent recurrence. The Department shall also be notified when there are no exceedances for a quarter. This report does not relieve the permittee of the legal liability for violations. All relevant records shall be maintained on file for a period of at least two years. The report shall be submitted within 30 days following each calendar quarter.

[Rule 62-4.070(3), F.A.C]

A.29. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C.]

Subsection B.

This section addresses the following emissions units:

E.U.

ID No. Brief Description

-005 (2) 8.8 MW Medium Speed Diesel Generators (Unit #1 & Unit #2)
 [EPA ID #: D-1 & D-2]

Each of the two 8.8 MW (nominal) electric Fairbanks Morse diesel generators burn No. 2 distillate fuel oil and have a maximum heat input rate of 85.4 million Btu per hour. Sulfur dioxide emissions are controlled by limiting the sulfur content of the No. 2 fuel oil to 0.05% by weight. Nitrogen oxides emissions are controlled by ignition timing retard and by limiting the hours operation. Visible emissions and NOx emissions are continuously monitored.

{Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination dated 6/5/89, AO44-207419 & PSD-FL-135}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum heat input rate to each diesel generator shall not exceed 85.4 MMBtu per hour (606 gallons per hour). The sum total consumption of fuel oil for both diesel generators combined shall not exceed 2.27 million gallons in any 12 consecutive month period.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE) and AC44-207419/PSD-FL-135]

B.2. Emissions Unit Operating Rate Limitation During and After Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions 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.]

B.3. Methods of Operation - Fuels. The only fuel to be burned in this unit is new/virgin No. 2 fuel oil. The sulfur content shall not exceed 0.05 percent by weight.

[Rules 62-213.440(1), F.A.C.; AC44-221256/PSD-FL-135; and Acid Rain Program New Unit Exemptions.]

B.4. Hours of Operation. For both units combined, the hours of operation shall not exceed a combined total of 3,740 full load equivalent engine hours in any consecutive 12-month period.

[Rule 62-212.400(6), F.A.C.]

Emission Limitations and Standards

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

B.5. Oxides of Nitrogen: NOx emissions shall not exceed any of the following limits:

- a. 160.9 pounds per hour from each engine;
- b. 6.0 grams per horsepower-hour from each engine;
- c. 300.9 tons in any 12 consecutive month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

B.6. Sulfur Dioxide: SO₂ emissions shall not exceed either of the following limits:

- a. 43.6 pounds per hour from each engine;
- b. 81.6 tons in any 12 consecutive month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

B.7. Particulate Matter. PM/PM₁₀ emissions shall not exceed any of the following limits:

- a. 8.5 pounds per hour from each engine;
- b. 0.1 million pound per million Btu heat input;
- c. 16.0 tons in any 12 consecutive month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

B.8. Carbon Monoxide: CO emissions shall not exceed any of the following limits:

- a. 53.6 pounds per hour from each engine;
- b. 2.0 grams per horsepower-hour from each engine;

c. 100.3 tons in any 12 consecutive month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

B.9. Volatile Organic Compounds: VOC emissions shall not exceed any of the following limits:

a. 28.6 pounds per hour from each engine;

b. 1.0 grams per horsepower-hour from each engine;

c. 50.1 tons in any 12 consecutive month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., and AC44-221256]

B.10. Beryllium (Be): Beryllium emissions shall not exceed 0.00054 pounds per hour from each engine and shall not exceed 2.0 pounds in any 12 consecutive month period for the combined sum total from both engines.

[Rule 62-212.400(6), 62-212.400(1)(c), and 62-212.400(2)(d)4., F.A.C., AC44-221256]

B.11. Visible Emissions: Visible emissions shall not exceed 20 percent opacity.

[Rule 62-296.320(4)(b)1, F.A.C., AC44-221256]

B.12. Objectionable Odor: The permittee shall not discharge air pollutants which cause or contribute to an objectionable odor.

[Rule 62-296.320(1)(a)2, F.A.C., AC44-221256]

Excess Emissions

B.13. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

B.14. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

Monitoring Requirements

B.15. The permittee shall calibrate, maintain, and operate continuous monitoring equipment, in accordance with the manufacturer's instructions, to continuously monitor and record opacity and NOx emissions. The permittee shall maintain a complete file of all measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; all continuous emissions monitoring system performance evaluations, all continuous emissions monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required, recorded in an a permanent legible form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

Test Methods and Procedures

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.16. The permittee shall test each diesel generator on an annual basis within 45 days of June 1 for the following pollutants. Each compliance test shall be conducted in accordance with 40 CFR 60, Appendix A, using the method indicated.

- a) Oxides of Nitrogen (NOx) - EPA Method 20.
- b) Carbon Monoxide (CO) - EPA Method 10.
- c) Beryllium (Be) - EPA Method 104.

[Rule 62-297.310(7)4., F.A.C.]

B.17. The permittee shall test each diesel generator prior to obtaining a renewed operation permit for the following pollutants. Each compliance test shall be conducted in accordance with 40 CFR 60 Appendix A, using the method indicated.

- a) Sulfur Dioxide (SO₂) - EPA Method 6 or ASTM D 2880-71 for sulfur in oil.
- b) Particulate Matter (PM/PM₁₀) - EPA Method 5.
- c) Visible Emissions - EPA Method 9.
- d) Volatile Organic Compounds (VOC) - EPA Method 25.

[Rule 62-297.310(7)3., F.A.C.]

B.18. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

B.19. Annual and permit renewal compliance testing for particular matter emissions is not required for these emissions units while burning liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)3. & 5., F.A.C.]

Reporting and Recordkeeping Requirements

B.20. In order to document compliance with the hours of operation limitation of specific condition B.4, the fuel oil consumption limit of specific condition B.1, and the annual NOx emission limit of specific condition B.5, the permittee shall keep daily records of the hours of operation, the fuel oil consumption, and the NOx emissions. At a minimum, the records shall indicate:

- (a) the daily hours of operation for each individual diesel generator,
- (b) the daily hours of operation expressed as full load equivalent engine hours (both units combined);
- (c) the daily sum total fuel oil consumption in gallons for both units combined;
- (d) the daily sum total NOx emissions in pounds for both units combined;
- (e) a cumulative total hours of operation expressed as full load equivalent engine hours for the current month;
- (f) a cumulative sum total fuel oil consumed in gallons for the current month;
- (g) a cumulative sum total NOx emissions in tons for the current month;
- (h) a rolling cumulative total hours of operation expressed as full load equivalent engine hours for the previous 12 consecutive months;
- (i) a rolling cumulative sum total fuel oil consumed in gallons for the previous 12 months; and
- (j) a rolling cumulative sum total NOx emissions in tons for the previous 12 consecutive months.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

B.21. For each calendar quarter, the permittee shall submit to the Department a written report of emissions in excess of the emission limiting standards as set forth in this permit. The report shall be postmarked by the 30th day following the end of each calendar quarter. The report shall include at least the following information:

1. The quarterly hours of operation for each individual diesel generator.
2. The magnitude of excess emissions, any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
3. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions.

4. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

5. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

B.22. In order to document continuing compliance with the hourly SO₂ emission limit of specific condition B.6 and the fuel sulfur limit of specific condition B.3, the permittee shall keep records of the sulfur content, in percent by weight, of all the fuel burned. The records shall be based upon either vendor provided as-shipped analyses or upon analyses of as-received samples. The records shall be maintained for a minimum of two years and shall be made available to the Department upon request.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

Source Commitments

B.23. If the permittee requests relaxation of any federally enforceable limits for these units, then the Department will determine whether the NSR requirements of Rule 62-212.400, F.A.C. shall apply, as though the construction permit AC44-221256 had not been issued.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

B.24. Best Available Control Technology (BACT) will be re-evaluated if the permittee requests an increase in or exceeds the permitted hours of operation. Selective Catalytic Reduction for NO_x control will be required at a minimum for BACT if deemed technologically feasible. In no event shall the BACT control installation and compliance testing occur later than 30 months from the date that the permittee requested to exceed the permitted hours of operation or actually exceeded the permitted hours of operation.

[Rule 62-4.070(3), F.A.C. and AC44-221256/PSD-FL-135]

B.25. The three existing 16.5 MW steam units at the Key West Plant shall not operate.

[AC44-221256/PSD-FL-135 and AC44-152197]

Subsection C.

This section addresses the following emissions units:

E.U.

ID No. Brief Description

-007 Simple Cycle Combustion Turbine, 23.5 MW

Emissions unit -007 is a General Electric (GE) Frame 5 model PG5341 CT equipped with water injection for fuel oil firing. It has a rated capacity of 23.5 MW at ISO conditions. The GE CT will have a heat input of 312 MMBtu per hour (at 59° F) while burning oil. The CT will be fired with No. 2 fuel oil with a sulfur content not to exceed 0.05 % by weight. NOx emissions are controlled by a water injection system. The water to fuel ratio is continuously monitored. This turbine began operation at this location January 1, 1996.

{Permitting notes: This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C.; NSPS 40 CFR 60 Subpart A; Rule 212.400, F.A.C., Prevention of Significant Deterioration; PSD-FL-210; and AC44-245399. The unit is not affected by the Acid Rain Program, as it is an existing (pre-1990) simple cycle combustion turbine less than 25 MW.}

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum heat input to the GE combustion turbine (CT) at an ambient temperature of 59° F shall not exceed 312 MMBtu/hr while firing fuel oil. Heat input may vary depending on ambient conditions and the CT characteristics. Manufacturer's curves or equations for correction to other temperatures shall be provided to DEP for review and approval 90 days prior to the initial compliance test. The approved manufacturer's curves shall be used to establish heat input rates over a range of temperatures for the purpose of compliance determination.
[Rule 62-210.200, F.A.C., AC44-245399/PSD-FL-210]

C.2. Methods of Operation - Fuels. The only fuel to be burned in this unit is new No. 2 fuel oil. The sulfur content shall not exceed 0.050 percent by weight.
[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C., AC44-245399/PSD-FL-210]

C.3. Hours of Operation/Fuel Consumption The maximum No. 2 fuel oil consumption allowed to be burned in the CT is 7.1 million gallons per year, which is equivalent to 2,888.5 hours per year at full-load; the CT may operate for more than this if operating at part-load.

[Rule 62-212.500(56), F.A.C., AC44-245399, PSD-FL-210]

Emission Limitations and Standards

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

Pursuant to Rule 62-212.410, F.A.C., BACT, the maximum allowable emissions from the CT, when firing No. 2 fuel oil at 15% O₂, shall not exceed:

C.4. Oxides of Nitrogen. NO_x emissions shall not exceed any of the following limits:

a. Nitrogen oxides emissions, expressed as NO_x, shall not exceed:

$$STD = 0.0075 (14.4)/Y + F$$

where:

STD=allowable NO_x 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=NO_x emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(3).

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

<u>Fuel-bound nitrogen (% by weight)</u>	<u>F (NO_x% by volume)</u>
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. 75 ppmvd, based on a 1-hour average at 15% O₂;

- c. 96 lbs./hour, based on a 1-hour average at 15% O₂;
- d. 138 TPY.

[Rule 62-212.500(56), F.A.C., AC44-245399/PSD-FL-210, 40 CFR 60.332]

C.5. Sulfur Dioxide. SO₂ emissions shall be controlled by limiting the sulfur content of the fuel to a maximum of 0.05 percent by weight.

[AC44-245399/PSD-FL-210, 40 CFR 60.333]

C.6. Particulate Matter/PM₁₀. PM/ PM₁₀ emissions shall be limited to 18 lbs./hour, based on a 1-hour average; 43 TPY.

[AC44-245399, PSD-FL-210]

C.7. Carbon Monoxide. CO shall be limited to 20 ppm at 100% load, and 136 ppm at 50% load; 64 lbs. per hour, based on a 1-hour average; 152 TPY.

[AC44-245399/PSD-FL-210]

C.8. Visible Emissions. Visible emissions shall be limited to 20 percent opacity.

[AC44-245399/PSD-FL-210]

Excess Emissions

C.9. Excess emissions from the CT resulting from start-up, shutdown, malfunction, or load change shall be acceptable providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for a longer duration.

[AC44-245399/PSD-FL-210]

Monitoring Requirements

C.10. For the simple cycle unit, the permittee shall install, operate, and maintain a continuous monitoring system (CMS) to monitor and record the fuel consumption, the ratio of water to fuel being fired in the turbine, and the electrical output in MW. The system shall be accurate to within ± 5.0 percent and shall be approved by the Department.

[AC44-245399/PSD-FL-210, 40 CFR 60.334(a)]

C.11. Operation and maintenance of the CMS shall be performed in accordance with the following protocol: Water is injected to reduce NO_x emissions. The CMS consists of water flow, fuel flow, and power (MW) measurements recorded on strip chart.

Quarterly calibrations are performed on the CMS as indicated in quarterly report submittals.

[AC44-245399/PSD-FL-210, 40 CFR 60.334(a)]

C.12. The permittee shall monitor sulfur content, nitrogen content, and the lower heating value of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

a. 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.

b. 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 Department before they can be used to comply with 40 CFR 60.334(b).

[AC44-245399/PSD-FL-210, 40 CFR 60.334(b)(1)&(b)(2), 40 CFR 60.335]

C.13. For the purpose of reports required under 40 CFR 60.7(c) (see specific condition C.24.), periods of excess emissions that shall be reported are defined as follows:

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

b. *Sulfur dioxide.* Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.05 percent.

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

Test Methods & Procedures

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.14. Compliance tests shall be performed on the CT while firing oil. Testing of emissions shall be conducted at 95-100% of the manufacturer's rated heat input based on the average ambient air temperature during the test.

Annual compliance tests shall be performed on the CT if the No. 2 fuel was used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods in accordance with 40 CFR 60, Appendix A, as adopted by reference in Chapter 62-297, F.A.C.:

- a. Reference Method 5B for PM.
- b. Reference Method 9 for VE.
- c. Reference Method 10 for CO.
- d. Reference Method 20 for NO_x.
- e. ASTM D4294 (or equivalent) for sulfur content of distillate oil.
Compliance with SO₂ emission limits will be demonstrated if the fuel oil analysis indicates a sulfur content of 0.05% by weight or less.
- f. Other methods may be used for compliance testing after obtaining prior Departmental approval, in writing.

[AC44-2445399]

C.15. 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.
[40 CFR 60.335(a)]

C.16. The owner or operator shall determine compliance with the NO_x standards in 40 CFR 60.332 (condition C.4) as follows:

- a. The NO_x emission rate shall be computed for each run using the following equation:

$$NO_x = (NO_{x0}) (P_r/P_o)^{0.5} e^{19(H_o-0.00633)} (288^\circ K/T_a)^{1.53}$$

where:

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

NO_{x0}=observed NO_x concentration, ppm by volume.

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

P_o=observed combustor inlet absolute pressure at test, mm Hg.

H_0 = observed humidity of ambient air, g H_2O /g air.

e = transcendental constant, 2.718.

T_a = ambient temperature, °K.

[40 CFR 60.335(c)(1)]

C.17. The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with 40 CFR 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

[40 CFR 60.335(c)(2)]

C.18. U.S. EPA. Method 20 (40 CFR 60, Appendix A) shall be used to determine nitrogen oxides and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO_x emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(c)(2) (condition C.16).

[40 CFR 60.335(c)(3)]

C.19. The Utility Board of the City of Key West shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to such facility. This includes (a) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (b) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

2. Safe sampling platform(s).

3. Safe access to sampling platform(s).

4. Utilities for sampling and testing equipment.

[40 CFR 60.7(e)]

Reporting and Recordkeeping Requirements

C.20. To determine compliance with the fuel oil firing heat input limitation, the permittee shall maintain daily records of fuel oil consumption for the turbine and the heating value for the fuel. All records shall be maintained for a minimum of two years after the date of each record and shall be made available to representatives of the Department upon request.

[AC44-245399/PSD-FL-210]

C.21. The permittee shall follow the manufacturer's instructions during periods of start-up, shutdown, malfunction, or load change to ensure that the best operational practices to minimize emissions will be adhered to and the duration of any excess emissions will be minimized. The instructions shall be kept on file at the plant site and made available for inspection upon request by the Department.

[AC44-245399/PSD-FL-210]

C.22. The permittee shall record the occurrence and duration of any startup, shutdown, or malfunctions of the turbine and any malfunction of the air pollution control equipment or CMS. Additionally, the permittee shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C., and 40 CFR 60.7(b)]

C.23. The permittee shall submit a quarterly excess emissions and monitoring systems performance report. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

1. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

2. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

3. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)]

C.24. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Department. One summary report form shall be submitted for each pollutant monitored.

1. If the total duration of excess emissions for the reporting period is less than one percent of the operating time for the reporting period and CMS downtime for the reporting period is less than five percent of the total operating time for the reporting

period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Department.

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

[40 CFR 60.7(d)]

C.25. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and

(iii) The Department does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Department in writing of his or her intention to make such a change and the Department does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Department may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Department to make a judgment about the source's potential for noncompliance in the future. If the Department disapproves the permittee's request to reduce the frequency of reporting, the Department will notify the permittee in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Department to the permittee will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard,

the frequency of reporting shall revert to the frequency specified in the applicable standard, and the permittee shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the permittee may again request approval from the Department to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)]

C.26. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least **5 (five)** years following the date of such measurements, maintenance, reports, and records.

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

C.27. The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted timely and in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and, the anticipated completion date of the change.

[AC44-245399, PSD-FL-210]

Subsection D. Common Conditions

The following conditions apply to all emissions units listed in Subsections A., B., and C., of Section III of this permit.

D.1. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

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

D.2. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

D.3. Applicable Test Procedures.

(a) **Required Sampling Time.**

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. **Opacity Compliance Tests.** When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

Exceptions to these requirements are as follows:

- a. (not applicable)
 - b. (not applicable)
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
 - (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
 - (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1. (See attachment.)
 - (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
- [Rule 62-297.310(4), F.A.C.]

D.4. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

D.5. Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

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

Section IV. Acid Rain Part

Operated by: Utility Board of the City of Key West
ORIS code: 6584

The emissions unit listed below is regulated under Acid Rain Part, Phase II.

E.U.

ID No. Description

- 001 Boiler - Ralph Garcia Steam Plant [EPA ID #:1]
- 005 (2) 8.8 MW Medium Speed Diesel Generators [EPA ID # D-1 and D-2]

1. The Acid Rain Part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of this acid rain unit must comply with the standard requirements and special provisions set forth in the application listed below:

- a. DEP Form No. 62-210.900(1)(a), effective 07/01/95, dated 12/11/95.
[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

2. The following table outlines the sulfur dioxide allowance allocations for the Ralph Garcia Steam Plant and the two medium speed diesel generators:

E.U. ID No.	EPA ID #	Year	2000	2001	2002
-001	1	SO ₂ allowances, under Table 2 of 40 CFR 73	2550*	2550*	2550*

*The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the US EPA under Table 2 of 40 CFR 73.]

3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
- b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
- c. Allowances shall be accounted for under the Federal Acid Rain Program.
[Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]

4. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year.

{See condition No. 51., Appendix TV-1, Title V Conditions.}
[Rule 62-214.420(11), F.A.C.]

5. Comments, notes, and justifications:

- a. Stock Island has no Phase I units/allowances.
- b. Units D-1 and D-2 received New Unit Exemptions.

Acid Rain Attachments and Relevant Documents:

Phase II Permit Application received 12/11/95.

New Unit Exemptions for Units D-1 and D-2 issued 02/09/95 and 02/07/95;
effective 01/01/95 through 12/31/99.

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

Utility Board of the City of Key West
Stock Island

DRAFT Permit No.: 0870003-001-AV

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

The below listed emissions units and/or activities are neither ‘regulated emissions units’ nor ‘exempt emissions units’.

E.U.

ID No. Brief Description of Emissions Units and/or Activities

-xxx Two No. 2 Fuel Oil Storage Tanks - 500,000 gallons each;
subject only to 40 CFR 60.116b (a) and (b)

No. 6 Fuel Oil Storage Tank - 1.9 million gallons; no applicable standards

Two No. 2 Fuel Oil Storage “day” Tanks - 16,000 gallons each

Eight Vehicular Fleet Fuel Tanks - 2,000 gallons each

Three Diesel Peaking Generators (2 MW): Units # 1, #2, #3

Appendix E-1, List of Exempt Emissions Units and Activities

Utility Board of the City of Key West
Stock Island

DRAFT Permit No.: 0870003-001-AV

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Full Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining whether a facility containing such emissions units or activities would be subject to any applicable requirements. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., are also exempt from the permitting requirements of Chapter 62-213, F.A.C., provided such emissions units and activities also meet the exemption criteria of Rule 62-213.430(6)(b), F.A.C. The below listed emissions units and/or activities are hereby exempt pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities

1. Brazing, soldering & welding.
2. One or more emergency generators located with a single facility provided:
 - a. None of the emergency generators is subject to the Federal Acid Rain Program; and
 - b. Total fuel consumption by all such emergency generators within the facility is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
3. Surface coating operations within a single facility if the total quantity of coatings containing greater than 5.0 percent VOC's, by volume, used is 6.0 gallons per day or less, averaged monthly, provided:
 - a. Such operations are not subject to a volatile organic compound Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.; and
 - b. The amount of coatings used shall include any solvents and thinners used in the process including those used for cleanup.
4. Fire safety equipment.
5. General Purpose Internal Combustion Engines, located withing a single facility provided:
 - a. None of the engines is subject to the Federal Acid Rain Program; and
 - b. Total fuel consumption by all such engines within the facility is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent amount if multiple fuels are used.
6. Miscellaneous surface coating activities utilizing only coatings containing 5.0 percent or less VOC's.
7. Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.

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

Utility Board of the City of Key West
 Stock Island Power Plant

DRAFT Permit #: 0870003-001-AV
Facility ID #: 0870003

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. -001 37 MW 515 MMBtu/hour Boiler # 1

Pollutant/Parameter	Fuel	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citations	See Permit Condition
			Standard(s)	lbs/hour	TPY	lbs./hour	TPY		
SO2	#6 oil #2 oil	8760	2.75 lbs/MMBtu			1416	6203	Rule 62-296.405(1)(c)1.j	III. A.9
PM	#6 oil #2 oil		0.1 lbs/MMBtu 0.3 lbs/MMBtu for 3hr. per 24 hours (sootblowing)			52	282**	Rule 62-296.405(1)(b) Rule 62-210.700(3)	III. A.7 III. A.8
VE	#6 oil #2 oil		20%; 40% @ 2min/hr. 60% for 3hr./24 hours (sootblowing)				n/a	Rule 62-296.405(1)(a) Rule 62-296.700(3)	III. A.5 III. A.6

Notes: ** -- Annual emissions (TPY) based on 3 hours per day at 0.3 lb/mmBtu and 21 hours per day at 0.1lb/MMBtu.
 * -- Equivalent Emissions provided for information only.

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

Utility Board of the City of Key West
 Stock Island Power Plant

DRAFT Permit #: 0870003-001-AV
Facility ID #: 0870003

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. -005 8.8 MW 85.4 MMBtu/hr Medium Speed Diesel Generators, Two Units

Emission Limits are for Each Engine

Pollutant/Parameter	Fuel	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citations	See Permit Condition
			Standard(s)	lbs/hour	TPY	lbs./hour	TPY		
SO2	#2 oil	3740 full-load equivalent engine hours	0.05% fuel	43.6	81.60			Rule 62-212.400, BACT	III. B.3, B.6 A A
PM	#2 oil		0.1 lbs/MMBtu	8.5	16			Rule 62-296.702	III. B.7 A
VE	#2 oil		20% opacity				n/a	Rule 62-296.320(4)(b)1	III. B.11 A
NOx	#2 oil		6.0 grams/hp-hour	160.9	300.9			Rule 62-212.400, BACT	III. B.5 A
CO	#2 oil		2.0 grams/hp-hour	53.6	100.3			Rule 62-212.400, BACT	III. B.8 A
Beryllium (Be)	#2 oil			0.00054	2			Rule 62-212.400, BACT	III. B.10 A
VOC	#2 oil		1.0 grams/hp-hour	28.6	50.1			Rule 62-212.400, BACT	III. B.9 A

Notes: ** -- Annual emissions (TPY) based on 3 hours per day at 0.3 lb/mmBtu and 21 hours per day at 0.1lb/MMBtu.
 * -- Equivalent Emissions provided for information only.

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

Utility Board of the City of Key West
 Stock Island Power Plant

DRAFT Permit #: 0870003-001-AV
 Facility ID #: 0870003

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. -007 23.5 MW 312 MMBtu/hour Simple Cycle Combustion Turbine

Pollutant/Parameter	Fuel	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citations	See Permit Condition
			Standard(s)	lbs/hour	TPY	lbs./hour	TPY		
SO2	#2 oil		0.05% fuel only			17-	24-		III. C.2
PM	#2 oil			18	43	51.4	225**	PSD-FL-210	III. C.6
CO	#2 oil		20/136 ppm@100/50% load	64	152			PSD-FL-210	III. C.7
NOx	#2 oil		75 ppm	96	138			PSD-FL-210	III. C.4
VE	#2 oil		20%				n/a	PSD-FL-210	III. C.8
VOC						6	15		

Notes: ** -- Annual emissions (TPY) based on 3 hours per day at 0.3 lb/mmBtu and 21 hours per day at 0.1lb/MMBtu.
 * -- Equivalent Emissions provided for information only.

Table 2-1, Summary of Compliance Requirements

Utility Board of the City of Key West
Stock Island Power Plant

DRAFT Permit #: 0870003-001-AV
Facility ID #: 0870003

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. -001 37 MW 515 MMBtu/hour Steam Boiler

Pollutant/ Parameter	Fuel	Compliance Method	Frequency of Sampling	Frequency Base Date *	Min. Compliance Test Duration	CMS**	Permit Condition
SO2	#2 oil	Fuel sampling & analysis	After each fuel oil shipment	1-Oct			III. A.19
PM	#2 oil	EPA Method 5B	annual				III. A.18
VE	#2 oil	DEP Method 9	annual				III. A.16

Notes:

*Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

**CMS = continuous monitoring system

Table 2-1, Summary of Compliance Requirements

Utility Board of the City of Key West
Stock Island Power Plant

DRAFT Permit #: 0870003-001-AV
Facility ID #: 0870003

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. -005

8.8 MW 85.4 MMBtu/hour Two Medium Speed Diesel Generators

Pollutant/ Parameter	Fuel	Compliance Method	Frequency of Sampling	Frequency Base Date *	Min. Compliance Test Duration	CMS**	Permit Condition
CO	#2 oil	EPA Method 10	annual				III. B. 16
VE	#2 oil	DEP Method 9	annual				III. B. 17
NOx	#2 oil	EPA Method 20	annual				III. B. 16
SO2	#2 oil	EPA Method 10 or ASTM D 2880-71	annual				III. B. 17
PM	#2 oil	EPA Method 5	annual				III. B. 17
VOC	#2 oil	EPA Method 25	annual				III. B. 17
Beryllium	#2 oil	EPA Method 104	annual				III. B. 16

Notes:

*Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

**CMS = continuous monitoring system

Table 2-1, Summary of Compliance Requirements

Utility Board of the City of Key West
 Stock Island Power Plant

DRAFT Permit #: 0870003-001-AV
 Facility ID #: 0870003

This table summarizes information for convenience purposes only, & does not supersede any terms or conditions of this permit.

E.U. -007 23.5 MW 312 MMBtu/hour Simple Cycle Combustion Turbine

Pollutant/ Parameter	Fuel	Compliance Method	Frequency of Sampling	Frequency Base Date *	Min. Compliance Test Duration	CMS**	Permit Condition
SO2	#2 oil	Fuel sampling & analysis	After each fuel oil shipment	Per 40 CFR 60.334			III. C.14
PM	#2 oil	EPA Method 5B	annual				III. C.14
VE	#2 oil	DEP Method 9	annual				III. C.14
CO	#2 oil	EPA Method 10	annual				III. C.14
NOx	#2 oil	EPA Method 20	annual				III. C.14

Notes:

*Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

**CMS = continuous monitoring system



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

September 12, 1997

Mr. Leo Carey
Manager
Utility Board of the City of Key West
P.O. Drawer 6100
Key West, Florida 33041-6100

Re: DRAFT Title V Permit No.: 0870003-001-AV
Stock Island Power Plant

Dear Mr. Carey:

One copy of the DRAFT Title V Air Operation Permit for the Stock Island Power Plant located at 6900 Front Street, Stock Island, Monroe County, is enclosed. The permitting authority's "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" is also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" must be published as soon as possible upon receipt of this letter. This issue is important in order for you to receive your Title IV Acid Rain permit by January 1, 1998, pursuant to the Clean Air Act and Section 403.782, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the permitting authority's office within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in denial of the permit.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Scott M. Sheplak, P.E., at the above letterhead address. If you have any other questions, please contact Steve Welsh at 850/488-1344.

Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/w

Enclosures

cc: Ms. Carla E. Pierce, U.S. EPA, Region 4 (INTERNET E-mail Memorandum)
Ms. Yolanda V. Adams, U.S. EPA, Region 4 (INTERNET E-Mail Memorandum)

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

In the Matter of an
Application for Permit by:
Utility Board of the City of Key West
P.O. Drawer 6100
Key West, Florida 33041-6100

DRAFT Permit No.: 0870003-001-AV
Stock Island Power Plant
Monroe County

INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

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

The applicant, Utility Board of the City of Key West, applied on June 12, 1996, to the permitting authority for a Title V air operation permit for the Stock Island Power Plant located at 6900 Front Street, Stock Island, Monroe County.

The permitting authority has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. This source is not exempt from Title V permitting procedures. The permitting authority has determined that a Title V air operation permit is required to commence or continue operations at the described facility.

The permitting authority intends to issue this Title V air operation permit based on the belief that reasonable assurances have been provided to indicate that operation of the source will not adversely impact air quality, and the source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C.

Pursuant to Sections 403.815 and 403.0872, F.S., and Rules 62-103.150 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed "**PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT.**" The notice shall be published one time only within 30 (thirty) days in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the permitting authority at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 904/488-1344; Fax: 904/922-6979), within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-103.150(6), F.A.C.

The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the enclosed Title V DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

The permitting authority will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, Florida Statutes. Mediation under Section 120.573, F.S., will not be available for this proposed action.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 (fourteen) days of receipt of this notice of intent. Petitions filed by any other person must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207, F.A.C.

A petition must contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number, and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the permitting authority's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the permitting authority's action or proposed action;
- (d) A statement of the material facts disputed by the petitioner, if any;
- (e) A statement of the facts that the petitioner contends warrant reversal or modification of the permitting authority's action or proposed action;

(f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the permitting authority's action or proposed action; and,

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the permitting authority to take with respect to the action or proposed action addressed in this notice of intent.

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

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

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
- (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
- (e) The type of action requested;
- (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and,
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at 401 M. Street, SW, Washington, D.C. 20460.

Executed in Tallahassee, Florida.

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION**



C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE TITLE V AIR OPERATION PERMIT (including the PUBLIC NOTICE and the DRAFT permit) and all copies were sent by certified mail before the close of business on 9/18/97 to the persons listed:

Mr. Leo Carey, Utility Board of the City of Key West
Mr. Carl R. Jansen, Jr., Utility Board of the City of Key West

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

Mr. Ivan Clark, P.E., R.W. Beck Engineering
South Florida District Office, FDEP, attn.: David Knowles
South Florida District Branch Office, FDEP, attn.: Jim Edds

Clerk Stamp

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

Barbara J. Fontwell 9/18/97
(Clerk) (Date)

PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Title V DRAFT Permit No.: 0870003-001-AV
Stock Island Power Plant
Monroe County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation permit to Utility Board of the City of Key West for the Stock Island Power Plant located at 6900 Front Street, Stock Island, Monroe County. The applicant's name and address are: Utility Board of the City of Key West, P.O. Drawer 6100, Key West, Florida 33041-6100.

The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the Title V DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Title V DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

The permitting authority will issue the permit unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S. Mediation under Section 120.573, F.S., will not be available for this proposed action.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 904/488-9730; Fax: 904/487-4938). Petitions must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of the notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number, and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the permitting authority's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the permitting authority's action or proposed action;
- (d) A statement of the material facts disputed by the petitioner, if any;

(e) A statement of the facts that the petitioner contends warrant reversal or modification of the permitting authority's action or proposed action;

(f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the permitting authority's action or proposed action; and,

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the permitting authority to take with respect to the action or proposed action addressed in this notice of intent. \

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

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at 401 M. Street, SW, Washington, D.C. 20460.

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

Permitting Authority:

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-1344
Fax: 850/922-6979

Affected District:

FDEP South Florida District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901
Telephone: 941/332-6975
Fax: 813/332-6969

FDEP South Florida District Branch Office
2796 Overseas Highway, Suite 221
Marathon, Florida 33050
Telephone: 305/289-2310
Fax: 305/289-2314

The complete project file includes the DRAFT Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S.

Interested persons may contact Scott M. Sheplak, P.E., at the above address, or call 904/488-1344, for additional information.



July 31, 1997

Mr. Syed Arif
Permitting and Standards Section
Bureau of Air Regulations
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: **Permitting Key West Combustion Turbine Peaking Unit(s)**

Dear Mr. Syed:

Attached are the minutes of our meeting on July 23, 1997 concerning the subject project. Please let me know if you have any questions or changes.

Sincerely,

R. W. BECK, INC.

Ivan L. Clark
Senior Director
Environmental Services

ILC/smm

Attachment

c: N. Guariello
C. Jansen
C. Holladay
A. Linero
C. Phillips
K. Plante
W. Reynolds
R. Williams

RECEIVED

AUG 04 1997

BUREAU OF
AIR REGULATION



MEETING MINUTES

Date: July 23, 1997

Place: FDEP Offices - Tallahassee, Florida

In Attendance: Syed Arif, FDEP
Ivan Clark, R. W. Beck
Cleve Holladay, FDEP
Carl Jansen, Utility Board of Key West
Al Linero, FDEP
Cindy Phillips, FDEP
Kelly Brewton Plante, Gray, Harris & Robinson
Robert Williams, FMFA

Purpose: Pre-Application Meeting for Permitting Key West Combustion Turbine Peaking Unit(s)

Reference: July 17, 1997 letter from Ivan Clark, R. W. Beck to Syed Arif, FDEP (copy attached)

Discussion:

The subject meeting was held to initiate discussions with FDEP concerning air emission permitting requirements for the combustion turbine peaking capacity to be installed at the Stock Island Plant site. The following items were discussed:

- In order to appropriately take credit for emissions from the Stock Island Steam Unit, the unit must be officially retired at FDEP. A one-page form must be completed (copy provided to C. Jansen) and submitted to FDEP. U. S. EPA will have to approve retirement since this unit is a Title IV Acid Rain unit. ?
- FDEP is in the process of preparing the draft Title V permits for generating plants statewide. They hope to have all draft permits completed by September 30, 1997. For those plants that include Title IV Acid Rain units, it is FDEP's goal to have final permits in-place by December 31, 1997. OK
- Cindy Phillips checked with Clair Fancy at FDEP concerning approach that the Utility Board should pursue concerning retirement of the steam unit, addition of new CT capacity and issuance of the draft Title V permit. Clair indicated that the Utility Board should request an extension of time with respect to finalizing the draft permit. This would avoid unneeded review work by both FDEP and the Utility Board. OK
- The attached table of actual emissions for the Stock Island Steam Unit was reviewed and discussed. FDEP has a regulatory policy with respect to emission off-sets for

retirement or reconstruction of older units. This is covered in Chapter 62-210.200(12) FAC. In general, this policy allows for selecting two representative years of operating data and using those years to establish emission off-sets. A request should be submitted by the Utility Board to FDEP requesting a determination with respect to the off-sets.

- With respect to NO_x emission controls, the CT(s) will not be subject to BACT, assuming they can be permitted as non-PSD. However, we need to check applicability of NSPS and associated requirements; again, a determination should be requested from FDEP.
- Assuming the CT(s) can be permitted as non-PSD, only an air quality compliance review will be necessary to assure compliance with NAAQS. We generally agreed that probably the easiest way to complete this review would be to go ahead and do a refined modeling analysis using data files available from previous work done for the relocation of the Key West combustion turbine. Downwash evaluations should be included.
- Submission of a permit application should be done on the new Title V application forms. FDEP would like the application submitted in electronic form.
- When requesting a determination with respect to the key permitting issues, reference the applicable regulatory citation. This will expedite FDEP's review.
- It was suggested that we should review EPA's Technology Transfer Network and review "reconstruction" requirements.
- With respect to FMPA's ownership and financing of the CT(s) and the Utility Board's operation and maintenance, it was generally agreed that since the Utility Board will have "common control" of the CT(s) with the other operations at the Stock Island Plant site, the CT(s) probably should be included as part of the Utility Board's Title V permit for the Stock Island Plant site.
- In submitting application information to FDEP for proposed units, it may be helpful to show "anticipated" emissions along with potential emissions since there may be a significant difference for these peaking units (i.e. 3,000 hours potential limit versus <1,500 hours for normal peaking operation).
- With respect to permitting schedule, the following was discussed:

October 1, 1997	Submit application
November 1, 1997	Application is determined complete
December 1, 1997	Public notice draft permit
January 5, 1998	Issue final permit



July 17, 1997

via Facsimile: 2 pages
(904) 922-6979

Mr. Syed Arif
Florida Department of Environmental Protection
2600 Blairstone Road
Mill Station 5505
Tallahassee, FL 32399-2400

Subject: **Pre-Application Meeting for
Key West/Stock Island Peaking Combustion Turbine**

Dear Mr. Arif:

In accordance with our recent telephone conversation, this letter confirms the subject proposed meeting time and date for July 23, 1997, 10:30 a.m. The purpose of the meeting will be to discuss the proposed project and plans for permitting new combustion turbine ("CT") capacity in Key West. The following is a brief summary of the proposed project.

In order to maintain adequate electric generating reserve capacity, the Utility Board of Key West is planning the addition of peaking combustion turbine capacity at its Stock Island Plant site. Through a recently approved power supply agreement with the Florida Municipal Power Agency ("FMPA"), FMPA will own and finance this new capacity and the Utility Board will operate and maintain the unit(s). The output from the CT(s) will provide reserve generating capacity to the Key West electric system.

A major reason that this new capacity is now needed is the fact that the Utility Board officially retired their 36 MW Stock Island steam unit in late 1996. This unit was retired for a number of reasons, including high operating costs, environmental compliance problems and lack of operating flexibility as a peaking unit.

The proposed combustion turbine (CT) unit(s) is anticipated to be a used refurbished unit(s), either a General Electric Frame 5N unit with a rating of 23.98 MW or two General Electric MS 5001R units rated at 17.9 MW each. Selection of the vendor and award of contract is anticipated in approximately six weeks.

Key permitting issues that we would like to review and discuss with FDEP include:

1. Utilization of emission off-sets for the retired Stock Island steam unit for permitting the CT(s).
2. Limiting annual emissions to avoid the rigors of the PSD permitting process.
3. NO_x emission limitations and control for the CT(s).
4. Permit application requirements and anticipated schedule.

02-00100-67602-0202 | h:\005186\smm001ic.doc



Mr. Syed Arif
July 17, 1997
Page 2



If you have any questions concerning these issues prior to the meeting, please feel free to contact me or Mike Henderson at 303-299-5200.

Sincerely,

R. W. BECK, INC.

A handwritten signature in black ink, appearing to read 'Ivan L. Clark'. The signature is fluid and cursive.

Ivan L. Clark
Senior Director
Environmental Services

ILC/smm

c: C. Jansen, Utility Board of Key West
K. Plant, Gray, Harris & Robinson
R. Williams, FMFA
N. Guarriello, RWBeck
M. Henderson, RWBeck

TABLE 2

STOCK ISLAND STEAM UNIT
Annual Operations
1987 - 1996

Year	Steam Unit ^[1] Annual Gross Generation	Steam Unit ^[1] Annual Fuel Consumed	Steam Unit ^[1] Annual Fuel Consumed	Steam Unit ^[2] Annual Fuel Heat Value	Steam Unit Air Emissions (tons/yr)		
	(KWH)	(gallons)	(pounds)	(Btu/gal.)	No _x ^[3]	SO ₂ ^[4]	Particulates ^[5]
1987	61,456,000	5,580,306	45,840,107	151,315	187	1008	42.2
1988	68,766,000	5,918,157	49,065,295	151,315	198	1079	44.8
1989	128,378,000	10,969,883	89,578,431	151,315	367	1971	83.0
1990	90,897,000	7,911,166	65,235,472	151,315	265	1435	59.9
1991	113,731,000	9,865,331	81,181,809	151,315	330	1786	74.6
1992	65,897,000	5,883,816	48,353,200	151,178	197	1064	44.5
1993	40,961,000	3,805,456	31,315,097	151,315	127	689	28.8
1994	44,567,000	4,239,081	34,934,270	151,470	142	769	32.1
1995	0	0	0	0	0	0	0.0
1996	0	0	0	0	0	0	0.0
Ten Year Average					181	980	41.0

^[1] Data based on calendar year end production report for Stock Island Steam Unit.

^[2] Average #6 fuel heat value has been assumed at 151,315 Btu/gal based on typical fuel delivery values, except for years 1992, 1993 and 1994 which are based on actual fuel heating value measurements.

^[3] Based on an emission rate of 67 lbs. NO_x per 1000 gallons of fuel burned.

^[4] Based on a fuel sulfur content of 2.2 percent.

^[5] Based on an emission rate of 0.1 lbs. per MM Btu.

I N T E R O F F I C E M E M O R A N D U M

Date: 30-Jan-1997 04:27pm EST
From: David Knowles FTM
KNOWLES_D@A1@FTM1
Dept: South District Office
Tel No: 941/332-6975
SUNCOM:

TO: Steve Welsh TAL

(WELSH_S@A1@DER)

Subject: Key West-Stock Island Power Plant

Dear Steve:

To the best of my knowledge and belief the Key West-Stock Island Power Plant facility number 0870003 is operating in compliance with our rules.

Sincerely,

David M. Knowles

Scott

12/9

From Steve W.

December 13, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Leo Carey
Manager
Utility Board of the City of Key West
P.O. Drawer 6100
Key West, Florida 33041-6100

Re: Request for Additional Information Regarding Initial Title V Permit Application
File # 0870003-001-AV
City of Key West - Stock Island Power Plant, Monroe County

Dear Mr. Carey:

Your initial Title V permit application for the Stock Island Power Plant was "timely and complete" and met the requirements of Rule 62-213.420(1)(a)1. and (b)2., F.A.C. However, to continue processing your application, the Department will need the following additional information, pursuant to Rule 62-213.420(1)(b)3., and 62-4.070(1), F.A.C.

1. For the 37 MW Ralph Garcia Steam Plant:

a. Page 8-3 of your application indicates that propane is used as a startup fuel. This fuel should be identified as an "Alternative Method of Operation", as outlined on page 35 of the application form (enclosed). See page 52 of the Instructions for the form.

b. Please submit completed Segment (Process/Fuel) Information pages for this fuel as required by page 25 of the application form (enclosed), DEP Form No. 62.210.900(1). See pages 36 through 39 of the Instructions for the form.

c. On page 9b-7, there is text missing from the end of the paragraph describing multiple cyclone control.

2. For the 2 MW diesel peaking units:

a. These units are currently permitted to fire No. 2 fuel oil, with no sulfur limit. On pages 8-3 through 8-5, you indicate that there is a 0.50% sulfur limit. Are you requesting this sulfur limit?

b. These units are currently permitted to operate at 20% opacity. On pages 10-5 through 10-7, you are requesting that Rule 62-210.700(1) apply to these units. However, in no case shall excess emissions exceed two hours in any 24 hour period; therefore your request for 10 minutes per hour is unacceptable.

c. It was observed that although on page 1-2 you state that these units are "unregulated" (since they have only a VE requirement), pages 9b-9 through 9b-26 list pollutant detail information (for regulated emissions units).

3. For the 8.8 MW units:

0.05% is required by Acid Rain

a. These units are currently permitted to fire No. 2 fuel oil with a sulfur limit of 0.50%. On pages 8-7 & 8-8, you indicate there is a 0.05% limit. Are you requesting this limit? Also, on pages 9c-14 & 9c-26, it appears you are requesting an SO₂ limit of approximately (but not exactly) one-tenth your existing limit. Please clarify the basis for these specific quantities.

hour ?
b. These units are currently permitted for emissions no more than 0.00054 pounds per year of Beryllium (Be) or 2.0 pounds per year of Be. On pages 9c-14 & 9c-26, you indicate that these limits are zero. Are you requesting this limit?

c. These units are currently permitted to operate at 20% opacity. On pages 10-8 & 10-9, you are requesting that Rule 62-210.700(1) apply to these units. However, in no case shall excess emissions exceed two hours in any 24 hour period; therefore your request for 20 minutes per hour is unacceptable. Also, on pages 10-11 & 10-12, the request for 100% opacity for 60 minutes per hour is unacceptable.

4. For the 24 MW unit:

a. This unit is currently permitted for 152 tpy of CO. On page 9c-31, you have listed an allowable value of 160.52 tpy. Similarly, on page 9c-32, you have listed an (NO_x) allowable value of 146 tpy, whereas the actual permitted value is 138 tpy. Also, for PM/PM₁₀, you have listed an allowable value of 45.0 tpy versus a permitted value of 43.0 tpy. Are you requesting these new allowables?

b. These units are currently permitted to operate at 20% opacity. On page 10-10, you are requesting that Rule 62-210.700(1) apply to these units. However, in no case shall excess emissions exceed two hours in any 24 hour period; therefore your request for 10 minutes per hour is unacceptable.

indent →
We offer the following as additional information concerning the "List of Insignificant Activities": Miscellaneous painting activities rule citations should be to #23, not #22; Parts Washers - should be to #26, not #24.

(only if applicable) Responsible Official (R.O.) Certification Statement: Rule 62-213.420, F.A.C. requires that all Title V permit applications must be certified by a responsible official. Due to the nature of the information requested in Item number(s)

which pollutant
d) Also - ✓ are the allowables of 4.46 lbs/hour & 8.33 TPY referencing


**STOCK ISLAND POWER PLAN
LIST OF INSIGNIFICANT ACTIVITIES/UNITS**

ACTIVITY/UNIT	RATIONALE FOR INSIGNIFICANCE
I.C. Engine - very small portable fire pump	Exempt pursuant to Rule 62-210.300(3)(a)20, FAC
I.C. Engine - 244 hp Cummins, diesel fired water pump	Exempt pursuant to Rule 62-210.300(3)(a)20, FAC
I.C. Engine - small mobile compressor	Exempt pursuant to Rule 62-210.300(3)(a)20, FAC
I.C. Engine - 115 kW Portable Generator	Exempt pursuant to Rule 62-210.300(3)(a)20, FAC
I.C. Engine - ~25 kW Portable Welder	Exempt pursuant to Rule 62-210.300(3)(a)20, FAC
I.C. Engine - Detroit Diesel, diesel fired black start	Exempt pursuant to Rule 62-210.300(3)(a)20, FAC
No. 2 Fuel Oil Storage Tank #1 - 500,000 gallons	Exempt pursuant to Rule 62-213.430(6), FAC; Potential VOC emissions 931 lbs/yr
No. 2 Fuel Oil Storage Tank #2 - 500,000 gallons	Exempt pursuant to Rule 62-213.430(6), FAC; Potential VOC emissions 931 lbs/yr
No. 2 Fuel Oil Storage Day Tank #1 - 16,000 gallons	Exempt pursuant to Rule 62-213.430(6), FAC; Potential VOC emissions 108 lbs/yr
No. 2 Fuel Oil Storage Day Tank #2 - 16,000 gallons	Exempt pursuant to Rule 62-213.430(6), FAC; Potential VOC emissions 108 lbs/yr
No. 6 Fuel Oil Storage Tank - 1,904,953 gallons	Exempt pursuant to Rule 62-213.430(6), FAC; Potential VOC emissions 15 lbs/yr
Fleet Fuel Tank #1 (unleaded gasoline) - 2,000 gallons	Exempt pursuant to Rule 62-213.430(6), FAC; Potential VOC emissions less than 0.5 tons/yr
Fleet Fuel Tank #2 (gasoline) - 2,000 gallons	Exempt pursuant to Rule 62-213.430(6), FAC; Potential VOC emissions less than 0.5 tons/yr
Fleet Fuel Tank #3 (gasoline) - 2,000 gallons	Exempt pursuant to Rule 62-213.430(6), FAC; Potential VOC emissions less than 0.5 tons/yr
Fleet Fuel Tank #4 (diesel) - 2,000 gallons	Exempt pursuant to Rule 62-213.430(6), FAC; Potential VOC emissions less than 1 lb/yr
Diesel Fire Pump No. 2 Fuel Oil Storage Tank - ~2.5' dia x 6' side	Exempt pursuant to Rule 62-213.430(6), FAC; Potential VOC emissions very small
Compressed hydrogen bottles	Exempt pursuant to Rule 62-213.430(6), FAC; No emissions
Lube Oil Storage Tank - 10,000 gallons	Exempt pursuant to Rule 62-213.430(6), FAC; Very low vapor pressure and throughput
Waste Oil Storage Area	Exempt pursuant to Rule 62-213.430(6), FAC; Used oil stored in closed 55 gallon drums; No emissions
Turbine Oil Storage Area	Exempt pursuant to Rule 62-213.430(6), FAC; Oil stored in closed 55 gallon drums; No emissions
Propane Storage Tank #1	Exempt pursuant to Rule 62-213.430(6), FAC; No emissions
Propane Storage Tank #2	Exempt pursuant to Rule 62-213.430(6), FAC; No emissions
Hazardous Materials Containment Area	Exempt pursuant to Rule 62-213.430(6), FAC; Materials stored in closed containers; No emissions
Hazardous Waste Containment Area	Exempt pursuant to Rule 62-213.430(6), FAC; Materials stored in closed containers; No emissions
Wastewater Retention Tank	Exempt pursuant to Rule 62-213.430(6), FAC; No emissions
Miscellaneous painting activities	Exempt pursuant to Rule 62-210.300(3)(a)22, FAC <i>Should be 23</i>
Miscellaneous welding activities	Exempt pursuant to Rule 62-210.300(3)(a)16, FAC
Storage & use of chemicals solely for water treatment	Exempt pursuant to Rule 62-213.430(6), FAC; Very low vapor pressures and small quantities/DEP presumptive exemption
Parts Washers (4) (hydrocarbon solvent)	Exempt pursuant to Rule 62-210.300(3)(a)24, FAC <i>Should be 26</i>
Oil/Water Separator	Exempt pursuant to Rule 62-213.430(6), FAC; Very low pressures; No emissions

→ check on solvent type for NESHA.

Leo Carey
305.294.5272

TO: David Knowles, SD

FROM: Bruce Mitchell 

DATE: November 6, 1996

SUBJECT: Completeness Review of an Application Package for a Title V Operation Permit
City of Key West, Stock Island Power Plant: 0870003-001-AV

The Title V operating permit application package for the referenced facility is being processed in Tallahassee. The application was previously forwarded to your office for your files and future reference. Please have someone review the package for completeness and respond in writing by November 22, 1996, if you have any comments. Otherwise, no response is required. If there are any questions, please call the project engineer, Steve Welsh, at 904/488-1344 or SC:278-1344. It is very important to verify the compliance statement regarding the facility. Since we do not have a readily effective means of determining compliance at the time the application was submitted, please advise if you know of any emissions unit(s) that were not in compliance at that time and provide supporting information. Also, do not write on the documents.

If there are any questions regarding this request, please call me or Scott Sheplak at the above number(s).

RBM/bm

cc: Earl Baker, SD

11-7-96

David / Earl,

I apologize for the shortness of this notice. All future notifications should provide at least 30-days for review time.

Sincerely,



TO: Isidore Goldman, SED
FROM: Bruce Mitchell *BM*
DATE: November 6, 1996
SUBJECT: Completeness Review of an Application Package for a Title V Operation Permit
City of Key West, Stock Island Power Plant: 0870003-001-AV

The Title V operating permit application package for the referenced facility is being processed in Tallahassee. The application was previously forwarded to your office for your files and future reference. Please have someone review the package for completeness and respond in writing by November 22, 1996, if you have any comments. Otherwise, no response is required. If there are any questions, please call the project engineer, Steve Welsh, at 904/488-1344 or SC:278-1344. It is very important to verify the compliance statement regarding the facility. Since we do not have a readily effective means of determining compliance at the time the application was submitted, please advise if you know of any emissions unit(s) that were not in compliance at that time and provide supporting information. Also, do not write on the documents.

If there are any questions regarding this request, please call me or Scott Sheplak at the above number(s).

RBM/bm

cc: Joe Kahn, SED

11-6-96

Isidore/ Joe,

I apologize for the shortness of this notice. All future notifications should provide at least 30-days for review time.

Sincerely,

Bruce

File

Memorandum

TO: Isidore Goldman, SED
FROM: Bruce Mitchell *RBM*
DATE: November 6, 1996
SUBJECT: Completeness Review of an Application Package for a Title V Operation Permit
City of Key West, Stock Island Power Plant: 0870003-001-AV

The Title V operating permit application package for the referenced facility is being processed in Tallahassee. The application was previously forwarded to your office for your files and future reference. Please have someone review the package for completeness and respond in writing by November 22, 1996, if you have any comments. Otherwise, no response is required. If there are any questions, please call the project engineer, Steve Welsh, at 904/488-1344 or SC:278-1344. It is very important to verify the compliance statement regarding the facility. Since we do not have a readily effective means of determining compliance at the time the application was submitted, please advise if you know of any emissions unit(s) that were not in compliance at that time and provide supporting information. Also, do not write on the documents.

If there are any questions regarding this request, please call me or Scott Sheplak at the above number(s).

RBM/bm

cc: Joe Kahn, SED

11-6-96

Isidore/Joe,

I apologize for the shortness of this notice. All future notifications should provide at least 30-days for review time.

Sincerely,
Bruce

AIRS ID: 0870003 Facility: STOCK ISLAND POWER PLANT
 Permit #: Type/Subtype: AV/00 Received: 12-JUN-1996
 Project #: 001 Name: (CITY OF KEY WEST: STOCK ISL PP)

> Receive Request: Done

Event	Begin Date	Prd	Due Date	Rmn	Status	End Date
Receive Request	12-JUN-1996	1	13-JUN-1996		Done	12-JUN-1996
Initial Completeness	12-JUN-1996	60	11-AUG-1996		Default	11-AUG-1996
Awaiting Detailed	11-AUG-1996	365	11-AUG-1997		Begin Deta	10-AUG-1997
Detailed Complete	10-AUG-1997	60	09-OCT-1997		Complete	09-OCT-1997
Determine Agency	10-AUG-1997	90	08-NOV-1997		Issue	18-SEP-1997
Draft Permit	18-SEP-1997	90	17-DEC-1997		Issue	18-SEP-1997
Date of Public	18-SEP-1997	999	13-JUN-2000	547	Pending	
STOP CLOCK	18-SEP-1997	1	19-SEP-1997		Done	18-SEP-1997

Count: *8

<List><Replace>

State of Florida summary checklist for initial Title V permit applications for 'existing' Title V Sources

Facility Owner/Operator Name: Utility Board of the City of Key West
Facility ID No.: 0870003 Site Name: Stock Island Power Plant
County: Monroe
application receipt date 06/12/96

I. Preliminary scanning of application submitted.

- a. Was application submitted to correct permitting authority? Y N
- b. Was an application filed? Y* N
- c. Was the application filed timely? Y* N

- d. Application format filed [check one].
Hard copy of official version of form? ^{version 1.34} ELSA?
A facsimile of official version of form? Some combination?

- e. 4 copies (paper/electronic) submitted? Y N

- f. Electronic diskettes protected/virus scanned/marked? Y N N/A
by KZ. date 06/12/96

- g. Entire hard copy of Section I. provided (Pages 1-8 of form)? Y N
Facility identified (Page 1)? [if not complete a Page 1] Y* [Attached]? Stw 10/3/96
R.O. certification signed and dated (Page 2)? Y* N
P.E. certification signed and dated (Page 7)? Y* N

- h. Any confidential information submitted? Y N
If yes, R.O. provided hard copy to us and EPA? Y* N
If yes, hard copy locked up and note filed with application? Y* N ? Stw

- i. Type of application filed.
TV application for 'existing' Title V Source only? Y N
Any units subject to acid rain? Y N

Note(s): [*] = mandatory.

Comment(s): 0870003 uploaded into EARS 7/12/96 P/mae

Reviewer's initials SS date 06/14/96 Concurrence initials _____ date ____/____/____

State of Florida summary checklist for initial Title V permit applications for 'existing' Title V Sources (cont'd)

II. Application logging.

ARMS Permit Number assigned 0870003 - AV
logged into ARMS by initials _____ date ___/___/___

III. Initial distribution of application.

a. Disposition of 4 paper/electronic copies submitted:

1- Clean originals to file? Y___ N___

1- ___ District Y___ N___

1- _____ County [affected local program]? Y___ N___

1- Permit engineer(s) _____, _____

b. Disposition of electronic files submitted:

copy placed onto PC? Y___ N___

c. Disposition of ELSA submitted:

version used [circle]: 1.0 1.1 1.2.1 1.3 1.3a 1.3b

Uploaded to EARS? Y___ N___

by _____ date ___/___/___

d. Electronic information submitted previewed? Y___ N___ N/A___

Comment(s): _____

{this checklist was developed from Rule 62-213.420(1)(b)2., F.A.C. and DARM policy}

AIRS ID: 0870003 Facility: STOCK ISLAND POWER PLANT
 Permit #: Type/Subtype: AV/00 Received: 12-JUN-1996
 Project #: 001 Name: (CITY OF KEY WEST: STOCK ISL PP)

> Receive Request: Done

Event	Begin Date	Prd	Due Date	Rmn	Status	End Date
Receive Request	12-JUN-1996	1	13-JUN-1996		Done	12-JUN-1996
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Determine Agency	10-AUG-1997	90	08-NOV-1997		Issue	18-SEP-1997
Draft Permit	18-SEP-1997	90	17-DEC-1997		Issue	18-SEP-1997
Date of Public	18-SEP-1997	999	13-JUN-2000	468	Pending	
STOP CLOCK	18-SEP-1997	1	19-SEP-1997		Done	18-SEP-1997

Count: *8

<List><Replace>

START OF DETAILED REVIEW OF TITLE V APPLICATION

Issued 9/28/95

Department of Environmental Protection



Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:
Utility Board of the
City of Key West
1001 James Street
P.O. Drawer 6100
Key West, FL 33041

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996
County: Monroe
Latitude/Longitude: 24°33'49"N
81°44'03"W
Project: 23.5 MW Simple Cycle
Combustion Turbine CT-1

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.). 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 specifically described as follows:

For the relocation of a simple cycle combustion turbine (CT) generator from Key West Power Plant to the existing Stock Island Power Plant (near Key West) in Monroe County. This generator is a General Electric (GE) Frame 5 model PG5341 CT (equipped with water injection for fuel oil firing) with a rated capacity of 23.5 megawatts at ISO conditions. The GE CT will have a heat input at 59°F of 312 MMBtu/hr (oil). The CT will be fired with No. 2 low sulfur fuel oil with a sulfur content not to exceed 0.05% by weight. NO_x emissions are controlled by a water injection system.

LHV

The source/emission unit(s) shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Key West City Electric System application received February 14, 1994.
2. DEP's letter dated March 10, 1994.
3. R.W. Beck's letter dated June 10, 1994.
4. DEP's letter dated July 28, 1994.
5. R.W. Beck's letter dated March 3, 1995.
6. DEP's letter dated April 10, 1995.
7. R.W. Beck's letter dated April 20, 1995.

Startup 1/1/96

Retired Unit Exemption

For more information, see instructions and refer to 40 CFR 72.8

This submission is: New Revised

STEP 1
Identify the unit that is or will be retired by plant name, State, and ORIS Code and boiler ID# from NADB.

RALPH GARCIA STEAM PLANT	FL	6584	#1
Plant Name	State	ORIS Code	Boiler ID#

STEP 2
Check one box to indicate the deadline for this application.

- This petition is being submitted on or before the deadline for submitting an Acid Rain part application for Phase II.
- The unit has a Phase II Acid Rain part. This petition is being submitted on or before the deadline for reapplying for the Acid Rain part.

STEP 3
Read the certification and enter the actual or expected date of retirement of the unit.

I certify that this unit is or will be permanently retired on the date specified in this petition and will not emit any sulfur dioxide or nitrogen oxides after such date. The date for the permanent retirement of this unit is or will be:

01/01/98 mm/dd/yy

STEP 4
Indicate that the required information is attached.

- A description of any actions that have been or will be taken and that provide the basis for the certification in Step 3.

Turbine Removed, All Piping Removed, controls removed AND circulating water pumps removed

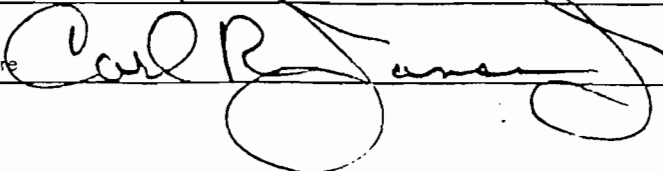
STEP 5
Read the special provisions and the certifications, and sign and date.

Special Provisions

- (1) A unit exempted under 40 CFR 72.8 and Rule 62-214.340(2), F.A.C., shall not emit any sulfur dioxide and nitrogen oxides starting on the date it is exempted.
- (2) The owners and operators of a unit exempted under 40 CFR 72.8 and Rule 62-214.340(2), F.A.C., shall comply with monitoring requirements in accordance with part 75 and will be allocated allowances in accordance with 40 CFR part 73.
- (3) A unit exempted under 40 CFR 72.8 shall not resume operation unless the designated representative of the source that includes the unit submits an Acid Rain part application for the unit not less than 24 months prior to the later of January 1, 2000, or the date the unit is to resume operation. On the earlier of the date the written exemption expires or the date an Acid Rain part application is submitted or is required to be submitted under this paragraph (3), the unit shall no longer be exempted and shall be subject to all requirements of 40 CFR part 72.

Certification

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	CARL R JAUSED JR		
Signature		Date	01/05/98

Andrew

UTILITY BOARD OF THE CITY OF KEY WEST

POST OFFICE DRAWER 6100
KEY WEST, FLORIDA 33041-6100



TELEPHONE: (305) 295-1000
www.kwcityelectric.com

January 5, 1998

Mr. A. A. Linero
Administrator
New Source Review Section
Division of Air Resources Management
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Official Retirement of the Ralph Garcia Steam Plant

Dear Mr. Linero:

As a condition of the draft construction permit (No. 0870003-003-AC) for two 19.77 MW simple cycle combustion turbines, we are officially retiring the Ralph Garcia Steam Plant as a steam generation plant. It is our understanding that a final construction permit will be issued upon the retirement of this unit. I have enclosed DEP Form No. 62-210.900(1)(a)3.

If you have any questions or comments, please do not hesitate to contact Joe Stone at (305) 295-1148.

Sincerely,

UTILITY BOARD - CITY OF KEY WEST
CITY ELECTRIC SYSTEM

Larry J. Thompson
Larry J. Thompson
General Manager

LJT/me

cc:
R. Rodriguez, Assistant General Manager
J. Stone, Environmental Services Supervisor
R. Williams, FMPA
I. Clark, R.W. Beck & Associates
File:SOF-110

*cc: C. Phillips, BAR
S. Ariz, BAR*

retirergsp.DOC

RECEIVED

JAN 06 1998

BUREAU OF
AIR REGULATION

UTILITY BOARD MEMBERS:

Robert R. Padron, Chairman • Dr. Otha P. Cox, Vice-Chairman
Leonard H. Knowles, Member • Gayle Swofford, Member • Lou Hernandez, Member



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

NEW UNIT EXEMPTION

Issued to: Stock Island Power Plant
Boiler ID#: D-2
Operated by: Utility Board of the City of Key West
Effective: January 1, 1995 to December 31, 1999

Statutory and Regulatory Authorities. In accordance with Title IV of the Clean Air Act Amendments of 1990, the U. S. Environmental Protection Agency exempts this unit from the requirements of the Acid Rain Program, except for the requirements in 40 CFR 72.1 through 72.7, and 72.10 through 72.13.

Conditions, notes and justifications that apply to the unit:

The petition for a new unit written exemption, submitted for this unit, is incorporated by reference. The requirements from which the unit is exempt during the effective period include, but are not limited to, the requirements to hold a permit (part 72), hold allowances (part 73), and monitor emissions (part 75).

Consistent with 40 CFR 72.7(d)(4), the unit shall only serve generators with a total nameplate capacity of 25 MWe or less and burn fuel with a sulfur content of 0.05 percent or less by weight.

The owners and operators shall apply the procedures under 40 CFR 72.7(d)(2) for all fuels used at any time during the period for which the unit is exempted.

The owners and operators, and to the extent applicable, the designated representative, shall comply with the requirements of the Acid Rain Program concerning all years for which the unit is not exempted, even if such requirements arise or must be complied with after the exemption takes effect. The exemption shall not be a defense against any violation of such requirements whether the violation occurs before or after the exemption takes effect.

Approval:

Winston A. Smith
Signature

FEB 07 1995

Date

Winston A. Smith
Director, Air, Pesticides and Toxics Management Division
U.S. Environmental Protection Agency, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365
Telephone: (404) 347-3043 Facsimile: (404) 347-5207



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

NEW UNIT EXEMPTION

Issued to: Stock Island Power Plant
Boiler ID#: D-1
Operated by: Utility Board of the City of Key West
Effective: January 1, 1995 to December 31, 1999

Statutory and Regulatory Authorities. In accordance with Title IV of the Clean Air Act Amendments of 1990, the U. S. Environmental Protection Agency exempts this unit from the requirements of the Acid Rain Program, except for the requirements in 40 CFR 72.1 through 72.7, and 72.10 through 72.13.

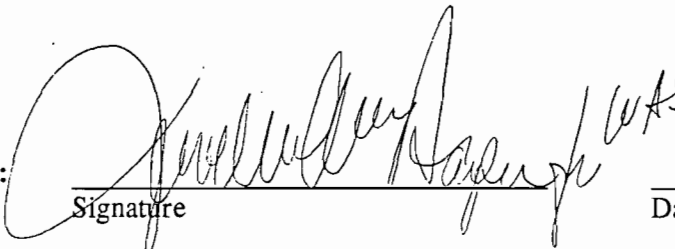
Conditions, notes and justifications that apply to the unit:

The petition for a new unit written exemption, submitted for this unit, is incorporated by reference. The requirements from which the unit is exempt during the effective period include, but are not limited to, the requirements to hold a permit (part 72), hold allowances (part 73), and monitor emissions (part 75).

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The owners and operators, and to the extent applicable, the designated representative, shall comply with the requirements of the Acid Rain Program concerning all years for which the unit is not exempted, even if such requirements arise or must be complied with after the exemption takes effect. The exemption shall not be a defense against any violation of such requirements whether the violation occurs before or after the exemption takes effect.

Approval:  2/9/95
Signature Date

Winston A. Smith
Director, Air, Pesticides and Toxics Management Division
U.S. Environmental Protection Agency, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365
Telephone: (404) 347-3043 Facsimile: (404) 347-5207

New Unit Exemption

For more information, see instructions and refer to 40 CFR 72.7

This submission is: New Revised

Page 2 of 2

STEP 1
Identify the new unit by plant name, State, and ORIS Code and boiler ID# from NADB.

Plant Name	Stock Island Power Plant	State	FL	ORIS Code	6584	Boiler ID#	CT 3
							TOTAL

STEP 2
List to one decimal place the nameplate capacity of each generator served by the unit. Then total these entries and enter the result.

MWe	MWe	MWe	MWe	MWe	MWe
19.8					19.8
Fuel (current)	Percent SO ₂ (current)			Fuel (expected)	Percent SO ₂ (expected)

STEP 3
List all fuels currently burned or expected to be burned, by the unit and the percent sulfur content by weight of each.

	%	No. 2 Diesel Oil	0.05 or less	%
	%			%

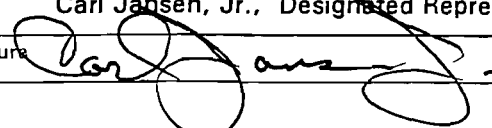
STEP 4
Read the special provisions and the certification, and sign and date.

Special Provisions

- (1) The owners and operators of each unit exempted under 40 CFR 72.7 and Rule 62-214.340, F.A.C., shall surrender allowances equal in number to, and with the same or an earlier compliance use date as, all of those allocated to the unit under subpart B of 40 CFR part 73 for any year for which the unit is exempted and shall waive the right to receive any allowances to be allocated under subpart B of 40 CFR part 73 for any year for which the unit is exempted.
- (2) The owners and operators of each unit exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C., shall determine the sulfur content by weight of its fuel as follows:
 - (i) For petroleum or petroleum products that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, a sample of each delivery of such fuel shall be tested using ASTM methods ASTM D4057-88 and ASTM D129-91, ASTM D2622-92, or ASTM D4294-90.
 - (ii) For natural gas that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, the sulfur content shall be assumed to be 0.05 percent or less by weight.
 - (iii) For gaseous fuel (other than natural gas) that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, a sample of each delivery of such fuel shall be tested using ASTM methods ASTM D1072-90 and ASTM D1265-92; *provided* that if the gaseous fuel is delivered by pipeline to the unit, a sample of the fuel shall be tested, at least once every quarter in which the unit operates during any year for which the exemption is in effect, using ASTM method ASTM D1072-90.
- (3) The owners and operators of each unit exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C., shall retain at the source that includes the unit, the records of the results of the tests performed under paragraph (2)(i) and (iii) of the special provisions and a copy of the purchase agreements for the fuel under paragraph (2) of the special provisions, stating the sulfur content of such fuel. Such records and documents shall be retained for 5 years from the date they are created.
- (4) On the earlier of the date the written exemption expires, the date a unit exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C., burns any fuel with a sulfur content in excess of 0.05 percent by weight (as determined in accordance with paragraph (2) of the special provisions), or 24 months prior to the date the unit first serves one or more generators with total nameplate capacity in excess of 25 MWe, the unit shall no longer be exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C., and shall be subject to all requirements of the Acid Rain Program, except that:
 - (i) Notwithstanding 40 CFR 72.30(b) and (c), the designated representative of the source that includes the unit shall submit a complete Acid Rain part application on the later of January 1, 1998 or the date the unit is no longer exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C.
 - (ii) For purposes of applying monitoring requirements under part 75 of this chapter, the unit shall be treated as a new unit that commenced commercial operation on the date the unit no longer meets the requirements of 40 CFR 72.7(a).

Certification

I am authorized to make this submission on behalf of the owners and operators of the acid rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Carl Jansen, Jr., Designated Representative	
Signature		Date
		4/30/98

New Unit Exemption

For more information, see instructions and refer to 40 CFR 72.7

This submission is: New Revised

Page 1 of 2

STEP 1

Identify the new unit by plant name, State, and ORIS Code and boiler ID# from NADB.

Plant Name	Stock Island Power Plant	State	FL	ORIS Code	6584	Boiler ID#	CT 2
							TOTAL

STEP 2

List to one decimal place the nameplate capacity of each generator served by the unit. Then total these entries and enter the result.

MWe	MWe	MWe	MWe	MWe	Mwe
19.8					19.8
Fuel (current)	Percent SO ₂ (current)			Fuel (expected)	Percent SO ₂ (expected)

STEP 3

List all fuels currently burned or expected to be burned, by the unit and the percent sulfur content by weight of each.

	%	No. 2 Diesel Oil	0.05 or less	%
	%			%

STEP 4

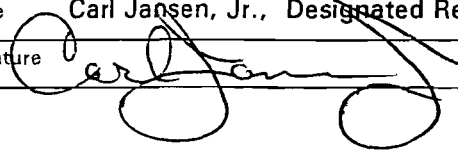
Read the special provisions and the certification, and sign and date.

Special Provisions

- (1) The owners and operators of each unit exempted under 40 CFR 72.7 and Rule 62-214.340, F.A.C., shall surrender allowances equal in number to, and with the same or an earlier compliance use date as, all of those allocated to the unit under subpart B of 40 CFR part 73 for any year for which the unit is exempted and shall waive the right to receive any allowances to be allocated under subpart B of 40 CFR part 73 for any year for which the unit is exempted.
- (2) The owners and operators of each unit exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C., shall determine the sulfur content by weight of its fuel as follows:
 - (i) For petroleum or petroleum products that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, a sample of each delivery of such fuel shall be tested using ASTM methods ASTM D4057-88 and ASTM D129-91, ASTM D2622-92, or ASTM D4294-90.
 - (ii) For natural gas that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, the sulfur content shall be assumed to be 0.05 percent or less by weight.
 - (iii) For gaseous fuel (other than natural gas) that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, a sample of each delivery of such fuel shall be tested using ASTM methods ASTM D1072-90 and ASTM D1265-92; provided that if the gaseous fuel is delivered by pipeline to the unit, a sample of the fuel shall be tested, at least once every quarter in which the unit operates during any year for which the exemption is in effect, using ASTM method ASTM D1072-90.
- (3) The owners and operators of each unit exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C., shall retain at the source that includes the unit, the records of the results of the tests performed under paragraph (2)(i) and (iii) of the special provisions and a copy of the purchase agreements for the fuel under paragraph (2) of the special provisions, stating the sulfur content of such fuel. Such records and documents shall be retained for 5 years from the date they are created.
- (4) On the earlier of the date the written exemption expires, the date a unit exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C., burns any fuel with a sulfur content in excess of 0.05 percent by weight (as determined in accordance with paragraph (2) of the special provisions), or 24 months prior to the date the unit first serves one or more generators with total nameplate capacity in excess of 25 MWe, the unit shall no longer be exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C., and shall be subject to all requirements of the Acid Rain Program, except that:
 - (i) Notwithstanding 40 CFR 72.30(b) and (c), the designated representative of the source that includes the unit shall submit a complete Acid Rain part application on the later of January 1, 1998 or the date the unit is no longer exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C.
 - (ii) For purposes of applying monitoring requirements under part 75 of this chapter, the unit shall be treated as a new unit that commenced commercial operation on the date the unit no longer meets the requirements of 40 CFR 72.7(a).

Certification

I am authorized to make this submission on behalf of the owners and operators of the acid rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Carl Jansen, Jr., Designated Representative	
Signature		Date
		4/30/98

New Unit Exemption

For more information, see instructions and refer to 40 CFR 72.7

This submission is: New Revised

STEP 1

Identify the new unit by plant name, State, and ORIS Code and boiler ID# from NADB.

Plant Name STOCK ISLAND POWER PLANT	State FLORIDA	ORIS Code CT-1	Boiler ID#
--	------------------	-------------------	------------

STEP 2

List to one decimal place the nameplate capacity of each generator served by the unit. Then total these entries and enter the result.

					TOTAL
23.5					23.5
MWe	MWe	MWe	MWe	MWe	MWe

STEP 3

List all fuels currently burned or expected to be burned, by the unit and the percent sulfur content by weight of each.

Fuel (current)	Percent SO ₂ (current)	Fuel (expected)	Percent SO ₂ (expected)
No. 2 Fuel Oil	0.05%	No. 2 Fuel Oil	0.05%
	%		%
	%		%

STEP 4

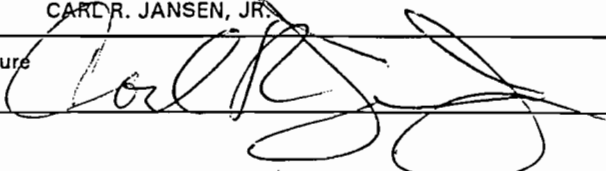
Read the special provisions and the certification, and sign and date.

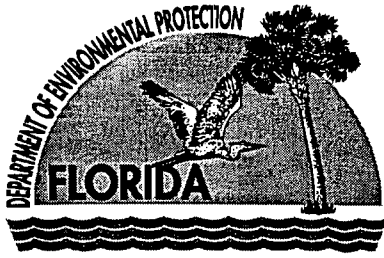
Special Provisions

- (1) The owners and operators of each unit exempted under 40 CFR 72.7 and Rule 62-214.340, F.A.C., shall surrender allowances equal in number to, and with the same or an earlier compliance use date as, all of those allocated to the unit under subpart B of 40 CFR part 73 for any year for which the unit is exempted and shall waive the right to receive any allowances to be allocated under subpart B of 40 CFR part 73 for any year for which the unit is exempted.
- (2) The owners and operators of each unit exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C., shall determine the sulfur content by weight of its fuel as follows:
 - (i) For petroleum or petroleum products that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, a sample of each delivery of such fuel shall be tested using ASTM methods ASTM D4057-88 and ASTM D129-91, ASTM D2622-92, or ASTM D4294-90.
 - (ii) For natural gas that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, the sulfur content shall be assumed to be 0.05 percent or less by weight.
 - (iii) For gaseous fuel (other than natural gas) that the unit burns starting on the first day on which the exemption takes effect until the exemption terminates, a sample of each delivery of such fuel shall be tested using ASTM methods ASTM D1072-90 and ASTM D1285-92; provided that if the gaseous fuel is delivered by pipeline to the unit, a sample of the fuel shall be tested, at least once every quarter in which the unit operates during any year for which the exemption is in effect, using ASTM method ASTM D1072-90.
- (3) The owners and operators of each unit exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C., shall retain at the source that includes the unit, the records of the results of the tests performed under paragraph (2)(i) and (iii) of the special provisions and a copy of the purchase agreements for the fuel under paragraph (2) of the special provisions, stating the sulfur content of such fuel. Such records and documents shall be retained for 5 years from the date they are created.
- (4) On the earlier of the date the written exemption expires, the date a unit exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C., burns any fuel with a sulfur content in excess of 0.05 percent by weight (as determined in accordance with paragraph (2) of the special provisions), or 24 months prior to the date the unit first serves one or more generators with total nameplate capacity in excess of 25 MWe, the unit shall no longer be exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C., and shall be subject to all requirements of the Acid Rain Program, except that:
 - (i) Notwithstanding 40 CFR 72.30(b) and (c), the designated representative of the source that includes the unit shall submit a complete Acid Rain part application on the later of January 1, 1998 or the date the unit is no longer exempted under 40 CFR 72.7 and Rule 62-214.340(1), F.A.C.
 - (ii) For purposes of applying monitoring requirements under part 76 of this chapter, the unit shall be treated as a new unit that commenced commercial operation on the date the unit no longer meets the requirements of 40 CFR 72.7(a).

Certification

I am authorized to make this submission on behalf of the owners and operators of the acid rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name CARL R. JANSEN, JR.	
Signature 	Date 9/9/98



Florida
Department of
Environmental Protection

Jeb Bush
Governor

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

David Struhs
Secretary

F A X T R A N S M I T T A L S H E E T

DATE: 3-3-99

TO: JENNY JACHIM

PHONE: _____

FAX: 404-562-9095

FROM: CINDY PHILLIPS

PHONE: 850-921-9534

Division of Air Resources Management

FAX: **850.922.6979**

RE: _____

CC: _____

Total number of pages including cover sheet: 9

Message

HERE ARE THE NEW UNIT EXEMPTION FORMS AND THE RETIRED
UNIT EXEMPTION FORM FOR KEY WEST-STOCK ISLAND.
I'VE ALSO ATTACHED THE FIRST PAGE OF THE CONSTRUCTION
PERMIT FOR CT-1. YOU SHOULD HAVE A COPY OF THIS PERMIT
IN YOUR PSD FILES, BUT IF YOU WANT ME TO SEND YOU THE
REMAINING PAGES, LET ME KNOW. I'VE ALSO INCLUDED THE
TITLE V PERMIT TRACKING PAGE FOR STOCK ISLAND.

If there are any problems with this fax transmittal, please call the above phone number.

"Protect, Conserve, and Manage Florida's Environmental and Natural Resources"

Printed on recycled paper



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

NEW UNIT EXEMPTION

Issued to: Stock Island Power Plant
Unit ID#: CT-1, CT-2, CT-3, D-1, D-2
Operated by: Utility Board of the City of Key West
Effective: January 1, 1999 to December 31, 2003

Statutory and Regulatory Authorities:

In accordance with Title IV of the Clean Air Act Amendments of 1990, the U.S. Environmental Protection Agency exempts this unit from the requirements of the Acid Rain Program, except for the requirements in 40 CFR 72.1 through 72.7, and 72.10 through 72.13.

Conditions, Notes and Justifications that Apply to the Unit:

The petition for a new unit written exemption, submitted for this unit, is incorporated by reference. The requirements from which the unit is exempt during the effective period include, but are not limited to, the requirements to hold a permit (part 72), hold allowances (part 73), and monitor emissions (part 75).

Consistent with 40 CFR 72.7(d) (4), the unit shall only serve generators with a total nameplate capacity of 25 MWe or less and burn fuel with a sulfur content of 0.05 percent or less by weight.

The owners and operators shall apply the procedures under 40 CFR 72.7 (d) (2) for all fuels used at any time during the period for which the unit is exempted.

The owners and operators, and to the extent applicable, the designated representative, shall comply with the requirements of the Acid Rain Program concerning all years for which the unit is not exempted, even if such requirements arise or must be complied with after the exemption takes effect. The exemption shall not be a defense against any violation of such requirements whether the violation occurs before or after the exemption takes effect.

Approval:

Signature

Date

Howard L. Rhodes, Director
Division of Air Resources Management
Department of Environmental Protection
Telephone: (850) 488-0114 Facsimile: (850) 922-6979



Issued 9/20/95

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:
Utility Board of the
City of Key West
1001 James Street
P.O. Drawer 6100
Key West, FL 33041

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996
County: Monroe
Latitude/Longitude: 24°33'49"N
81°44'03"W
Project: 23.5 MW Simple Cycle
Combustion Turbine

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.). 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 specifically described as follows:

For the relocation of a simple cycle combustion turbine (CT) generator from Key West Power Plant to the existing Stock Island Power Plant (near Key West) in Monroe County. This generator is a General Electric (GE) Frame 5 model PG5341 CT (equipped with water injection for fuel oil firing) with a rated capacity of 23.5 megawatts at ISO conditions. The GE CT will have a heat input at 59°F of 312 MMBtu/hr (oil). The CT will be fired with No. 2 low sulfur fuel oil with a sulfur content not to exceed 0.05% by weight. NO_x emissions are controlled by a water injection system.

LHV The source/emission unit(s) shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Key West City Electric System application received February 14, 1994.
2. DEP's letter dated March 10, 1994.
3. R.W. Beck's letter dated June 10, 1994.
4. DEP's letter dated July 28, 1994.
5. R.W. Beck's letter dated March 3, 1995.
6. DEP's letter dated April 10, 1995.
7. R.W. Beck's letter dated April 20, 1995.

Startup 1/1/96

PERMITTEE:
City Electric System

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996

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, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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

3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed 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.

PERMITTEE:
City Electric System

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996

GENERAL CONDITIONS:

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 any 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 F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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

PERMITTEE:
City Electric System

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996

GENERAL CONDITIONS:

11. This permit is transferable only upon Department approval in accordance with 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:

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

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least 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 dates analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and,
 - the results of such analyses.

PERMITTEE:
City Electric System

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996

GENERAL CONDITIONS:

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.

SPECIFIC CONDITIONS:

The construction and operation of the Project shall be in accordance with all applicable provisions of Chapters 62-210 to 62-297, F.A.C. In addition to the foregoing, the Project shall comply with the following conditions as indicated.

A. General Requirements

1. Pursuant to Rule 62-212.200(56), F.A.C., Potential to Emit (PTE), the maximum heat input to the GE combustion turbine (CT) at an ambient temperature of 59°F shall not exceed 312 MMBtu/hr while firing fuel oil. Heat input may vary depending on ambient conditions and the CT characteristics. **Manufacturer's curves** or equations for correction to other temperatures shall be provided to DEP for review and approval 90 days prior to the initial compliance test. The approved manufacturer's curves shall be used to establish heat input rates **over a range of temperatures** for the purpose of compliance determination.

2. Pursuant to Rule 62-212.200(56), F.A.C., only No. 2 fuel oil is **allowed to be fired in the CT**. The maximum sulfur content of the **No. 2 fuel oil shall not exceed 0.05 percent**, by weight.

3. Pursuant to Rule 62-212.200(56), F.A.C., the maximum No. 2 fuel oil consumption allowed to be burned in the CT is **7,100,000 gallons per year**, which is equivalent to **2888.5 hours per year** of operation at full-load. The CT may operate for more than **2888.5 hours per year** if operating at part-load.

4. Pursuant to Rule 62-296.310(3), F.A.C., **Unconfined Emissions of Particulate Matter**, the emissions of unconfined particulate matter shall be minimized **during the relocation and construction period** by covering or watering dust generating areas.

5. The facility shall comply with all the requirements of **40 CFR Part 60 Subpart GG**.

still needed?

PERMITTEE:
City Electric System

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996

SPECIFIC CONDITIONS:

B. Emission Limits

1. Pursuant to Rule 62-212.410, F.A.C., BACT, the maximum allowable emissions from the CT, when firing No. 2 fuel oil at 15% O₂, shall not exceed:

ALLOWABLE EMISSIONS LIMITATIONS - GE CT

<u>POLLUTANT</u>	<u>BASIS</u>	<u>lbs/hr(a)</u>	<u>TPY</u>
NO _x	75 ppmvd(b)	96	138
PM/PM ₁₀		18	43
CO	20/136 ppmvd(c)	64	152
Visible Emissions	20 percent opacity		

(a) Emission limitations in lbs/hr are a 1-hour average as determined pursuant to the Performance Testing conducted pursuant to Condition C.1 below.

(b) Fuel oil NO_x emissions are based on BACT at 15% oxygen. Compliance shall be determined through the initial and annual compliance tests. The annual compliance test will be required if the fuel oil operation is more than 400 hrs/yr.

(c) The ppmvd numbers are at 100% / 50% load respectively. The mass emission rates for CO emissions are based on 136 ppmvd.

2. Excess emissions from the CT resulting from start-up, shutdown, malfunction, or load change shall be acceptable providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for a longer duration. The permittee shall provide a general description of the procedures to be followed during periods of start up, shutdown, malfunction, or load change to ensure that the best operational practices to minimize emissions will be adhered to and the duration of any excess emissions will be minimized. The description should be submitted to the Department along with the initial compliance test data. The description may be updated as needed by submitting such update to the Department within thirty (30) days of implementation.

PERMITTEE:
City Electric System

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996

SPECIFIC CONDITIONS:

C. Performance Testing

1. Initial (I) compliance tests shall be performed on the CT while firing oil. Testing of emissions shall be conducted at 95-100% of the manufacturer's rated heat input based on the average ambient air temperature during the test. Annual (A) compliance tests shall be performed on the CT if the No. 2 fuel was used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods in accordance with 40 CFR 60, Appendix A, as adopted by reference in Chapter 62-297, F.A.C.:

- a. Reference Method 5B for PM (I, A).
- b. Reference Method 9 for VE (I, A).
- c. Reference Method 10 for CO (I, A).
- d. Reference Method 20 for NOx (I, A).

e. ASTM D4294 (or equivalent) for sulfur content of distillate oil (I, A). Compliance with SO₂ emission limits will be demonstrated if the fuel oil analysis indicates a sulfur content of 0.05% by weight or less.

f. Other methods may be used for compliance testing after obtaining prior Departmental approval, in writing.

2. The No. 2 fuel oil shall be monitored for the sulfur content. The frequency of determination shall be in accordance with the requirements of 40 CFR 60.334. Testing for sulfur content of the fuel oil in the storage tanks shall be conducted upon each occasion that fuel is transferred to the storage tanks. Testing for fuel oil lower heating value shall also be conducted on the same schedule.

D. Monitoring Requirements

1. For the simple cycle unit, the permittee shall install, operate, and maintain a continuous monitoring system (CMS) to monitor and record the fuel consumption, the ratio of water to fuel being fired in the turbine, and the electrical output in MW. The system shall be accurate to within ± 5.0 percent and shall be approved by the Department.

PERMITTEE:
City Electric System

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996

SPECIFIC CONDITIONS:

2. For purposes of the reports required under this permit, excess emissions are defined as any calculated average emission rate, as determined pursuant to Specific Condition B.2 herein, which exceeds the applicable emission limits in Specific Condition B.1.

E. Notification, Reporting and Recordkeeping

1. To determine compliance with the fuel oil firing heat input limitation, the permittee shall maintain daily records of fuel oil consumption for the turbine and the heating value for the fuel. All records shall be maintained for a minimum of two years after the date of each record and shall be made available to representatives of the Department upon request.

2. The project shall comply with all the applicable requirements of Chapter 62-297, F.A.C. and 40 CFR 60, Subpart A. The requirements shall include:

a. 40 CFR 60.7(a)(1) - By postmarking or delivering notification of the start of construction no more than 30 days after such date.

b. 40 CFR 60.7(a)(2) - By postmarking or delivering notification of the anticipated date of the initial start up of the CT not less than 30 days prior to such date.

c. 40 CFR 60.7(a)(3) - By postmarking or delivering notification of the actual start up of the turbine within 15 days after such date.

d. 40 CFR 60.7(a)(6) - By postmarking or delivering notification of the anticipated date for conducting the opacity observations no less than 30 days prior to such date.

e. 40 CFR 60.7(b) - By initiating a recordkeeping system to record the occurrence and duration of any start up, shutdown or malfunction of the turbine, and of any malfunction of the air pollution control equipment.

f. 40 CFR 60.7(c) - By postmarking or delivering a quarterly excess emissions and monitoring system performance report within 30 days after the end of each calendar quarter. This report shall contain the information specified in 40 CFR 60.7(c) and (d).

g. 40 CFR 60.8(a) - By conducting all performance tests within 60 days after achieving the maximum turbine firing rates, but not more than 180 days after the initial start up of the CT.

PERMITTEE:
City Electric System

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996

SPECIFIC CONDITIONS:

h. 40 CFR 60.8(d) - By postmarking or delivering notification of the date of each performance test required by this permit at least 30 days prior to the test date; and,

i. Rule 62-297.345, F.A.C. - By providing stack sampling facilities for the turbine.

j. All notifications and reports required by this Specific Condition shall be submitted to the Department's Air Program of the South District office. Performance test results shall be submitted within 45 days of completion of such test.

3. The following protocols shall be submitted to the Department's Air Program of the South District office for approval;

a. CMS Protocol - Within 60 days after selection of the CMS, but prior to the initial startup, a CMS protocol describing the system, its installation, operating and maintenance characteristics and requirements.

b. Performance Test Protocol - At least 90 days prior to conducting the initial performance tests required by this permit, the permittee shall submit to the Department's Air Program of the South District office a protocol outlining the procedures to be followed and the test methods that will be used to verify compliance with the conditions of this permit. The Department shall approve the testing protocol provided that it meets the requirements of this permit.

F. Modifications

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

G. No. 2 Fuel Oil Storage Tank

The permittee shall be in compliance with the monitoring requirements specified in 40 CFR 60.116b(b), which requires maintaining a record of the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

PERMITTED:
City Electric System

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996

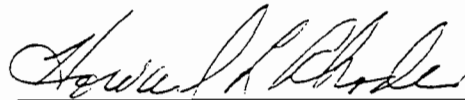
SPECIFIC CONDITIONS:

H. Additional General Conditions

1. Pursuant to Rule 62-4.090, F.A.C., the permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit.

2. Pursuant to Rules 62-4.055 and 62-4.220, F.A.C., an application for an operation permit must be submitted to the Department's South District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Howard L. Rhodes, Director
Division of Air Resources
Management

Best Available Control Technology (BACT) Determination
 Key West City Electric System
 Monroe County
 PSD-FL-210

The applicant proposes to relocate a simple cycle combustion turbine (CT) generator from the Key West Power Plant, where it is currently permitted, to the existing Stock Island Power Plant (near Key West) in Monroe County. The CT is a General Electric Frame 5 model PG5341 unit with a nominal base load rating of 23.5 megawatt (MW) at ISO conditions [ISO standard day conditions means 288 degrees Kelvin (59°F), 60 percent relative humidity and 101.3 kilopascals pressure]. The Stock Island Power Plant currently consists of a nominal 37 MW steam-electric generating unit, two nominal 8.6 MW medium speed diesel-electric generating units, three nominal 2 MW high speed diesel-electric generating units, fuel storage tanks, and other electrical generating support equipment. The CT will be fired with No. 2 low sulfur fuel oil with a sulfur content not to exceed 0.05 percent, by weight, and a fuel oil consumption limit of 7.1 million gallons per year.

The applicant has indicated that the maximum annual air pollutant emission rates for the CT, based on consumption of 7.1 million gallons of No. 2 fuel oil, with a maximum sulfur content of 0.05%, by weight, will be:

Pollutant	Emissions (TPY)	PSD Significant Emission Rate (TPY)	Subject to PSD review?
NO _x *	138	40	Yes
SO ₂	24	40	No
PM/PM ₁₀ **	43	25/15	Yes
CO**	152	100	Yes
VOC	15	40	No
Lead	0.004	0.6	No

* - Based on firing No. 2 fuel oil (0.05% sulfur by weight) at a maximum of 7.1 million gals/yr at full load.

** - Based on firing No. 2 fuel oil (0.05% sulfur by weight) at a maximum of 7.1 million gals/yr at 50% load.

Rule 62-212.400, Florida Administrative Code (F.A.C.), Stationary Source Preconstruction Review, requires a BACT review for all regulated pollutants emitted in an amount equal to or greater than the significant emission rates listed in the previous table.

Date of Receipt of a BACT Application:
February 14, 1994

Date Application Complete:
May 5, 1995

BACT Determination Requested by the Applicant:

Pollutant	Emission Limits & Control Technology
NOx	75 ppmvd @ 15% O ₂ and ISO conditions; Water Injection; Use of Good Quality Fuel Oil (<0.05% Sulfur) and Limited Operation
CO	20 ppmvd @ 15% O ₂ / 100% load 136 ppmvd @ 15% O ₂ / 50% load Combustion Control
PM/PM ₁₀	Combustion Control; use of good quality fuel oil (<0.05% Sulfur) and Limited Operation

BACT Determination Procedure

In accordance with Rule 62-212.410, F.A.C., Best Available Control Technology Review, Stationary Source - Preconstruction Review, the BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that, in making the BACT determination, the Department shall give consideration to:

- (a) Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- (b) All scientific, engineering, and technical material and other information available to the Department.
- (c) The emission limiting standards or BACT determinations of any other state.
- (d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission source in question the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objection.

The air pollutant emissions from simple cycle power plants can be grouped into categories based upon what control equipment and techniques are available to control emissions from these facilities. Using this approach, the emissions can be classified as follows:

- o Combustion Products (e.g., particulate matter and trace metals). Controlled generally by good combustion of clean fuels.
- o Products of Incomplete Combustion (e.g., CO and VOCs). Control is largely achieved by proper combustion techniques.
- o Acid Gases (e.g., SO₂, NO_x). Controlled generally by gaseous control devices and fuel quality.

Grouping the pollutants in this manner facilitates the BACT analysis because it enables the equipment available to control the type or group of pollutants emitted and the corresponding energy, economic, and environmental impacts to be examined on a common basis. Although all of the pollutants addressed in the BACT analysis may be subject to a specific emission limiting standard as a result of PSD review, the control of "nonregulated" air pollutants is considered in imposing a more stringent BACT limit on a "regulated" pollutant (i.e., particulates, sulfur dioxide, fluorides, sulfuric acid mist, etc.), if a reduction in "nonregulated" air pollutants can be directly attributed to the control device selected as BACT for the abatement of the "regulated" pollutants.

BACT POLLUTANT ANALYSIS

COMBUSTION PRODUCTS

Particulate Matter (PM/PM₁₀)

The design of the CT system ensures that particulate matter emissions will be minimized by combustion control and the use of clean fuels. The particulate matter emissions from the combustion turbine, when burning No. 2 fuel oil (0.05% sulfur, by weight), will not exceed 18 lb/hr at 50% load.

PRODUCTS OF INCOMPLETE COMBUSTION

Carbon Monoxide (CO)

The emissions of carbon monoxide exceed the PSD significant emission rate of 100 TPY with the GE CT. The applicant has indicated that the carbon monoxide emissions from the proposed simple cycle turbine is 20 ppmvd at 15 % O₂ and 100% load for No. 2 fuel oil firing with water injection. The emissions at 50% load will be 136 ppmvd at 15% O₂.

The majority of BACT emissions limitations have been based on combustion controls for carbon monoxide and volatile organic compounds minimization. Additional control is achievable through the use of catalytic oxidation. Catalytic oxidation is a post-combustion control that has been employed in CO nonattainment areas where regulations have required CO emission levels to be less than those associated with wet injection. These installations have been required to use LAER technology and typically have CO limits on the order of 10 ppm (corrected to dry conditions).

In an oxidation catalyst control system, CO emissions are reduced by allowing unburned CO to react with oxygen at the surface of a precious metal catalyst such as platinum. Combustion of CO starts at about 300°F, with efficiencies above 90 percent occurring at temperatures above 600°F. Catalytic oxidation occurs at temperatures 50 percent lower than that of thermal oxidation, which reduces the amount of thermal energy required. For CT/HRSG combinations, the oxidation catalyst can be located directly after the CT or in the HRSG. Catalyst size depends upon the exhaust flow, temperature, and desired efficiency.

The application of oxidation catalyst is not technically feasible for combustion turbines fired with fuel oil due to the oxidation of sulfur compounds and excessive formation of H₂SO₄ mist emissions. Catalytic oxidation has not been demonstrated on a continuous basis when using fuel oil.

ACID GASES

Nitrogen Oxides (NO_x)

The emissions of nitrogen oxides represent a significant portion of the total emissions generated by this project and need to be controlled. The applicant presented an extensive analysis of the different available technologies for NO_x control.

The applicant stated that BACT for nitrogen oxides will be met by using water injection to limit emissions to 75 ppmvd @ 15% O₂ when burning fuel oil.

A review of the EPA's BACT/LAER Clearinghouse indicates that the lowest NO_x emission limit established to date for a combustion turbine is 6 ppmvd at 15% oxygen. This level of control was accomplished through the use of water injection and a selective catalytic reduction (SCR) system.

SCR is a post-combustion method for control of NO_x emissions. The SCR process combines vaporized ammonia with NO_x in the presence of a catalyst to form nitrogen and water. The vaporized ammonia is injected into the exhaust gases prior to passage through the catalyst bed. The SCR process can achieve up to 90% reduction of NO_x with a new catalyst. As the catalyst ages, the NO_x reduction efficiency at constant ammonia slip will decrease.

The effect of exhaust gas temperature on NO_x reduction depends on the specific catalyst formulation and reactor design. Generally, SCR units can be designed to achieve effective NO_x control over a 100-300°F operating window within the bounds of 450-800°F. The preferable operating window is within the bounds of 600-750°F for effective NO_x control.

Most commercial SCR systems operate over a temperature range of about 600-750°F. At levels above and below this window, the specific catalyst formulation will not be effective and NO_x reduction will decrease. Operating at high temperatures can permanently damage the catalyst through sintering of surfaces. Increased water vapor content in the exhaust gas (as would result from water or steam injection in the gas turbine combustor) can shift the operating temperature window of the SCR reactor to slightly higher levels.

As stated by the applicant, the exhaust temperature of the proposed simple cycle CT is approximately 1000°F. At temperatures of 1000°F and above, the zeolite catalyst (reported to operate within 600-950°F) will be irreparably damaged, and the temperature is high enough to oxidize ammonia to NO_x. The heat recovery steam generator allows attainment of, and provides relative stability for catalyst operation within the optimum temperature range (600-750°F) for a combined cycle operation. In this case, application of an SCR system to a simple cycle combustion turbine appears to be technically infeasible.

The applicant further looked at the dry low-NO_x burner technology for this project. The dry low-NO_x combustors are primarily utilized when natural gas is the fuel fired. However, when the fuel fired is distillate oil, water or steam injection must be utilized along with dry low-NO_x combustors to obtain emission levels comparable to those which are obtained by the use of conventional combustors with the application of water or steam

injection. Therefore, the use of a dry combustor when firing fuel oil does not offer any distinct advantages over conventional water or steam injection systems. Further, the applicant states that dry low-NO_x burners are not available for this existing combustion turbine.

The applicant reviewed water or steam injection technologies for NO_x control on simple cycle combustion turbine. Major manufacturers such as General Electric, and ASEA Brown Boveri, have recently begun to offer commercial guarantees of 25 ppmvd @ 15% O₂ using steam or water injection for large new gas-fired gas turbines even though the commercial operating experience at these levels is limited. NO_x emissions reduction to 65 ppmvd @ 15% O₂ for the relocated unit is technically feasible. However, meeting this limit would require modifications to the turbine existing water injection system and an increase in demineralized water supply. The total capital cost for a water injection system capable of meeting 65 ppmvd @ 15% O₂ is estimated at \$820,000. The total annualized cost is estimated at \$727,000 per year. This equates to cost per ton NO_x removed of \$2,754 based on full load operation and the annual fuel consumption limit. The incremental cost for additional water injection capacity to reduce NO_x emissions from the current 75 ppmvd @ 15% O₂ to 65 ppmvd @ 15% O₂ is estimated to be \$15,505 per ton. This cost is excessive for a unit which is being relocated within the same county.

BACT Determination by DEP:

Simple Cycle Combustion Turbine

NO_x Control

The applicant presented information on different control technologies for the simple cycle combustion turbine. The information that the applicant presented and the Department's calculations indicate that the incremental cost per ton of reducing NO_x with additional water injection from the current 75 ppmvd @ 15% O₂ to 65 ppmvd @ 15% O₂ for the GE Frame 5 model PG5341 turbine to be \$15,505. This cost is excessive. Based on the information presented by the applicant, the Department believes that the use of additional water injection for NO_x control is not justifiable as BACT at this time.

The cost and other concerns expressed by the applicant are considered valid by the Department. Therefore, the Department accepts water injection to limit NO_x emissions to 75 ppmvd @ 15% O₂ as BACT for this project.

CO Control

The Department is in agreement with the applicant's proposal of combustor design and good operating practices as BACT for CO for this project.

Other Emissions Control

The emission limitations for PM and PM₁₀ is based on previous BACT determinations for similar facilities. Although the emissions of this pollutant could be controlled by particulate matter control devices, such as a baghouse or scrubber, the amount of emission reductions would not warrant the added expense. Therefore, the Department does not believe that the BACT determination would be affected by the emissions of this pollutant. The Department accepts the applicant's proposed control of fuel quality for this pollutant as BACT for the simple cycle unit.

The emission limits for the Key West City Electric System project of the simple cycle unit for 23.5 MW are thereby established as follows at 15% O₂:

23.5 MW SIMPLE CYCLE COMBUSTION TURBINE

Pollutant	Emission Standards/Limitations(a)	Method of Control
NO _x	75 ppmvd @ 15% O ₂	Water Injection
CO	20 ppmvd @ 15% O ₂ @100% load 136 ppmvd @ 15% O ₂ @50% load	Combustion Controls Use of Good Quality Fuel Oil and Limited Operation
PM & PM ₁₀	18 lb/hr	Combustion Controls, Fuel Quality

(a) No. 2 fuel oil with a maximum of 0.05% sulfur, by weight, and consumption of 7.1 million gallons per year.

State of Florida
Department of Environmental Protection
Notice of Permit

In the matter of an
Application for Permit by:

DEP File No. AC 44-245399
PSD-FL-210
Monroe County

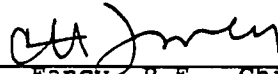
Mr. Skip Jansen
Utility Board of the City of Key West
1001 James Street
Post Office Drawer 6100
Key West, Florida 33041

Enclosed is Permit Number AC 44-245399 (PSD-FL-210) for relocation of a gas turbine to the Stock Island Power Plant located at 6900 Front Street, Key West, Monroe County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; 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 of Appeal must be filed within 14 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed by certified mail before the close of business on 9-28-95 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


Clerk
9-28-95
Date

Copies furnished to:

D. Knowles, SD
J. Harper, EPA
J. Bunyak, NPS
M. Henderson, RW Beck



Florida Department of Environmental Regulation

South District

2295 Victoria Avenue

Fort Myers, Florida 33901

Lawton Chiles, Governor

Virginia B. Wetherell, Secretary

PERMITTEE:

Key West City Electric System
(KWCES)
1006 James Street
Key West, Florida 33041

I.D. No: 52FTM44000305 and
52FTM44000306
Permit/Certification
Number: AO44-207419 PSD-FL-135
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997
County: Monroe
Latitude: 24° 33' 49" N
Longitude: 81° 44' 03" W
Section/Town/Range: 35/67S/25E
Project: Stock Island Diesel
Generators Units 1
and 2

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 17-296, 17-297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For operation of ² two 8.8 Megawatt electric (nominal) Fairbanks Morse diesel generators^{max} at the Stock Island Power Plant. The diesel generators burn No. 2 distillate fuel oil. The maximum heat input rate to each diesel generator is 85.4 million Btu per hour (606 gallons per hour).

Sulfur dioxide emissions are controlled by limiting the sulfur content of the No. 2 distillate fuel oil to 0.50% by weight. Nitrogen oxides emissions are controlled by timing retardation and limiting the hours of operation.

The facility is located on Front Street (extended), on Stock Island.

Startup 4/1/91

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

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 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5) F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in 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 any order from the Department.

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

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

- a. Have access to and copy any records that must be kept under 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 non-compliance, 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 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

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

GENERAL CONDITIONS:

or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and 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. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 17-3.051, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
11. This permit is transferable only upon Department approval in accordance with F.A.C. Rules 17-4.120 and 17-30.300, 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 (BACT)
 - (b) Determination of Prevention of Significant Deterioration (PSD)
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

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

GENERAL CONDITIONS:

records of all data used to complete the application for 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;
6. the results of such analyses.

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

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305

and 52FTM44000306

Permit/Cert. No.: A044-207419

Date of Issue: March 18, 1993

Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

1. Nitrogen oxides (NOx) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

(A) 160.9 pounds per hour from each engine.

(B) 6.0 grams per (horsepower*hour) from each engine. ✓

(C) 300.9 tons in any 12 consecutive month period for the combined sum total from both engines.

2. Sulfur dioxide (SO₂) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

(A) 43.63 pounds per hour from each engine.

(B) 81.59 tons in any 12 consecutive month period for the combined sum total from both engines. ✓

0.5% Fuel

3. Particulate matter (PM)/PM₁₀ emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

(A) 8.54 pounds per hour from each engine.

(B) 0.10 pound per million Btu heat input from each engine. ✓

(C) 15.97 tons in any 12 consecutive month period for the combined sum total from both engines.

4. Carbon monoxide (CO) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

(A) 53.62 pounds per hour from each engine.

(B) 2.0 grams per (horsepower*hour) from each engine.

(C) 100.27 tons in any 12 consecutive month period for the combined sum total from both engines.

5. Volatile organic compound (VOC) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

SPECIFIC CONDITIONS: *VOC;*

(A) 26.81 pounds per hour from each engine.

(B) 1.0 gram per (horsepower*hour) from each engine. ✓ - *O.K. by AC*

(C) 50.13 tons in any 12 consecutive month period for the combined sum total from both engines.

6. Beryllium (Be) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

(A) 0.00054 pounds per hour from each engine. ✓

(B) 2.0 pounds in any 12 consecutive month period for the combined sum total from both engines.

7. Visible emissions from each diesel generator shall not be equal to nor greater than 20% opacity. ✓
[Rule 17-296.310(2)(a), F.A.C.]

8. KWCES shall not discharge air pollutants which cause or contribute to an objectionable odor. [Rule 17-296.320(2), F.A.C.]

9. The hours of operation for this facility shall not exceed 1,870 full load equivalent hours in any 12 consecutive month period (total of 3,740 full load equivalent engine hours). ✓
[Rule 17-296.330, F.A.C.]

10. KWCES is permitted to burn only new/virgin No. 2 fuel oil with a maximum sulfur content of 0.50% by weight. ✓
[Rule 17-296.330, F.A.C.]

✓ 11. The heat input rate to each diesel generator shall not exceed 85.4 million Btu per hour (606 gallons per hour). ✓
[Requested by applicant].

✓ 12. The sum total consumption of fuel oil at this facility (both diesel generators combined) shall not exceed 2.27 million gallons in any 12 consecutive month period. ✓
[Requested by applicant]. ←

13. KWCES shall test each diesel generator for the following pollutants on an annual basis within 45 days of the date June 1. Each compliance test shall be conducted in accordance with 40 CFR 60, Appendix A, using the method indicated. [Permit AC44-152197].

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Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

- (A) NOx - EPA Method 20.
- (B) SO₂ - EPA Method 6 or ASTM D 2880-71 for sulfur in oil.
- (C) PM/PM₁₀ - EPA Method 5.
- (D) Visible emissions - EPA Method 9.

14. KWCES shall test each diesel generator for the following pollutants within one year prior to the expiration date of this permit. Each compliance test shall be conducted in accordance with 40 CFR 60, Appendix A, using the method indicated. [Rule 17-297.340(1)(c), F.A.C.]

- (A) CO - EPA Method 10.
- (B) VOC - EPA Method 25. (Note: On May 17, 1991, the Department denied a request to utilize EPA Method 25A; see ASP-91-F-01).
- (C) Be - EPA Method 104. (Note: On May 17, 1991, the Department denied a request to utilize fuel sampling in lieu of EPA Method 104; see ASP-91-F-01).

15. KWCES shall conduct emissions testing on each diesel generator while operating within 90% - 100% of the maximum heat input rate of 85.4 million Btu per hour. The actual heat input rate, electrical generator output, and diesel engine horsepower output shall be specified in each test report. [Rule 17-4.070(3), F.A.C.]

16. KWCES shall file all test reports with the South District Office of the Department as soon as practical, but no later than 45 days after the test is complete. [Rule 17-297.570(2), F.A.C.]

17. KWCES shall notify the South District Office of the Department at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. [Rule 17-297.340(1)(i), F.A.C.]

18. In order to document continuing compliance with the hourly SO₂ emission limit of specific condition 2 and the fuel sulfur limit of specific condition 10, KWCES shall keep records of the sulfur content, in percent by weight, of all the fuel burned. The records shall be based upon either vendor provided as-shipped

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SPECIFIC CONDITIONS:

analyses or upon analyses of as-received samples. The records shall be maintained for a minimum of 2 years and shall be made available to the Department upon request. [Rule 17-4.070(3), F.A.C.].

19. In order to document compliance with the hours of operation limitation of specific condition 9, the fuel oil consumption limit of specific condition 12, and the annual NOx emission limit of specific condition 1, KWCES shall keep daily records of the hours of operation, the fuel oil consumption, and the NOx emissions. At a minimum, the records shall indicate (a) the daily hours of operation for each individual diesel generator, (b) the daily hours of operation expressed as full load equivalent engine hours (both units combined), (c) the daily sum total fuel oil consumption in gallons for both units combined, (d) the daily sum total NOx emissions in pounds for both units combined, (e) a cumulative total hours of operation expressed as full load equivalent engine hours for the current month, (f) a cumulative sum total fuel oil consumed in gallons for the current month, (g) a cumulative sum total NOx emissions in tons for the current month, (h) a rolling cumulative total hours of operation expressed as full load equivalent engine hours for the previous 12 consecutive months, (i) a rolling cumulative sum total fuel oil consumed in gallons for the previous 12 consecutive months, and (j) a rolling cumulative sum total NOx emissions in tons for the previous 12 consecutive months. [Rule 17-4.070(3), F.A.C.].

20. KWCES shall install, calibrate, maintain, and operate continuous monitoring equipment, in accordance with the manufacturer's instructions, to continuously monitor and record opacity and NOx emissions. KWCES shall maintain a complete file of all measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; all continuous emissions monitoring system performance evaluations, all continuous emissions monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required, recorded in a permanent legible form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records. [Permit AC 44-152197 and Rule 17-4.070(3), F.A.C.].

21. For each calendar quarter, KWCES shall submit to the Department a written report of emissions in excess of the emission limiting standards as set forth in this permit. The

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Key West City Electric
System (KWCES)

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Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

report shall be postmarked by the 30th day following the end of each calendar quarter. The report shall include at least the following information [Rules 17-4.070(3), 17-210.700(1), 17-210.700(4), and 17-210.700(6), F.A.C.]:

- (A) The quarterly hours of operation for each individual diesel generator.
- (B) The magnitude of excess emissions, any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
- (C) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions.
- (D) The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted.
- (E) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.
- (F) When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

22. KWCES shall submit an annual operation report (DER Form 17-210.900(4), attached) to the South District Office of the Department by March 1st each year. The attached form should be reproduced and used for the annual submittals. [Rule 17-4.070(3), F.A.C.]

23. KWCES shall take all reasonable precautions to prevent / emissions of unconfined particulate matter. [Rule 17-296.310(3), F.A.C.]

24. If the Department has reason to believe that any applicable emission standard is being violated, then the Department may require KWCES to conduct compliance tests which identify the nature and quantity of pollutant emissions and to provide a report on the results of said tests. [Rule 17-297.340(2), F.A.C.] ✓

25. Construction/modification permit number AC 44-221256 might have been subject to the new source review (NSR) requirements of ✓ Rule 17-212.400, F.A.C. if the federally enforceable limits for

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SPECIFIC CONDITIONS:

NOx emissions had been relaxed any further, or if the federally enforceable hours of operation limit had been relaxed. If KWCES requests relaxation of any federally enforceable limits, then the Department will determine whether the NSR requirements of Rule 17-212.400, F.A.C. shall apply as though modification AC 44-221256 had not occurred. [Rule 17-212.400(2)(g), F.A.C.].

26. Best Available Control Technology (BACT) will be re-evaluated if KWCES requests an increase in or exceeds the permitted hours of operation. Selective Catalytic Reduction for NOx control will be required at a minimum for BACT if deemed technologically feasible. In no event shall the BACT control installation and compliance testing occur later than 30 months from the date that KWCES requested to exceed the permitted hours of operation or actually exceeded the permitted hours of operation. [Permit AC 44-152197].

27. The three existing 16.5 MW steam units at the Key West Plant shall not operate. KWCES shall surrender the operation permits for the three 16.5 MW steam units within 30 days after this permit becomes final agency action. [Permit AC 44-152197].

28. KWCES shall send all notifications and reports required by this permit to (a) the South District Office of the Department in Fort Myers, and (b) the South District Branch Office in Marathon, FL.

29. Issuance of this permit does not relieve KWCES from complying with applicable emission limiting standards or other requirements of Rules 17-210, 17-212, 17-252, 17-272, 17-273, 17-275, 17-296, and 17-297, F.A.C., or any other requirements under federal, state, or local law. Future regulations may impact this facility at some future date. KWCES shall comply with any applicable future regulations when they become effective. [Rule 17-210.300, F.A.C.].

30. In order to renew this operation permit, KWCES must submit an application for renewal by November 1, 1997. [Rule 17-4.090(1), F.A.C.].

PERMITTEE:

Key West City Electric
System (KWCES)

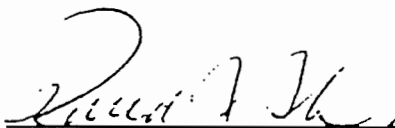
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SPECIFIC CONDITIONS:

NOTE: In the event of an emergency the permittee shall contact the Department by calling (904)488-1320. During normal business hours, the permittee shall call (813)332-6975.

Issued this 18th day of March, 1993.

STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL REGULATION



Philip R. Edwards
Director of
District Management

PRE/GAM/jw

14 Pages Attached



Florida Department of Environmental Protection

Lawton Chiles
Governor

South District
2295 Victoria Avenue
Fort Myers, Florida 33901

Virginia B. Wetherell
Secretary

PERMITTEE:

City Electric System
Utility Board of the
City of Key West
P.O. Drawer 6100
Key West, FL 33041-6100

I.D. No. 52FTM44000301
Permit/Certification
Number: **AO44-245479**
Date of Issue: May 3, 1994
Expiration Date: Apr. 25, 1999
County: Monroe
Latitude: 24° 33' 49" N
Longitude: 81° 44' 03" W
Section/Town/Range: 35/67S/25E
Project: Stock Island, Ralph
Garcia Steam Plant

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-296, 17-297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

For operation of the Stock Island **Ralph Garcia** Steam Plant (fossil fuel steam generator). This plant has a rated capacity of approximately **37 megawatts**. It is fired with **new/virgin #6 fuel oil**. **New/virgin #2 fuel oil** is used for start up and boil down. The maximum heat input rate is **515.0 million (MM) Btu per hour**.

Sulfur dioxide emissions are controlled by limiting the sulfur content of the fuel. Particulate matter emissions are controlled by a multiple cyclone dust collector.

The facility is located at 6900 Front Street, Stock Island, FL.

Reference Documents:

1. Application for renewal from the Utility Board of the City of Key West, City Electric System (CES) dated February 10, 1994, received on February 14, 1994.

startup: 12/1/72

PERMITTEE:
City Electric System
Utility Board of the
City of Key West

I.D. No. 52FTM44000301
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Date of Issue: May 3, 1994
Expiration Date: Apr. 25, 1999

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 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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

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

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of 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 and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems

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GENERAL CONDITIONS:

when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

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

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

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

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

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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GENERAL CONDITIONS:

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 Rule 17-4.120 and 17-730.300 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:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of compliance with state Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

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GENERAL CONDITIONS:

- (c) Records of monitoring information shall include:
1. the date, exact place, and time of sampling or measurements;
 2. the person responsible for performing the sampling or measurements;
 3. the dates analyses were performed;
 4. the person responsible for performing the analyses;
 5. the analytical techniques or methods used;
 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware 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.

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 City of Key West

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SPECIFIC CONDITIONS:

(1) Heat Input Rate:

The heat input rate shall not exceed 515.0 MM Btu/hr (3,433 gallons per hour. [Requested in the permit application dated 03/21/84].

(2) Permitted Fuels:

ELSA has propane

The only fuels authorized to be burned in this source are, (a) new/virgin No. 6 residual fuel oil, or (b) new/virgin No. 2 fuel oil. The sulfur content of the fuel oil shall not exceed 2.5 percent by weight. [Requested in the permit application dated 02/10/94, and Rule 17-296.405(1)(c)1.j., F.A.C.].

(3) Source Emission Limiting Standards and Compliance Testing Requirements:

POLLUTANT	EMISSION (1) LIMITING STANDARDS.	TESTING FREQUENCY (2)			TEST (3) METHOD
		ANNUAL	QUARTERLY	OTHER	
Particulate Matter					
-Normal Operation	0.1 lb/MM Btu	X(6)	----	----	EPA Method 5 or 17 (4)
-Sootblowing and Load Changing	0.3 lb/MM Btu (5) (Max 3 hrs in 24 hrs)	X	----	----	EPA Method 5 or 17 (4)
Sulfur Dioxide	2.75 lb/MM Btu	----	----	X	Fuel Analysis
Visible Emissions					
-Normal Operation	20% Opacity, except that 40% is allowed for one two-minute period per hour. (6)	X(6)	----	----	DEP Method 9
-Sootblowing and Load Changing	60% Opacity for (5) up to 3 hrs in 24 hrs, with up to four 6-minute periods of up to 100% if unit has an operational opacity CEM.	X	----	----	DEP Method 9

*no sootblowing
 Provision
 in AC
 ←
 or for VE
 ↓ 60/100*

PERMITTEE:
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SPECIFIC CONDITIONS:

Notes for Specific Condition 3:

- (1) Rules 17-296.405(1) and 17-210.700(3), F.A.C.
- (2) Rule 17-297.340, F.A.C.
- (3) Rule 17-297.330, F.A.C.
- (4) EPA Method 17 may be used only if the stack gas exit temperature is less than 375°F.
- (5) Rule 17-210.700(3), F.A.C. Excess emissions are authorized only if (a) best operational practices to minimize emissions are adhered to, and (b) the duration of excess emissions is minimized.
- (6) Rule 17-296.405(1)(a), F.A.C.

(4) Compliance Testing Related Requirements:

(a) Notification - Rule 17-297.340(1)(i), F.A.C.

CES shall notify the South District Office and the Marathon Branch Office of the Department of Environmental Protection at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner.

(b) Conditions - Rule 17-4.070(3), F.A.C.

Compliance testing of particulate matter and visible emissions should be conducted while the source is firing No. 6 residual fuel oil within 90-100% of the maximum allowable rate of 515.0 MM Btu per hour. Particulate matter and visible emissions tests shall be conducted under both sootblowing and normal operating conditions.

Testing may be conducted with the source firing No. 6 residual fuel oil at less than 90 percent of the maximum allowable rate; however, if so, subsequent source operation is limited up to 110% of the average No. 6 residual fuel oil heat input rate during the test. Once the unit is so limited, then operation at higher No. 6 residual fuel oil heat input rates is allowed for no more than fifteen calendar days for purposes of additional compliance testing to regain the higher rates, not to exceed 515.0 MM Btu per hour on No. 6 residual fuel oil.

Operating at conditions during testing which do not reflect representative operating conditions may invalidate a test.

(c) Test Schedule - Rule 17-4.070(3), F.A.C.

Stack tests shall be conducted at least on an annual basis, on or within 60 days before the date October 31.

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SPECIFIC CONDITIONS:

(d) Stack Sampling Facility - Rule 17-297.345, F.A.C.

The stack sampling facility must comply with Rule 17-297.345, F.A.C.

(e) Report Submittal - Rules 17-297.570 and 17-4.070(3), F.A.C.

Copies of the test results shall be submitted to the Department's South District Office and the Marathon Branch Office within 45 days after the last test run is completed. The test report shall provide the actual heat input rate and at least all of the information listed in Rule 17-297.570(3), F.A.C. Each test report shall also include a fuel oil analysis from a representative sample of the fuel oil burned during the test. Failure to submit any of the above information may invalidate the test.

(5) Recordkeeping to Document Compliance with the Sulfur Dioxide Emission Limit - Rule 17-4.070(3), F.A.C.

In order to document continuing compliance with the fuel oil sulfur limit, CES shall keep records of the sulfur content, in percent by weight, of all the fuel burned based on either vendor provided as-shipped analyses or on analyses of as-received samples. The records shall be maintained for a minimum of 2 years and shall be made available to the Department upon request. CES shall submit a copy of the fuel oil analysis for the fuel oil burned during each compliance test with the results from the test. [Rule 17-4.070(3), F.A.C.].

(6) Annual Operations Report (AOR):

On or before March 1 of each calendar year, a completed DEP Form 17-213.900(4), "Annual Operating Report for Air Pollutant Emitting Facility", shall be submitted to the Department's South District Office and Marathon Branch Office.

(7) Excess Emissions:

(a) Events - Rule 17-210.700, F.A.C.

Excess emissions resulting from start-up or shut-down are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions is minimized.

Excess emissions resulting from malfunction are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions is minimized but in no case exceeds two hours in any 24-hour period unless specifically authorized by the Department for longer duration.

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SPECIFIC CONDITIONS:

Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction are prohibited.

(b) Notification - Rules 17-210.700(6) and 17-4.130, F.A.C.

In the event the permittee is temporarily unable to comply with any of the conditions of the permit, the permittee shall immediately notify the Department's South District Office and Marathon Branch Office. Notification shall be conducted in accordance with General Condition (8) of this permit. In case of excess emissions resulting from malfunctions, CES shall notify the Department's South District Office and Marathon Branch Office in accordance with Rule 17-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

(c) Quarterly Report Submittal - Rule 17-4.070(3), F.A.C.

CES shall submit to the Department's South District Office and Marathon Branch Office a written report of emissions in excess of the emission limiting standards as set forth in Rule 17-296.405, F.A.C., for each calendar quarter. The nature and cause of the excessive emissions shall be explained. The report shall state the cause, period of non-compliance, steps taken for corrective action, and steps taken to prevent recurrence. The Department shall also be notified when there are no exceedances for a quarter. This report does not relieve CES of the legal liability for violations. All relevant records shall be maintained on file for a period of at least two years. The report shall be submitted within 30 days following each calendar quarter.

(8) Objectionable Odors - Rule 17-296.320(2), F.A.C.

CES shall not discharge air pollutants which cause or contribute to an objectionable odor.

(9) Hours of Operation:

The hours of operation are not restricted.

(10) Notices and Reports:

CES shall send all notifications and reports required by this permit to (a) the South District Office of the Department in Fort Myers, and (b) the Marathon Branch Office of the Department in Marathon, FL.

PERMITTEE:
City Electric System
Utility Board of the
City of Key West

I.D. No. 52FTM44000301
Permit/Cert. No. AO44-245479
Date of Issue: May 3, 1994
Expiration Date: Apr. 25, 1999

SPECIFIC CONDITIONS:

(11) Special Compliance Tests - Rule 17-297.340(2), F.A.C.

If the Department of Environmental Protection, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard is being violated, then the Department of Environmental Protection may require CES to conduct compliance tests which identify the nature and quantity of pollutant emissions and to provide a report on the results of said tests.

(12) Other Requirements - Rule 17-210.300, F.A.C.

Issuance of this permit does not relieve CES from complying with applicable emission limiting standards or other requirements of Rules 17-210, 17-212, 17-252, 17-272, 17-273, 17-275, 17-296, and 17-297, F.A.C., or any other requirements under federal, state, or local law.

(13) Operation Permit Renewal - Rules 17-4.050(2) and 17-4.090(1), F.A.C.

In order to renew this operation permit, an application for renewal shall be submitted to the Department of Environmental Protection by February 24, 1999.

Note: In the event of an emergency the permittee shall contact the Department by calling (904) 488-1320. During normal business hours, the permittee shall call (813) 332-6975.

Issued this 3rd day of May, 1994.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

David M. Knowles

for Ronald D. Blackburn
Acting Director of
District Management

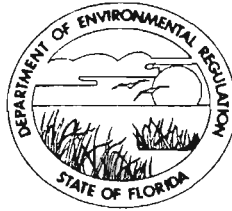
RDB/GM/gm

13 Pages Attached

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTH FLORIDA
DISTRICT

2269 BAY STREET
FORT MYERS, FLORIDA 33901



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PHILIP R. EDWARDS
DISTRICT MANAGER

PERMITTEE: Utility Board of The City
of Key West
P. O. Drawer 1060
Key West, FL 33040

I.D. Number: 52/44/0003/01
Permit/Certification Number: AC-44-61820
Date of Issue: 12-17-82
Expiration Date: 06-15-83
County: Monroe
Latitude/Longitude: 24°33'49"N/81°44'03"W
Section/Township/Range: 35/67/25
Project: Stock Island Power Plant Low Excess
Air Burners

Ralph Garcia

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

Install low excess air burners in existing steam boiler. Rated capacity of plant is 37 megawatts. Boiler uses Number 6 fuel oil. Emissions are controlled by mechanical multiple cyclone dust collector.

Plant is located at Front Street on Stock Island.

PERMITTEE: Utility Board of
City of Key West

I.D. Number: 52/44/0003/01
Permit/Certification Number: AC-44-61820
Date of Issue: 12-17-82
Expiration Date: 06-15-83

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 Section 403.161(1), 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 court 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 any 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 of property and penalties therefor 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.
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.

PERMITTEE: Utility Board of
City of Key West

I.D. Number: 52/44/0003/01
Permit/Certification Number: AC-44-61820
Date of Issue: 12-17-82
Expiration Date: 06-15-83

GENERAL CONDITIONS:

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 the cause of non-compliance; and
 - b. the period of noncompliance, including exact 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.
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)
 - () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
 - () 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.
 - 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 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.

GENERAL CONDITIONS:

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. Particulate Emission and Visible Emission tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Tests shall be conducted in accordance with EPA method 5 and 9 as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted once per year commencing April 1983. Results shall be submitted to the Department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing.
2. Particulate emissions shall not exceed 0.1 pounds per million BTU heat input.
3. Sulfur dioxide emissions shall not exceed 2.75 pounds per million BTU heat input. Compliance will be calculated from analyses of Sulfur in fuel oil. Sulfur content in fuel shall not exceed 2.5%.
4. Visible emissions shall not exceed 20% opacity under normal operation except for up to 2 minutes in any one hour at not more than 40% opacity.
5. All fugitive dust generated at this site shall be adequately controlled.
6. The Department shall be notified and prior approval shall be obtained of any changes or revisions made during construction.

PERMITTEE: Utility Board of The
City of Key West

I.D. Number: 52/44/0003/01
Permit/Certification Number: AC-44-61820
Date of Issue: 12-17-82
Expiration Date: 06-15/83

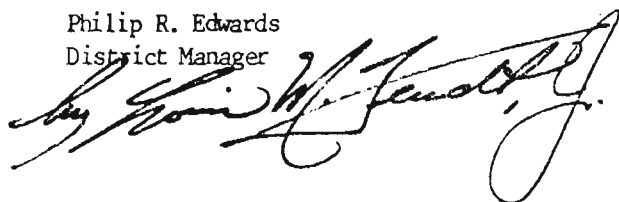
SPECIFIC CONDITIONS:

7. The Department shall be notified within 15 days after construction is completed and prior to testing to allow witnessing of tests.
8. The applicant shall retain the engineer of record for the inspection of the construction of this project. Upon completion the engineer shall inspect for conformity to construction permit applications and associated documents. A Certificate of Completion (Form DER 17-1.122(20) attached) shall be submitted with the compliance tests results and a fee of \$500 as an application for an operation permit. These are to be submitted within 60 days after completion of construction.
9. Sampling facilities shall include caged ladder, sampling ports, safe work platforms and access, and electrical power. The sampling ports shall be located in the Stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbances.
10. Test for Nitrogen Oxides shall be conducted in accordance with EPA Method 7 as published in 40 CFR-60, Appendix A. Test shall be conducted before application for operating permit. Test shall be conducted while boiler is near permitted maximum operating rate. Results shall be submitted to the department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing.
11. A report, stating the quantity of fuel oil received and sulfur content of fuel oil, shall be submitted to the Department monthly.

Issued this 17th day of December, 1982.
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

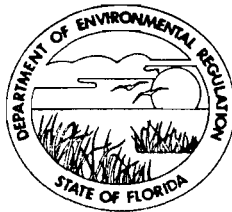


Philip R. Edwards
District Manager



_____ Pages attached.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION



SOUTH FLORIDA
DISTRICT

2269 BAY STREET
FORT MYERS, FLORIDA 33901

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PHILIP R. EDWARDS
DISTRICT MANAGER

December 17, 1982

Utility Board of the City
of Key West
Post Office Drawer 1060
Key West, Florida 33040

Re: Monroe County - AP
Utility Board of the City
of Key West
Stock Island Power Plant
Low Excess Air Burners

Gentlemen:

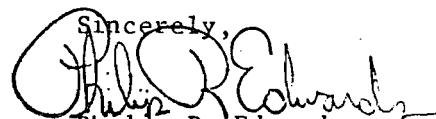
Enclosed is Permit Number AC-44-61820, dated December 17, 1982, to construct the subject modification to the power plant issued pursuant to Section 403, Florida Statutes.

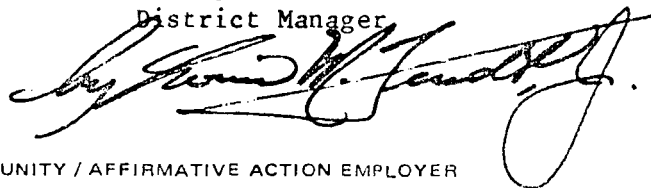
Should you object to this permit, including any and all of the conditions contained therein, you may file an appropriate petition for administrative hearing. This petition must be filed within fourteen (14) days of the receipt of this letter. Further, the petition must conform to the requirements of Section 28-5.201, Florida Administrative Code (see reverse side of this letter). The petition must be filed with the Office of General Counsel, Department of Environmental Regulation, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301.

If no petition is filed within the prescribed time, you will be deemed to have accepted this permit and waived your right to request an administrative hearing on this matter.

Acceptance of the permit constitutes notice and agreement that the Department will periodically review this permit for compliance, including site inspections where applicable, and may initiate enforcement action for violation of the conditions and requirements thereof.

Sincerely,


Philip R. Edwards
District Manager



PRE/DMK/1s
Enclosure

cc: J. B. Sims, P.E.

R. J. Herbling

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

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

PART II
FORMAL PROCEEDINGS

28-5.201 Initiation of Formal Proceedings.

- (1) Initiation of formal proceedings shall be made by petition to the agency responsible for rendering final agency action. The term petition as used herein includes any application or other document which expresses a request for formal proceedings. Each petition should 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, and an explanation of how his/her substantial interests will be affected by the agency determination;
 - (c) A statement of when and how petitioner received notice of the agency decision or intent to render a decision;
 - (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
 - (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;
 - (f) A demand for relief to which the petitioner deems himself entitled; and
 - (g) Other information which the petitioner contends is material.

A petition may be denied if the petitioner does not state adequately a material factual allegation, such as a substantial interest in the agency determination, or if the petition is untimely. (Section 28-5.201(3)(a), FAC)



Florida Department of Environmental Regulation

South District

2295 Victoria Avenue

Fort Myers, Florida 33901

Lawton Chiles, Governor

Virginia B. Wetherell, Secretary

PERMITTEE:

Key West City Electric System
(KWCES)
1006 James Street
Key West, Florida 33041

I.D. No: 52FTM44000305 and
52FTM44000306
Permit/Certification
Number: AC44-221256 PSD-FL-135
Date of Issue: March 18, 1993
Expiration Date: March 18, 1994
County: Monroe
Latitude: 24° 33' 49" N
Longitude: 81° 44' 03" W
Section/Town/Range: 35/67S/25E
Project: Stock Island Diesel
Generators Units 1
and 2

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 17-296, 17-297, and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For modification of two 8.8 Megawatt electric (nominal) Fairbanks Morse diesel generators at the Stock Island Power Plant. This construction/modification permit authorizes minor increases in the allowable emission rates over the original construction permit (AC44-152197). The diesel generators burn No. 2 distillate fuel oil. The maximum heat input rate to each diesel generator is 85.4 million Btu per hour (606 gallons per hour).

Sulfur dioxide emissions are controlled by limiting the sulfur content of the No. 2 distillate fuel oil to 0.50% by weight. Nitrogen oxides emissions are controlled by timing retardation and limiting the hours of operation.

The facility is located on Front Street (extended), on Stock Island.

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AC44-221256
Date of Issue: March 18, 1993
Expiration Date: March 18, 1994

GENERAL CONDITIONS:

records of all data used to complete the application for 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;
 6. the results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AC44-221256
Date of Issue: March 18, 1993
Expiration Date: March 18, 1994

• SPECIFIC CONDITIONS:

1. Nitrogen oxides (NOx) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

- (A) 160.9 pounds per hour from each engine.
- (B) 6.0 grams per (horsepower*hour) from each engine.
- (C) 300.9 tons in any 12 consecutive month period for the combined sum total from both engines.

2. Sulfur dioxide (SO₂) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

- (A) 43.63 pounds per hour from each engine.
- (B) 81.59 tons in any 12 consecutive month period for the combined sum total from both engines.

3. Particulate matter (PM)/PM₁₀ emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

- (A) 8.54 pounds per hour from each engine.
- (B) 0.10 pound per million Btu heat input from each engine.
- (C) 15.97 tons in any 12 consecutive month period for the combined sum total from both engines.

4. Carbon monoxide (CO) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

- (A) 53.62 pounds per hour from each engine.
- (B) 2.0 grams per (horsepower*hour) from each engine.
- (C) 100.27 tons in any 12 consecutive month period for the combined sum total from both engines.

5. Volatile organic compound (VOC) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AC44-221256
Date of Issue: March 18, 1993
Expiration Date: March 18, 1994

SPECIFIC CONDITIONS:

VOC

- (A) 26.81 pounds per hour from each engine.
- (B) 1.0 gram per (horsepower*hour) from each engine.
- (C) 50.13 tons in any 12 consecutive month period for the combined sum total from both engines.

6. Beryllium (Be) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

- (A) 0.00054 pounds per hour from each engine.
- (B) 2.0 pounds in any 12 consecutive month period for the combined sum total from both engines.

7. Visible emissions from each diesel generator shall not be equal to nor greater than 20% opacity. [Rule 17-296.310(2)(a), F.A.C.]

8. KWCES shall not discharge air pollutants which cause or contribute to an objectionable odor. [Rule 17-296.320(2), F.A.C.]

9. The hours of operation for this facility shall not exceed 1,870 full load equivalent hours in any 12 consecutive month period (~~total of 3,740 full load equivalent engine hours~~). [Rule 17-296.330, F.A.C.]

10. KWCES is permitted to burn only new/virgin No. 2 fuel oil with a maximum sulfur content of 0.50% by weight. *superceded by new source exemption 0.05%* [Rule 17-296.330, F.A.C.]

11. The heat input rate to each diesel generator shall not exceed 85.4 million Btu per hour (606 gallons per hour). [Requested by applicant].

12. The sum total consumption of fuel oil at this facility (both diesel generators combined) shall not exceed 2.27 million gallons in any 12 consecutive month period. [Requested by applicant].

13. In order to document continuing compliance with the hourly SO₂ emission limit of specific condition 2 and the fuel sulfur

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AC44-221256
Date of Issue: March 18, 1993
Expiration Date: March 18, 1994

SPECIFIC CONDITIONS:

limit of specific condition 10, ^{the permittee} KWCES shall keep records of the sulfur content, in percent by weight, of all the fuel burned. The records shall be based upon either vendor provided as-shipped analyses or upon analyses of as-received samples. The records shall be maintained for a minimum of 2 years and shall be made available to the Department upon request. [Rule 17-4.070(3), F.A.C.].

Tab
14. In order to document compliance with the hours of operation limitation of specific condition 9, the fuel oil consumption limit of specific condition 12, and the annual NOx emission limit of specific condition 1, ^{P.1} KWCES shall keep daily records of the hours of operation, the fuel oil consumption, and the NOx emissions. At a minimum, the records shall indicate; (a) the daily hours of operation for each individual diesel generator, (b) the daily hours of operation expressed as full load equivalent engine hours (both units combined), (c) the daily sum total fuel oil consumption in gallons for both units combined, (d) the daily sum total NOx emissions in pounds for both units combined, (e) a cumulative total hours of operation expressed as full load equivalent engine hours for the current month, (f) a cumulative sum total fuel oil consumed in gallons for the current month, (g) a cumulative sum total NOx emissions in tons for the current month, (h) a rolling cumulative total hours of operation expressed as full load equivalent engine hours for the previous 12 consecutive months, (i) a rolling cumulative sum total fuel oil consumed in gallons for the previous 12 consecutive months, and (j) a rolling cumulative sum total NOx emissions in tons for the previous 12 consecutive months. [Rule 17-4.070(3), F.A.C.].

^{The permittee}
15. KWCES shall ~~install~~, calibrate, maintain, and operate continuous monitoring equipment, in accordance with the manufacturer's instructions, to continuously monitor and record opacity and NOx emissions. KWCES shall maintain a complete file of all measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; all continuous emissions monitoring system performance evaluations, all continuous emissions monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required, recorded in a permanent legible form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.

[Permit AC 44-152197 and Rule 17-4.070(3), F.A.C.].

PERMITTEE:

Key West City Electric System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AC44-221256
Date of Issue: March 18, 1993
Expiration Date: March 18, 1994

SPECIFIC CONDITIONS:

16. KWCES shall take all reasonable precautions to prevent emissions of unconfined particulate matter. [Rule 17-296.310(3), F.A.C.] *IN TV-1*

17. ~~This construction/modification permit might have been subject to the new source review (NSR) requirements of Rule 17-212.400, F.A.C. if the federally enforceable limits for NOx emissions had been relaxed any further, or if the federally enforceable hours of operation limit had been relaxed.~~ *If KWCES requests permittee relaxation of any federally enforceable limits, then the permittee Department will determine whether the NSR requirements of Rule 17-212.400, F.A.C. shall apply as though this permit had not been issued.* *The construction AC 44-221256*
[Rule 17-212.400(2)(g), F.A.C.]

The permittee
The permittee
18. Best Available Control Technology (BACT) will be re-evaluated if ~~KWCES~~ requests an increase in or exceeds the permitted hours of operation. Selective Catalytic Reduction for NOx control will be required at a minimum for BACT if deemed technologically feasible. In no event shall the BACT control installation and compliance testing occur later than 30 months from the date that ~~KWCES~~ requested to exceed the permitted hours of operation or actually exceeded the permitted hours of operation. [Permit AC 44-152197] *and AC 44-221256*

19. The three existing 16.5 MW steam units at the Key West Plant shall not operate. [Permit AC 44-152197] *and AC 44-221256*

20. Issuance of this permit does not relieve KWCES from complying with applicable emission limiting standards ~~or other requirements~~ of Rules 17-210, 17-212, 17-252, 17-272, 17-273, 17-275, 17-296, and 17-297, F.A.C., or any other requirements under federal, state, or local law. Future regulations may impact this facility at some future date. KWCES shall comply with any applicable future regulations when they become effective.
[Rule 17-210.300, F.A.C.]

PERMITTEE:

Key West City Electric
System (KWCES)

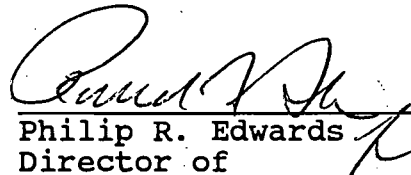
I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AC44-221256
Date of Issue: March 18, 1993
Expiration Date: March 18, 1994

SPECIFIC CONDITIONS:

Note: In the event of an emergency the permittee shall contact the Department by calling (904) 488-1320. During normal business hours, the permittee shall call (813)332-6975.

Issued this 18th day of March, 1993.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION



Philip R. Edwards
Director of
District Management

PRE/GAM/jw

10 Pages Attached

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

NOTICE OF PERMITS

March 18, 1993

FILE

CERTIFIED MAIL #P 360 290 511
RETURN RECEIPT REQUESTED

In the Matter of Two
Applications for Permits by:

Mr. Robert R. Padron, Manager
Key West City Electric System
1006 James Street
Key West, FL 33041

DER File Nos. AC44-221256
and AO44-207419
OGC Case No. 92-1471
Monroe County - AP

Enclosed are (a) modified construction permit number AC44-221256 and (b) operation permit number AO44-207419, for the two diesel generators located at the Stock Island Power Plant on Stock Island in Monroe County, issued pursuant to Section(s) 403.087, Florida Statutes.

Any party to these Orders (permits) has the right to seek judicial review of the permits pursuant to Section 120.68, Florida Statutes (F.S.), by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; 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 of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Fort Myers, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Philip R. Edwards
Director of
District Management
South District Office
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901-2896
(813) 332-6975



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:

Key West City Electric
System
1006 James Street
Key West, Florida 33041

Permit Number: **AC 44-152197**
PSD-FL-135

Expiration Date: April 1, 1991
County: Monroe
Latitude/Longitude: 24°33'49"N
81°44'03"W

Project: **Two Diesel Generators**

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 drawing(s), 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 two Fairbanks Morse diesel generators, each combusting about 700 gals/hr No. 2 fuel oil, 100 MMBtu/hr heat input, generating almost 10-MW of electricity, at the existing Stock Island plant in Monroe County, Florida.

The UTM coordinates of the facility are Zone 17, 425 km East and 2716 km North. The Source Classification Code for the diesel generators is 2-01-001-02.

Construction shall be in accordance with the permit application and plans, documents, and reference material submitted unless otherwise stated herein.

Attachments:

1. Key West's (KW) application received July 15, 1988.
2. DER's letter of incompleteness dated August 11, 1988.
3. RWB's letter received August 24, 1988.
4. RWB's letter received September 20, 1988.
5. DER's letter dated September 21, 1988.
6. RWB's letter received September 23, 1988.
7. EPA's letter dated September 29, 1988.
8. NPS's letter dated October 11, 1988.
9. KW's letter received November 22, 1988.
10. KW's letter received December 15, 1988.
11. RWB's letter received January 18, 1989.
12. RWB's letter received February 10, 1989.
13. RWB's letter received March 2, 1989.
14. RWB's letter received March 6, 1989.

PERMITTEE:

Key West City Electric System

Permit Number: AC 44-152197

PSD-FL-135

Expiration Date: April 1, 1991

Attachments continued:

15. DER's Preliminary Determination dated March 21, 1989.
16. EPA's letter dated April 19, 1989.
17. KW's letter dated April 25, 1989.
18. KW's letter dated May 24, 1989.
19. DER's Final Determination dated June 2, 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:

Key West City Electric System

Permit Number: AC 44-152197
PSD-FL-135

Expiration Date: April 1, 1991

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 non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

PERMITTEE:

Key West City Electric System

Permit Number: AC 44-152197

PSD-FL-135

Expiration Date: April 1, 1991

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:

- (x) Determination of Best Available Control Technology (BACT)
- (x) Determination of Prevention of Significant Deterioration (PSD)
- () 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:

Key West City Electric System

Permit Number: AC 44-152197

PSD-FL-135

Expiration Date: April 1, 1991

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:

Both diesel generators combined together
1. ~~The facility~~ shall not operate for more than 1870 full load equivalent hours per year (total of 3740 full load equivalent engine hours). The BACT will be re-evaluated at the time the permittee requests an increase in or exceeds the permitted hours of operation (see Specific Condition 10). Selective Catalytic Reduction for NO_x control will be required at a minimum for BACT if deemed technologically feasible. In no event shall the BACT control installation and compliance testing occur later than thirty (30) months from the date that the permittee requested or exceeded the permitted hours of operation.

2. Only No. 2 fuel oil with a maximum of 0.5% sulfur content shall be fired in the engines.

3. The maximum heat input to each engine shall not exceed 100 MMBtu/hr (approx. 700 gals/hr). The derated electrical output (with timing retardation) is expected to be about 8.8 MW for each unit.

PERMITTEE:
Key West City Electric System

Permit Number: AC 44-152197
PSD-FL-135
Expiration Date: April 1, 1991

SPECIFIC CONDITIONS:

4. The maximum allowable emissions from the project, in accordance with the attached BACT determination, shall not exceed:

Pollutant	Basis	Maximum Allowable Emissions	
		Per Engine lb/hr	Facility Total TPY
PM/PM ₁₀ *	0.10 lb/MMBtu	19.7	37.4
NOx	6 g/hp-hr	155	290
SO ₂	0.5% S oil	50.4	96
CO *	2 g/hp-hr	51.7	98
VOC *	1 g/hp-hr	25.8	50
Be	-	0.00054	0.001

* PM₁₀, CO, and VOC emission limitations are maximum allowables and are subject to change based on stack testing results.

The facility may fire up to 2.6 million gallons per year of diesel oil, or operate up to 1870 full load equivalent hours annually (total of 3740 full load equivalent engine hours), as long as the total NOx emissions do not exceed 290 TPY. The fuel usage, NOx emissions, and hours of operation will be based on a 365-day rolling average.

Visible emissions (VE) shall not exceed 20% opacity. This limit is subject to change after testing.

5. Initial (I) and annual (A) compliance tests shall be performed using EPA Methods in accordance with 40 CFR 60 Appendix A, 1987 version:

- a. EPA Method 5 for PM (I,A)
- b. EPA Method 6 for SO₂, or ASTM D 2880-71 for sulfur in oil (I,A)
- c. EPA Method 9 for VE (I,A)
- d. EPA Method 10 for CO (I)
- e. EPA Method 20 for NOx (I,A)
- f. EPA Method 25 for VOC (I)
- g. EPA Method 104 for Be, or EPA SW846 Method 3040, 7090/7091 (I)

Other DER approved test methods may be used only after Departmental approval.

Continuous emission monitors shall be installed, calibrated, maintained and operated for opacity and NOx.

6. The project shall comply with all the applicable requirements of Chapters 17-2 and 17-4 of the Florida Administrative Code (F.A.C.).

PERMITTEE:

Key West City Electric System

Permit Number: AC 44-152197
PSD-FL-135

Expiration Date: April 1, 1991

SPECIFIC CONDITIONS:

7. DER's South Florida District office shall be notified in writing a minimum of 15 days prior to source testing. Written reports of the test results shall be submitted to the district office within 45 days of test completion.

8. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).


9. An application for an operation permit must be submitted to the South Florida District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

10. Any change in the method of operation, fuels, equipment or operating hours shall be submitted for approval to the South Florida District office.

11. The three existing 16.5 MW steam units at the Key West Plant shall be shut down and operation permits shall be surrendered for cancellation when operation permits are issued for the two new engines authorized by this permit.

Issued this 5 day
of June, 1989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


Dale Twachtmann, Secretary

ATTACHMENTS AVAILABLE UPON REQUEST



Florida Department of Environmental Regulation

South District • 2269 Bay Street • Fort Myers, Florida 33901-2896 • 813-332-2667

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

Philip Edwards, Deputy Assistant Secretary

PERMITTEE: Utility Board of the City
of Key West
Post Office Drawer 6100
Key West, Florida 33040

I.D. Number: 52FIM44000302/03/04
Permit/Certification Number: **A044-175804**
Date of Issue: February 20, 1990
Expiration Date: February 20, 1995
County: Monroe
Latitude/Longitude:
24° 33' 49" N
81° 44' 03" W
Section/Township/Range: 35/67S/25E
Project: Diesel Peaking Units

This permit is issued under the provisions of Chapter(s) 403.087, 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(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

3x

Operation of three 2 MW capacity diesel peaking generators fired with number 2 fuel oil.

Facility located off Front Street, Stock Island, Florida.

23 mmBtu/hr

Startup

~~3/1/65~~
3/1/65

PERMITTEE: Utility Board of the
City of Key West

I.D. Number: 52FTM44000302/03/04
Permit/Certification Number: A044-175804
Date of Issue: February 20, 1990
Expiration Date: February 20, 1995

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.087(6) and 403.722(5), F.S. the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or 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, 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 and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

PERMITTEE: Utility Board of the
City of Key West

I.D. Number: 52FTM44000302/03/04
Permit/Certification Number: A044-175804
Date of Issue: February 20, 1990
Expiration Date: February 20, 1995

GENERAL CONDITIONS:

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

a. Have access to and copy any records that must be kept under conditions of the permit;

b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

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

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

10. The permittee agrees to comply with changes in Department rules and 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 Rule 17-4.120 and 17-30.300, 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.

PERMITTEE: Utility Board of the
City of Key West

I.D. Number: 52FIM44000302/03/04
Permit/Certification Number: AO44-175804
Date of Issue: February 20, 1990
Expiration Date: February 20, 1995

GENERAL CONDITIONS:

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

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

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

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least 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 date analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used;
6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware 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.

PERMITTEE: Utility Board of the
City of Key West

I.D. Number: 52PIM44000302/03/04
Permit/Certification Number: A044-175804
Date of Issue: February 20, 1990
Expiration Date: February 20, 1995

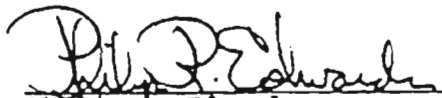
SPECIFIC CONDITIONS:

1. For each unit, visible emissions tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method Nine as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted once per year commencing before June 30, 1990. Results shall be submitted to the Department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing.
2. Visible emissions shall not exceed 20% opacity in accordance with the provisions of Florida Administrative Code Rule 17-2.610(2).
3. An annual operation report (DER Form 17-1.202(6) attached) shall be submitted by March 1st each year. The attached form shall be reproduced by the permittee and used for future annual submittals.
4. All fugitive dust generated at this site shall be adequately controlled.
5. Proper oil flow meters shall be installed to monitor the fuel oil being consumed.
6. Notification and reporting requirements of this permit shall also be sent to the DER - Marathon Office.
7. There shall be no discharges of liquid effluents or contaminated runoff from the plant site.

Note: In the event of an emergency the permittee shall contact the Department by calling (904)488-1320. During normal business hours, the permittee shall call (813)332-2667.

Issued this 20th day of February, 1990

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION



Philip R. Edwards
Deputy Assistant Secretary

PRE/PRC/js

Pages Attached

Do they surrender
to

AO permit?

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official :

Name : ~~Leo Carey~~ *Larry Thompson*
Title : Manager

2. Owner or Authorized Representative or Responsible Official Mailing Address :

Organization/Firm : Utility Board of the City of Key West
Street Address : P.O. Drawer 6100
City : Key West
State : FL Zip Code : 33041-6100

3. Owner/Authorized Representative or Responsible Official Telephone Numbers :

Telephone : (305)~~294-5272~~ ²⁹⁵⁻¹⁰⁰¹ Fax : (305)~~294-3685~~ ²⁹⁵⁻¹⁰⁰⁵

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions units.*

Leo A. Carey
Signature

JUNE 7, 1996
Date

* Attach letter of authorization if not currently on file.

Ivan Clark

303 299 5247

4. Professional Engineer Statement :

I, the undersigned, hereby certified, except as particularly noted herein, that :*

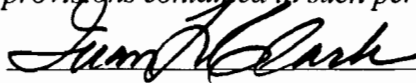
(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

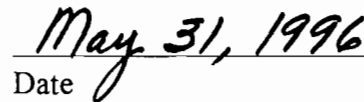
If the purpose of this application is to obtain a Title V source air operation permit (check here [] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.



Signature



Date

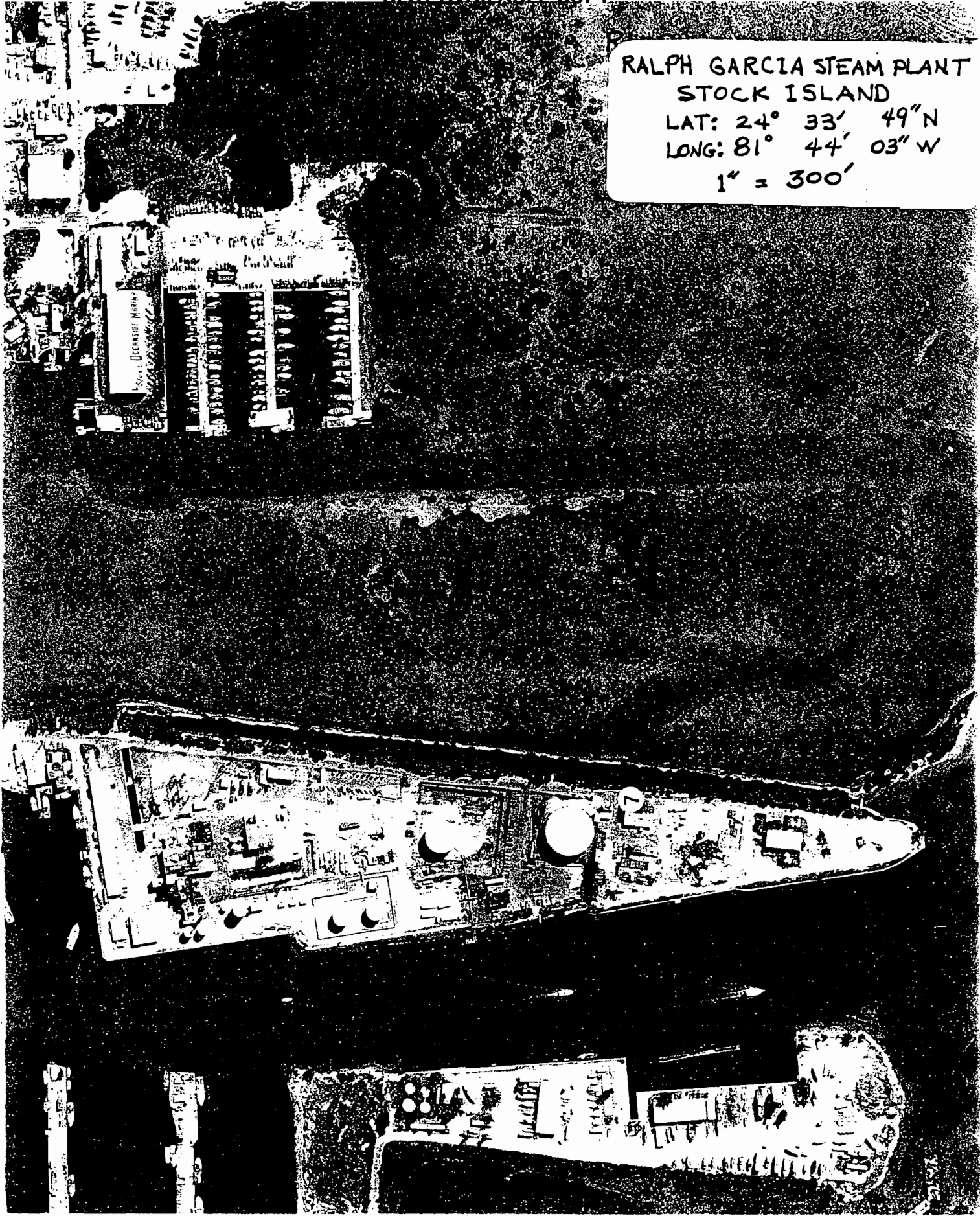
* Attach any exception to certification statement.

I. Part 6 - 1

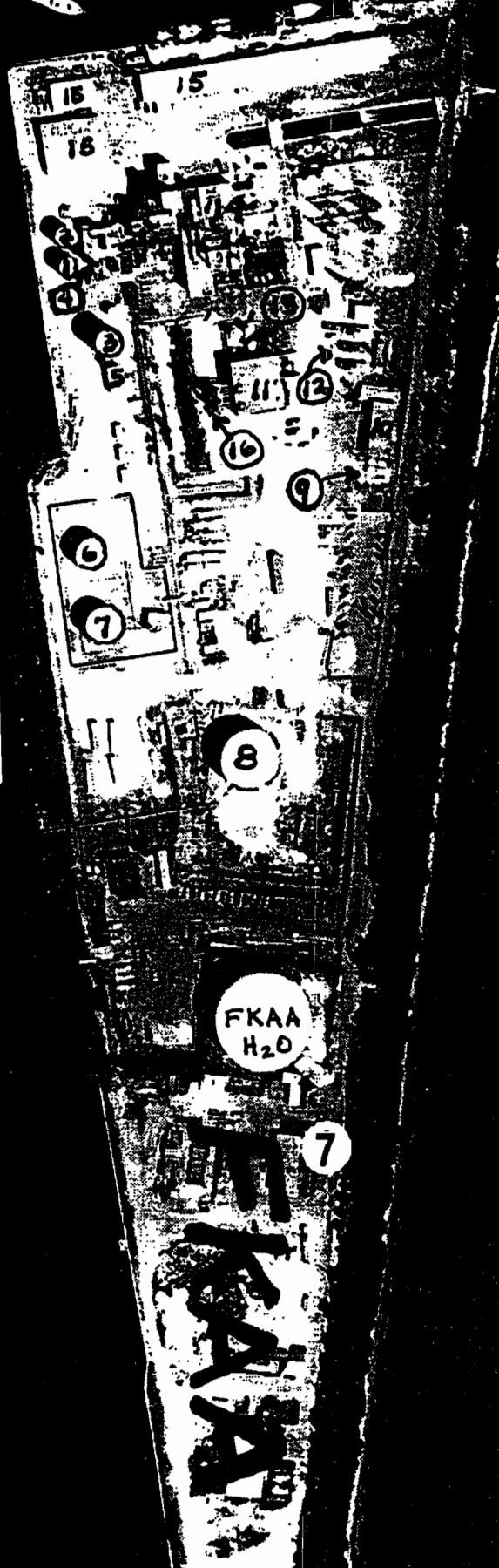
DEP Form No. 62-210.900(1) - Form

ATTACHMENTS AND FIGURES

RALPH GARCIA STEAM PLANT
STOCK ISLAND
LAT: 24° 33' 49" N
LONG: 81° 44' 03" W
1" = 300'



14. Steam Power
Plant,
15. Warehouse.
16. MSD Stack.



- 1. #1 Demin. Water Tank.
- 2. #2 Demin. Water Tank.
- 3. #3 City Water Tank.
- 4. Steam plant Stock.
- 5. Fire Protection Pump House.
- 6. #2 Diesel Fuel Tank (as)
- 7. #1 Diesel Fuel Tank.
- 8. Bunker "C" Tank.
- 9. Convault Tanks (4)
- 10. Garage.
- 11. MSD Building
- 12. 1, 2, and 3 High speed Diesels.
- 13. #1 + #2 Diesel Day Tanks, Lube Oil Tank and Retention Tank.

PROCESS FLOW DIAGRAM

STOCK ISLAND STEAM UNIT #1

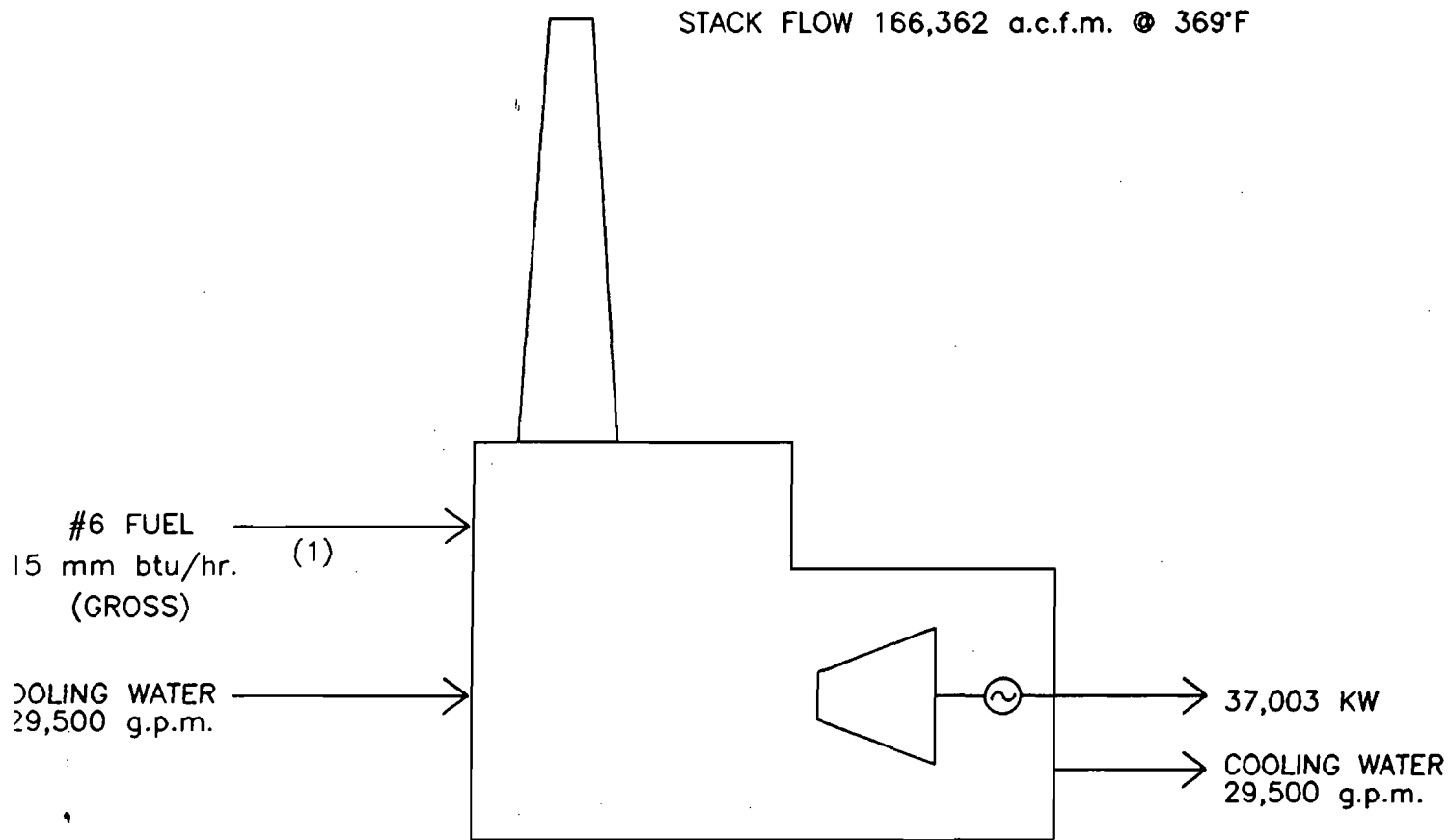


Figure 3

BASED ON NET HEAT RATE OF 11,130 BTU/KWH, NET POWER RATE OF 35,153 KW AND A 5% AUXILIARY POWER REQUIREMENT FOR THE PLANT.

CITY ELECTRIC SYSTEM
KEY WEST, FLORIDA
DATE: 5-15-95

PROCESS FLOW DIAGRAM

STOCK ISLAND HIGH SPEED DIESEL UNITS 1, 2 & 3.

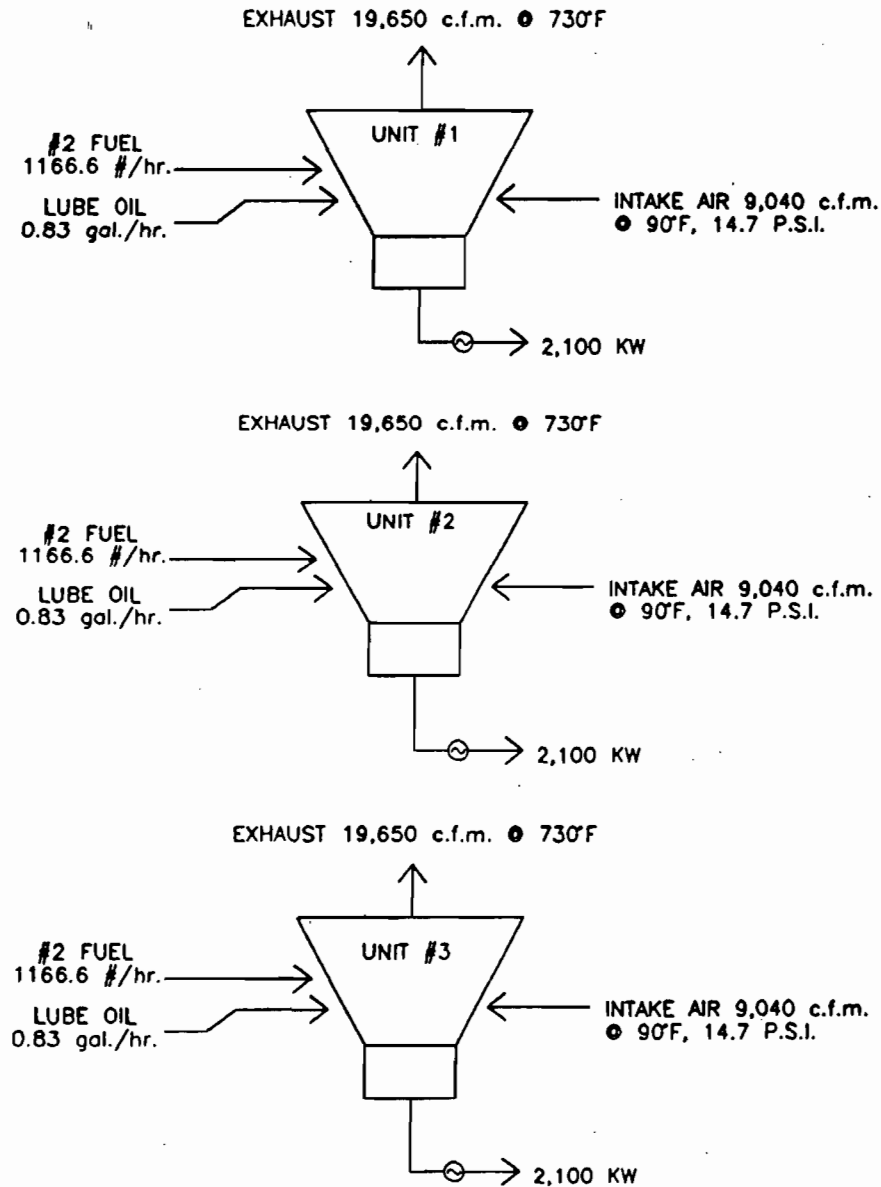


Figure 4

CITY ELECTRIC SYSTEM
KEY WEST, FLORIDA
DATE: 5-15-95

PROCESS FLOW DIAGRAM

STOCK ISLAND MEDIUM SPEED DIESEL UNITS 1 & 2

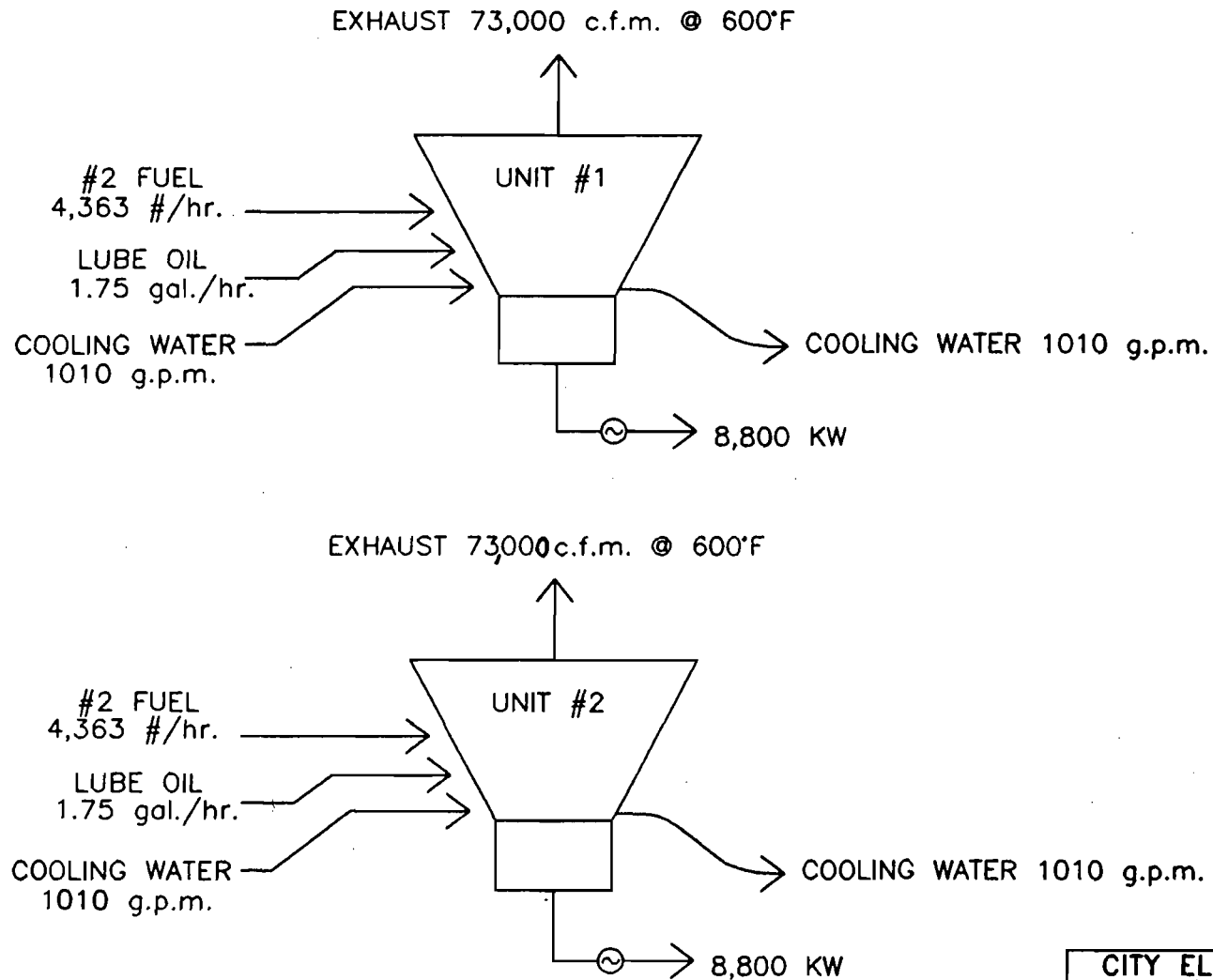


Figure 5

CITY ELECTRIC SYSTEM
KEY WEST, FLORIDA
DATE: 5-15-95

PROCESS FLOW DIAGRAM

STOCK ISLAND COMBUSTION TURBINE #1

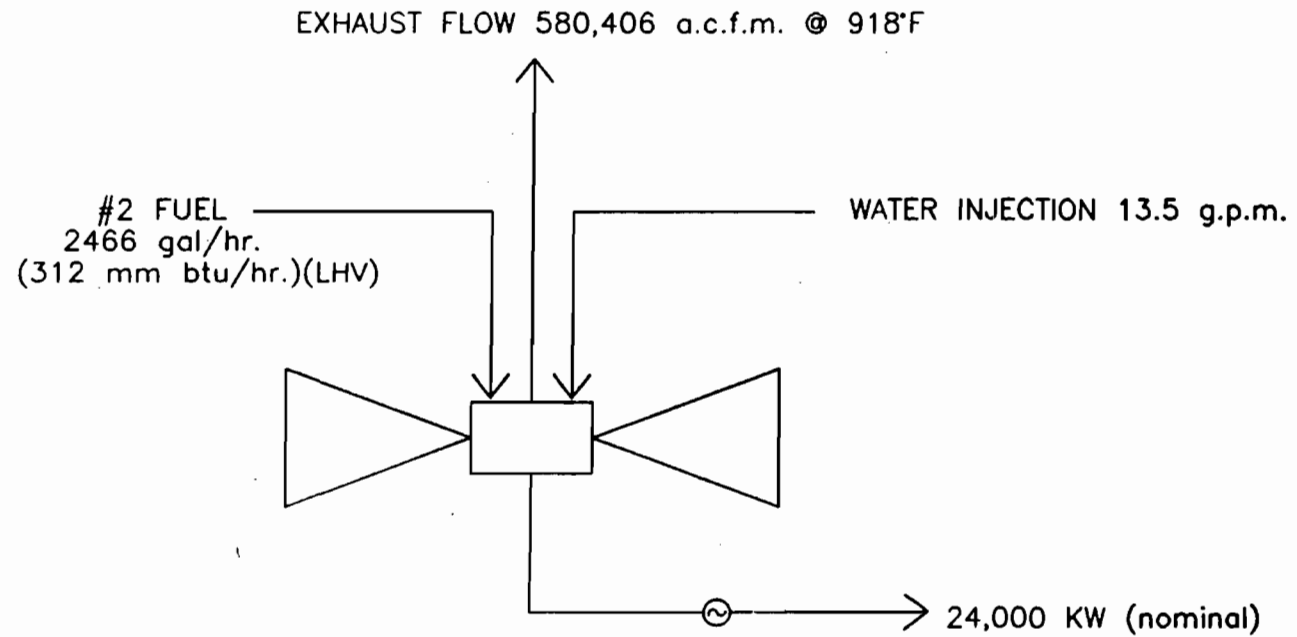


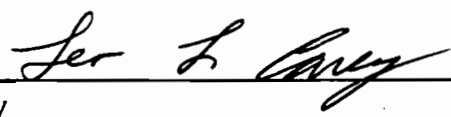
Figure 6

CITY ELECTRIC SYSTEM
KEY WEST, FLORIDA
DATE: 5-15-95

Attachment A

COMPLIANCE STATEMENT

"I, the undersigned, am the responsible official as defined in Chapter 62-213, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete."



Leo Carey
Manager

Attachment B

**FUEL ANALYSES FOR NO. 6 FUEL OIL,
NO. 2 FUEL OIL, AND PROPANE**

CITY ELECTRIC SYSTEM MATERIAL RECEIPT

Received From: Coastal Fuels & Marketing, Inc.
Delivery at: Stock Island Power Plant

Date: 10/19/94

Item	Quantity	Description as listed on Purchase Order
------	----------	---

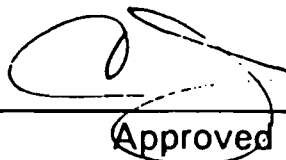
Oil #6

Barge: #25

	Barrels:	Gallons:
All Tanks	9,142.58	383,988
Less	395.16	16,597
Total Received	8,747.42	367,391

API: 10.2

Sulfur: 1.87%



Approved Department Head

Carl Jensen, Jr. Production Manager

PROPANE

PRP

<p>Common Synonyms Dimethylmethane</p> <p>Liquefied compressed gas Colorless Odorless-may have skunk odor added</p> <p>Liquid floats and boils on water. Flammable visible vapor cloud is produced.</p>	
<p>Stop discharge if possible. Keep people away. Shut off ignition sources and call fire department. Stay upwind and use water spray to "knock down" vapor. Notify local health and pollution control agencies.</p>	
Fire	<p>FLAMMABLE. Containers may explode in fire. Flashback along vapor trail may occur. Vapor may explode if ignited in an enclosed area. Stop flow of gas if possible. Cool exposed containers and protect men effecting shut-off with water. Let fire burn.</p>
Exposure	<p>CALL FOR MEDICAL AID</p> <p>VAPOR Not irritating to eyes, nose or throat. If inhaled, will cause dizziness, difficult breathing, or loss of consciousness. Move to fresh air. If breathing has stopped, give artificial respiration if breathing is difficult, give oxygen.</p> <p>LIQUID May cause frostbite. Flush affected areas with plenty of water. DO NOT RUB AFFECTED AREAS</p>
Water Pollution	Not harmful to aquatic life.
<p>1. RESPONSE TO DISCHARGE (See Response Methods Handbook) Issue warning-high flammability Restrict access Evacuate area</p>	<p>2. LABEL</p> <p>2.1 Category: Flammable gas 2.2 Class: 2</p>
<p>3. CHEMICAL DESIGNATIONS</p> <p>3.1 CG Compatibility Class: Paraffin 3.2 Formula: $CH_3CH_2CH_3$ 3.3 IMO/IUN Designation: 2.0/1978 3.4 DOT ID No.: 1978 3.5 CAS Registry No.: 74-98-6</p>	<p>4. OBSERVABLE CHARACTERISTICS</p> <p>4.1 Physical State (as shipped): Liquefied compressed gas 4.2 Color: Colorless 4.3 Odor: Faint gassy</p>
<p>5. HEALTH HAZARDS</p> <p>5.1 Personal Protective Equipment: Self-contained breathing apparatus for high concentrations of gas. 5.2 Symptoms Following Exposure: Vaporizing liquid may cause frostbite. Concentrations in air greater than 10% cause dizziness in a few minutes. 1% concentrations give the same effect in 10 min. High concentrations cause asphyxiation. 5.3 Treatment of Exposure: Remove to open air. If victim is overcome by gas, apply artificial respiration. Guard against self-injury if confused. 5.4 Threshold Limit Value: Asphyxiant 5.5 Short Term Inhalation Limits: Data not available 5.6 Toxicity by Ingestion: Not pertinent 5.7 Late Toxicity: None 5.8 Vapor (Gas) Irritant Characteristics: Vapors are nonirritating to the eyes and throat. 5.9 Liquid or Solid Irritant Characteristics: No appreciable hazard. Practically harmless to the skin because it evaporates quickly. 5.10 Odor Threshold: 5,000-20,000 ppm 5.11 IDLN Value: 20,000 ppm</p>	

<p>6. FIRE HAZARDS</p> <p>6.1 Flash Point: -158°F C.C. 6.2 Flammable Limits in Air: 2.1%-9.5% 6.3 Fire Extinguishing Agents: Stop flow of gas. For small fires use dry chemicals. Cool adjacent areas with water spray. 6.4 Fire Extinguishing Agents Not to be Used: Water 6.5 Special Hazards of Combustion Products: Not pertinent 6.6 Behavior in Fire: Containers may explode. Vapor is heavier than air and may travel a long distance to a source of ignition and flash back. 6.7 Ignition Temperature: 842°F 6.8 Electrical Hazard: Class I, Group D 6.9 Burning Rate: 8.2 mm/min. 6.10 Adiabatic Flame Temperature: 2419. (Est.)</p> <p style="text-align: right;">(Continued)</p>	<p>10. HAZARD ASSESSMENT CODE (See Hazard Assessment Handbook) A-B-C-D-E-F-G</p>																																				
<p>7. CHEMICAL REACTIVITY</p> <p>7.1 Reactivity With Water: No reaction 7.2 Reactivity With Common Materials: No reaction 7.3 Stability During Transport: Stable 7.4 Neutralizing Agents for Acids and Caustics: Not pertinent 7.5 Polymerization: Not pertinent 7.6 Inhibitor of Polymerization: Not pertinent 7.7 Molar Ratio (Reactant to Product): Data not available 7.8 Reactivity Group: 31</p>	<p>11. HAZARD CLASSIFICATIONS</p> <p>11.1 Code of Federal Regulations: Flammable gas 11.2 HAS Hazard Rating for Bulk Water Transportation:</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Rating</th> </tr> </thead> <tbody> <tr> <td>Fire</td> <td>4</td> </tr> <tr> <td>Health</td> <td></td> </tr> <tr> <td>Vapor Irritant</td> <td>0</td> </tr> <tr> <td>Liquid or Solid Irritant</td> <td>0</td> </tr> <tr> <td>Poisons</td> <td>0</td> </tr> <tr> <td>Water Pollution</td> <td></td> </tr> <tr> <td>Human Toxicity</td> <td>0</td> </tr> <tr> <td>Aquatic Toxicity</td> <td>0</td> </tr> <tr> <td>Aesthetic Effect</td> <td>0</td> </tr> <tr> <td>Reactivity</td> <td></td> </tr> <tr> <td>Other Chemicals</td> <td>0</td> </tr> <tr> <td>Water</td> <td>0</td> </tr> <tr> <td>Self Reaction</td> <td>0</td> </tr> </tbody> </table> <p>11.3 NFPA Hazard Classification:</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Classification</th> </tr> </thead> <tbody> <tr> <td>Health Hazard (Blue)</td> <td>1</td> </tr> <tr> <td>Flammability (Red)</td> <td>4</td> </tr> <tr> <td>Reactivity (Yellow)</td> <td>0</td> </tr> </tbody> </table>	Category	Rating	Fire	4	Health		Vapor Irritant	0	Liquid or Solid Irritant	0	Poisons	0	Water Pollution		Human Toxicity	0	Aquatic Toxicity	0	Aesthetic Effect	0	Reactivity		Other Chemicals	0	Water	0	Self Reaction	0	Category	Classification	Health Hazard (Blue)	1	Flammability (Red)	4	Reactivity (Yellow)	0
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Reactivity (Yellow)	0																																				
<p>8. WATER POLLUTION</p> <p>8.1 Aquatic Toxicity: None 8.2 Waterfowl Toxicity: None 8.3 Biological Oxygen Demand (BOD): None 8.4 Food Chain Concentration Potential: None</p>	<p>12. PHYSICAL AND CHEMICAL PROPERTIES</p> <p>12.1 Physical State at 15°C and 1 atm: Gas 12.2 Molecular Weight: 44.09 12.3 Boiling Point at 1 atm: $-43.8^{\circ}\text{F} = -42.1^{\circ}\text{C} = 231.1^{\circ}\text{K}$ 12.4 Freezing Point: $-305.8^{\circ}\text{F} = -187.7^{\circ}\text{C} = 85.5^{\circ}\text{K}$ 12.5 Critical Temperature: $208.0^{\circ}\text{F} = 98.6^{\circ}\text{C} = 368.8^{\circ}\text{K}$ 12.6 Critical Pressure: 616.5 psia = 41.94 atm = 4.249 MPa/m² 12.7 Specific Gravity: 0.590 at -50°C (liquid) 12.8 Liquid Surface Tension: 16 dynes/cm = 0.016 N/m at -47°C 12.9 Liquid Water Interfacial Tension: (est.) 50 dynes/cm = 0.05 N/m at -50°C 12.10 Vapor (Gas) Specific Gravity: 1.5 12.11 Ratio of Specific Heats of Vapor (Gas): 1.130 12.12 Latent Heat of Vaporization: 183.2 Btu/lb = 101.6 cal/g = 4.262×10^4 J/kg 12.13 Heat of Combustion: $-19,782$ Btu/lb = $-10,990$ cal/g = -460.13×10^4 J/kg 12.14 Heat of Decomposition: Not pertinent 12.15 Heat of Solution: Not pertinent 12.16 Heat of Polymerization: Not pertinent 12.25 Heat of Fusion: Data not available 12.26 Limiting Value: Data not available 12.27 Reid Vapor Pressure: 190 psia</p>																																				
<p>9. SHIPPING INFORMATION</p> <p>9.1 Grades of Purity: Research: instrument, or Pure: 99.25 + % Technical: 97.50 % 9.2 Storage Temperature: Ambient 9.3 Inert Atmosphere: No requirement 9.4 Venting: Safety relief</p>	<p>6. FIRE HAZARDS (Continued)</p> <p>6.11 Stoichiometric Air to Fuel Ratio: 15.60 (Est.) 6.12 Flame Temperature: Data not available</p>																																				

Attachment C

DESCRIPTION OF CONTROL EQUIPMENT

ON UNITS ID 001, 005, 006, AND

UNKNOWN (GAS TURBINE)

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Unit ID 001 - Ralph Garcia Steam Generator

The air pollution control associated with the boiler consists of a multiple cyclone for particulate emissions reduction. Design details and manufacturer guarantees for control efficiency for the multiple cyclone are unavailable. The control efficiency of the multiple cyclone is believed to be sufficient for the boiler to meet current applicable particulate emissions limitations.

Units ID 005 and 006 - Medium Speed Diesels

The air pollution control associated with the MSDs consists of ignition timing retard for NO_x emissions reduction. Design details are unavailable. The manufacturer's guarantee for NO_x emissions for each unit is 6 grams/hp-hr. This level is sufficient to meet current NO_x permit limitations.

Unit ID Unknown - Gas Turbine

The air pollution control associated with the gas turbine consists of water injection for NO_x emissions reduction. Design details and manufacturer guarantees for control efficiency for the water injection system are unavailable. The control efficiency of the water injection system is believed to be sufficient for the gas turbine to meet NO_x emissions limits proposed in the PSD application submitted in May 1993 for relocation of the gas turbine to the Stock Island Power Plant. The PSD application is currently pending approval.

Attachment D

DESCRIPTION OF STACK SAMPLING FACILITIES

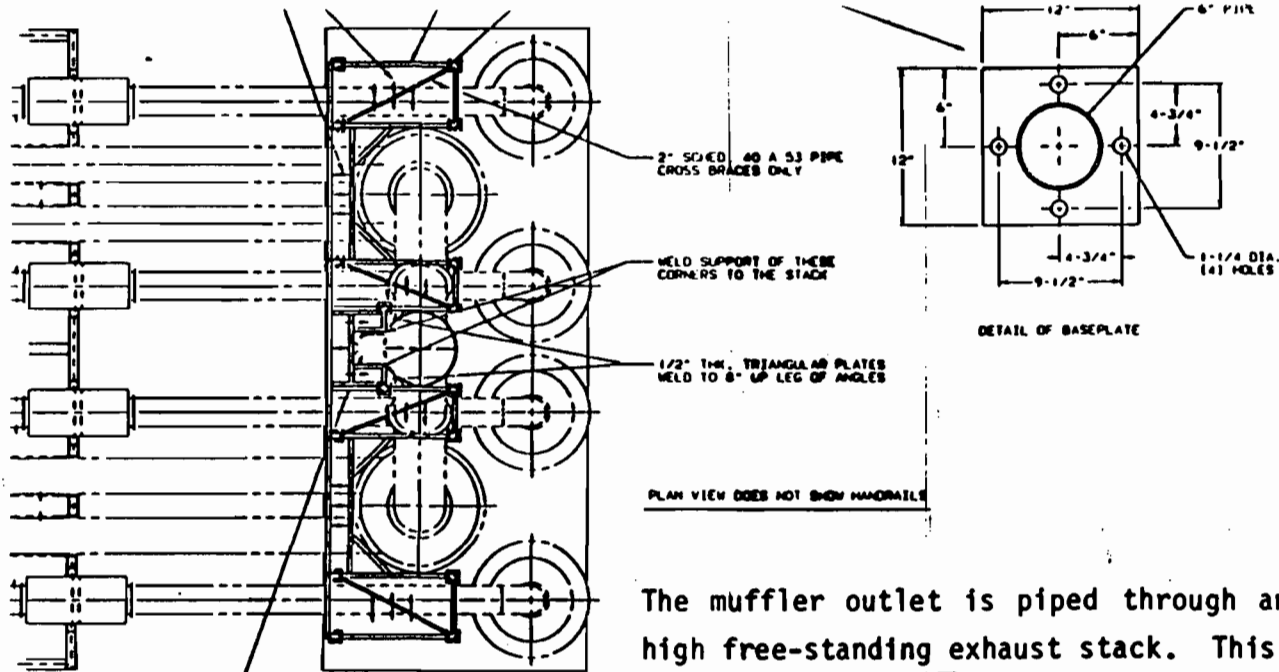
FOR UNITS ID 001, 005, 006, AND

UNKNOWN (GAS TURBINE)

STACK SAMPLING FACILITIES - R.G.S.P. BOILER

The Stack CEM Components include an elevated prefabricated shelter at the stack base containing analyzers, control units, and operator work station. Dual platforms at the 74-foot 6-inch level and at the 82-foot 6-inch level provide access to stack penetrations, nozzles, and associated ancillaries. The platform is accessible by caged ladder.

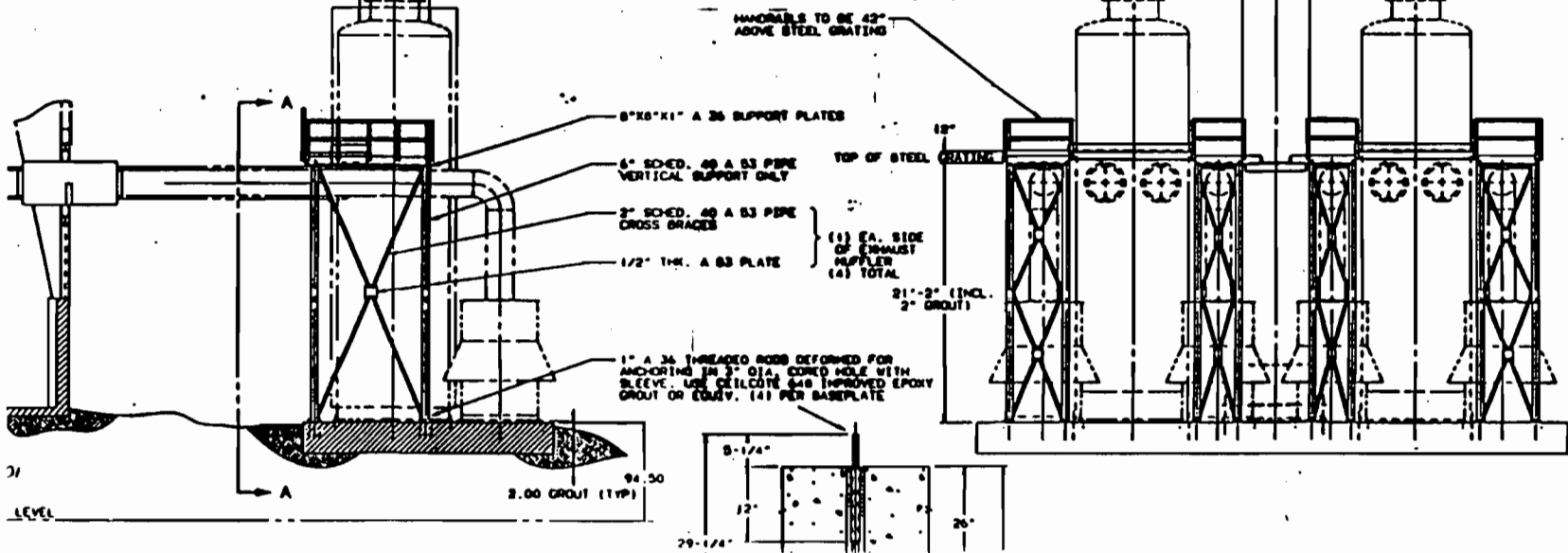
BEST AVAILABLE COPY



LADDER AND SAFETY CAGE
FURNISHED WITH STACK
MODIFY TO SUIT THIS
INSTALLATION

The muffler outlet is piped through an expansion joint into the 100 ft. high free-standing exhaust stack. This stack has a vertical splatter plate in the middle and upper sections and both engines exhaust into it, thus the gas is ducted to atmosphere in separate pipe sections.

Exhaust emissions are monitored/sampled in the outlet tube inside the exhaust muffler and a maintenance platform/ladder arrangement is provided for access to the equipment.



STACK SAMPLING FACILITIES - GAS TURBINE

A single port is located on the side of the gas turbine stack and is accessible from the top of the unit enclosure.

Attachment E

**PROCEDURES FOR
STARTUP AND SHUTDOWN**

STOCK ISLAND POWER PLANT

Procedures for Startup and Shutdown

The units are brought to load and put online as fast as possible in accordance with manufacturer instructions to minimize opacity emissions.

Attachment F

ADDITIONAL APPLICABLE REQUIREMENTS

Additional applicable requirements for the Ralph Garcia Steam Plant (001) and the associated compliance methods, recordkeeping, and monitoring requirements are as set forth in the current operating permit #A044-245479, attached.

Additional applicable requirements for the three 2-MW diesel peaking units (002, 003, 004) and the associated compliance methods, recordkeeping, and monitoring requirements are as set forth in the current operating permit #A044-175804, attached.

Additional applicable requirements for the two 8.8-MW medium speed diesels (005, 006) and the associated compliance methods, recordkeeping, and monitoring requirements are as set forth in the current operating permit #A044-207419 PSD-FL-135, attached.



Florida Department of Environmental Protection

Lawton Chiles
Governor

South District
2295 Victoria Avenue
Fort Myers, Florida 33901

Virginia B. Wetherell
Secretary

PERMITTEE:

City Electric System
Utility Board of the
City of Key West
P.O. Drawer 6100
Key West, FL 33041-6100

I.D. No. 52FTM44000301
Permit/Certification
Number: A044-245479
Date of Issue: May 3, 1994
Expiration Date: Apr. 25, 1999
County: Monroe
Latitude: 24° 33' 49" N
Longitude: 81° 44' 03" W
Section/Town/Range: 35/67S/25E
Project: Stock Island, Ralph
Garcia Steam Plant

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-296, 17-297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

For operation of the Stock Island Ralph Garcia Steam Plant (fossil fuel steam generator). This plant has a rated capacity of approximately 37 megawatts. It is fired with new/virgin #6 fuel oil. New/virgin #2 fuel oil is used for start up and boil down. The maximum heat input rate is 515.0 million (MM) Btu per hour.

Sulfur dioxide emissions are controlled by limiting the sulfur content of the fuel. Particulate matter emissions are controlled by a multiple cyclone dust collector.

The facility is located at 6900 Front Street, Stock Island, FL.

Reference Documents:

1. Application for renewal from the Utility Board of the City of Key West, City Electric System (CES) dated February 10, 1994, received on February 14, 1994.

PERMITTEE:
City Electric System
Utility Board of the
City of Key West

I.D. No. 52FTM44000301
Permit/Cert. No. AO44-245479
Date of Issue: May 3, 1994
Expiration Date: Apr. 25, 1999

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 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of 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 and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems

PERMITTEE:
City Electric System
Utility Board of the
City of Key West

I.D. No. 52FTM44000301
Permit/Cert. No. AO44-245479
Date of Issue: May 3, 1994
Expiration Date: Apr. 25, 1999

GENERAL CONDITIONS:

when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

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

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

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

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

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

PERMITTEE:
City Electric System
Utility Board of the
City of Key West

I.D. No. 52FTM44000301
Permit/Cart. No. AO44-245479
Date of Issue: May 3, 1994
Expiration Date: Apr. 25, 1999

GENERAL CONDITIONS:

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 Rule 17-4.120 and 17-730.300 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:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of compliance with state Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

PERMITTEE:
City Electric System
Utility Board of the
City of Key West

I.D. No. 52FTM44000301
Permit/Cert. No. A044-245479
Date of Issue: May 3, 1994
Expiration Date: Apr. 25, 1999

GENERAL CONDITIONS:

- (c) Records of monitoring information shall include:
1. the date, exact place, and time of sampling or measurements;
 2. the person responsible for performing the sampling or measurements;
 3. the dates analyses were performed;
 4. the person responsible for performing the analyses;
 5. the analytical techniques or methods used;
 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware 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.

PERMITTEE:
 City Electric System
 Utility Board of the
 City of Key West

I.D. No. 52FTM44000301
 Permit/Cert. No. AO44-245479
 Date of Issue: May 3, 1994
 Expiration Date: Apr. 25, 1999

SPECIFIC CONDITIONS:

(1) Heat Input Rate:

The heat input rate shall not exceed 515.0 MM Btu/hr (3,433 gallons per hour. [Requested in the permit application dated 03/21/84].

(2) Permitted Fuels:

The only fuels authorized to be burned in this source are, (a) new/virgin No. 6 residual fuel oil, or (b) new/virgin No. 2 fuel oil. The sulfur content of the fuel oil shall not exceed 2.5 percent by weight. [Requested in the permit application dated 02/10/94, and Rule 17-296.405(1)(c)1.j., F.A.C.].

(3) Source Emission Limiting Standards and Compliance Testing Requirements:

POLLUTANT	EMISSION (1) LIMITING STANDARDS.	TESTING FREQUENCY (2)			TEST (3) METHOD	
		ANNUAL	QUARTERLY	OTHER		
Particulate Matter	-Normal Operation	0.1 lb/MM Btu	X(6)	----	----	EPA Method 5 or 17 (4)
	-Sootblowing and Load Changing	0.3 lb/MM Btu (5) (Max 3 hrs in 24 hrs)	X	----	----	EPA Method 5 or 17 (4)
Sulfur Dioxide	2.75 lb/MM Btu	----	----	X		Fuel Analysis
Visible Emissions	-Normal Operation	20% Opacity, except that 40% is allowed for one two-minute period per hour.(6)	X(6)	----	----	DEP Method 9
	-Sootblowing and Load Changing	60% Opacity for(5) up to 3 hrs in 24 hrs, with up to four 6-minute periods of up to 100% if unit has an operational opacity CEM.	X	----	----	DEP Method 9

PERMITTEE:
City Electric System
Utility Board of the
City of Key West

I.D. No. 52FTM44000301
Permit/Cert. No. AO44-245479
Date of Issue: May 3, 1994
Expiration Date: Apr. 25, 1999

SPECIFIC CONDITIONS:

Notes for Specific Condition 3:

- (1) Rules 17-296.405(1) and 17-210.700(3), F.A.C.
- (2) Rule 17-297.340, F.A.C.
- (3) Rule 17-297.330, F.A.C.
- (4) EPA Method 17 may be used only if the stack gas exit temperature is less than 375°F.
- (5) Rule 17-210.700(3), F.A.C. Excess emissions are authorized only if (a) best operational practices to minimize emissions are adhered to, and (b) the duration of excess emissions is minimized.
- (6) Rule 17-296.405(1)(a), F.A.C.

(4) Compliance Testing Related Requirements:

(a) Notification - Rule 17-297.340(1)(i), F.A.C.

CES shall notify the South District Office and the Marathon Branch Office of the Department of Environmental Protection at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner.

(b) Conditions - Rule 17-4.070(3), F.A.C.

Compliance testing of particulate matter and visible emissions should be conducted while the source is firing No. 6 residual fuel oil within 90-100% of the maximum allowable rate of 515.0 MM Btu per hour. Particulate matter and visible emissions tests shall be conducted under both sootblowing and normal operating conditions.

Testing may be conducted with the source firing No. 6 residual fuel oil at less than 90 percent of the maximum allowable rate; however, if so, subsequent source operation is limited up to 110% of the average No. 6 residual fuel oil heat input rate during the test. Once the unit is so limited, then operation at higher No. 6 residual fuel oil heat input rates is allowed for no more than fifteen calendar days for purposes of additional compliance testing to regain the higher rates, not to exceed 515.0 MM Btu per hour on No. 6 residual fuel oil.

Operating at conditions during testing which do not reflect representative operating conditions may invalidate a test.

(c) Test Schedule - Rule 17-4.070(3), F.A.C.

Stack tests shall be conducted at least on an annual basis, on or within 60 days before the date October 31.

PERMITTEE:
City Electric System
Utility Board of the
City of Key West

I.D. No. 52FTM44000301
Permit/Cert. No. AO44-245479
Date of Issue: May 3, 1994
Expiration Date: Apr. 25, 1999

SPECIFIC CONDITIONS:

(d) Stack Sampling Facility - Rule 17-297.345, F.A.C.

The stack sampling facility must comply with Rule 17-297.345, F.A.C.

(e) Report Submittal - Rules 17-297.570 and 17-4.070(3), F.A.C.

Copies of the test results shall be submitted to the Department's South District Office and the Marathon Branch Office within 45 days after the last test run is completed. The test report shall provide the actual heat input rate and at least all of the information listed in Rule 17-297.570(3), F.A.C. Each test report shall also include a fuel oil analysis from a representative sample of the fuel oil burned during the test. Failure to submit any of the above information may invalidate the test.

(5) Recordkeeping to Document Compliance with the Sulfur Dioxide Emission Limit - Rule 17-4.070(3), F.A.C.

In order to document continuing compliance with the fuel oil sulfur limit, CES shall keep records of the sulfur content, in percent by weight, of all the fuel burned based on either vendor provided as-shipped analyses or on analyses of as-received samples. The records shall be maintained for a minimum of 2 years and shall be made available to the Department upon request. CES shall submit a copy of the fuel oil analysis for the fuel oil burned during each compliance test with the results from the test. [Rule 17-4.070(3), F.A.C.].

(6) Annual Operations Report (AOR):

On or before March 1 of each calendar year, a completed DEP Form 17-213.900(4), "Annual Operating Report for Air Pollutant Emitting Facility", shall be submitted to the Department's South District Office and Marathon Branch Office.

(7) Excess Emissions:

(a) Events - Rule 17-210.700, F.A.C.

Excess emissions resulting from start-up or shut-down are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions is minimized.

Excess emissions resulting from malfunction are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions is minimized but in no case exceeds two hours in any 24-hour period unless specifically authorized by the Department for longer duration.

PERMITTEE:
City Electric System
Utility Board of the
City of Key West

I.D. No. 52FTM44000301
Permit/Cert. No. AO44-245479
Date of Issue: May 3, 1994
Expiration Date: Apr. 25, 1999

SPECIFIC CONDITIONS:

Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction are prohibited.

(b) Notification - Rules 17-210.700(6) and 17-4.130, F.A.C.

In the event the permittee is temporarily unable to comply with any of the conditions of the permit, the permittee shall immediately notify the Department's South District Office and Marathon Branch Office. Notification shall be conducted in accordance with General Condition (8) of this permit. In case of excess emissions resulting from malfunctions, CES shall notify the Department's South District Office and Marathon Branch Office in accordance with Rule 17-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

(c) Quarterly Report Submittal - Rule 17-4.070(3), F.A.C.

CES shall submit to the Department's South District Office and Marathon Branch Office a written report of emissions in excess of the emission limiting standards as set forth in Rule 17-296.405, F.A.C., for each calendar quarter. The nature and cause of the excessive emissions shall be explained. The report shall state the cause, period of non-compliance, steps taken for corrective action, and steps taken to prevent recurrence. The Department shall also be notified when there are no exceedances for a quarter. This report does not relieve CES of the legal liability for violations. All relevant records shall be maintained on file for a period of at least two years. The report shall be submitted within 30 days following each calendar quarter.

(8) Objectionable Odors - Rule 17-296.320(2), F.A.C.

CES shall not discharge air pollutants which cause or contribute to an objectionable odor.

(9) Hours of Operation:

The hours of operation are not restricted.

(10) Notices and Reports:

CES shall send all notifications and reports required by this permit to (a) the South District Office of the Department in Fort Myers, and (b) the Marathon Branch Office of the Department in Marathon, FL.

PERMITTEE:
City Electric System
Utility Board of the
City of Key West

I.D. No. 52FTM44000301
Permit/Cert. No. AO44-245479
Date of Issue: May 3, 1994
Expiration Date: Apr. 25, 1999

SPECIFIC CONDITIONS:

(11) Special Compliance Tests - Rule 17-297.340(2), F.A.C.

If the Department of Environmental Protection, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard is being violated, then the Department of Environmental Protection may require CES to conduct compliance tests which identify the nature and quantity of pollutant emissions and to provide a report on the results of said tests.

(12) Other Requirements - Rule 17-210.300, F.A.C.

Issuance of this permit does not relieve CES from complying with applicable emission limiting standards or other requirements of Rules 17-210, 17-212, 17-252, 17-272, 17-273, 17-275, 17-296, and 17-297, F.A.C., or any other requirements under federal, state, or local law.

(13) Operation Permit Renewal - Rules 17-4.050(2) and 17-4.090(1), F.A.C.

In order to renew this operation permit, an application for renewal shall be submitted to the Department of Environmental Protection by February 24, 1999.

Note: In the event of an emergency the permittee shall contact the Department by calling (904) 488-1320. During normal business hours, the permittee shall call (813) 332-6975.

Issued this 3rd day of May, 1994.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

David M. Knowles

for Ronald D. Blackburn
Acting Director of
District Management

RDB/GM/gm

13 Pages Attached



Florida Department of Environmental Regulation

South District • 2269 Bay Street • Fort Myers, Florida 33901-2896 • 813-332-2667

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

Philip Edwards, Deputy Assistant Secretary

PERMITTEE: Utility Board of the City
of Key West
Post Office Drawer 6100
Key West, Florida 33040

I.D. Number: 52FTM44000302/03/04
Permit/Certification Number: 7A044-175804
Date of Issue: February 20, 1990
Expiration Date: February 20, 1995
County: Monroe
Latitude/Longitude:
24° 33' 49" N
81° 44' 03" W
Section/Township/Range: 35/67S/25E
Project: Diesel Peaking Units

This permit is issued under the provisions of Chapter(s) 403.087, 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(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

Operation of three 2 MW capacity diesel peaking generators fired with number 2 fuel oil.
Facility located off Front Street, Stock Island, Florida.

PERMITTEE: Utility Board of the
City of Key West

I.D. Number: 52FTM44000302/03/04
Permit/Certification Number: AO44-175804
Date of Issue: February 20, 1990
Expiration Date: February 20, 1995

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.087(6) and 403.722(5), F.S. the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or 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, 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 and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

PERMITTEE: Utility Board of the
City of Key West

I.D. Number: 52FDM44000302/03/04
Permit/Certification Number: AO44-175804
Date of Issue: February 20, 1990
Expiration Date: February 20, 1995

GENERAL CONDITIONS:

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - a. Have access to and copy any records that must be kept under conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - 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 Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Department rules and 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 Rule 17-4.120 and 17-30.300, 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.

PERMITTEE: Utility Board of the
City of Key West

I.D. Number: 52FTM44000302/03/04
Permit/Certification Number: A044-175804
Date of Issue: February 20, 1990
Expiration Date: February 20, 1995

GENERAL CONDITIONS:

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

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

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

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least 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 date analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used;
6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware 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.

PERMITTEE: Utility Board of the
City of Key West

I.D. Number: 52FTM44000302/03/04
Permit/Certification Number: A044-175804
Date of Issue: February 20, 1990
Expiration Date: February 20, 1995

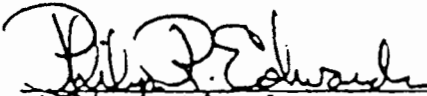
SPECIFIC CONDITIONS:

1. For each unit, visible emissions tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method Nine as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted once per year commencing before June 30, 1990. Results shall be submitted to the Department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing.
2. Visible emissions shall not exceed 20% opacity in accordance with the provisions of Florida Administrative Code Rule 17-2.610(2).
3. An annual operation report (DER Form 17-1.202(6) attached) shall be submitted by March 1st each year. The attached form shall be reproduced by the permittee and used for future annual submittals.
4. All fugitive dust generated at this site shall be adequately controlled.
5. Proper oil flow meters shall be installed to monitor the fuel oil being consumed.
6. Notification and reporting requirements of this permit shall also be sent to the DER - Marathon Office.
7. There shall be no discharges of liquid effluents or contaminated runoff from the plant site.

Note: In the event of an emergency the permittee shall contact the Department by calling (904)488-1320. During normal business hours, the permittee shall call (813)332-2667.

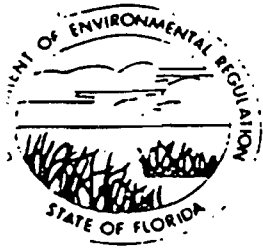
Issued this 20th day of February, 1990

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION


Philip R. Edwards
Deputy Assistant Secretary

PRE/PRC/jsw

Pages Attached



Florida Department of Environmental Regulation

South District

2295 Victoria Avenue

Fort Myers, Florida 33901

Lawton Chiles, Governor

Virginia B. Wetherell, Secretary

PERMITTEE:

Key West City Electric System
(KWCES)
1006 James Street
Key West, Florida 33041

I.D. No: 52FTM44000305 and
52FTM44000306

Permit/Certification

Number: AO44-207419 PSD-FL-135

Date of Issue: March 18, 1993

Expiration Date: December 31, 1997

County: Monroe

Latitude: 24° 33' 49" N

Longitude: 81° 44' 03" W

Section/Town/Range: 35/67S/25E

Project: Stock Island Diesel
Generators Units 1
and 2

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 17-296, 17-297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For operation of two 8.8 Megawatt electric (nominal) Fairbanks Morse diesel generators at the Stock Island Power Plant. The diesel generators burn No. 2 distillate fuel oil. The maximum heat input rate to each diesel generator is 85.4 million Btu per hour (606 gallons per hour).

Sulfur dioxide emissions are controlled by limiting the sulfur content of the No. 2 distillate fuel oil to 0.50% by weight. Nitrogen oxides emissions are controlled by timing retardation and limiting the hours of operation.

The facility is located on Front Street (extended), on Stock Island.

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305

and 52FTM44000306

Permit/Cert. No.: A044-207419

Date of Issue: March 18, 1993

Expiration Date: December 31, 1997

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 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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

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

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

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

- a. Have access to and copy any records that must be kept under 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 non-compliance, 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 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

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: A044-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

GENERAL CONDITIONS:

or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and 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. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 17-3.051, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
11. This permit is transferable only upon Department approval in accordance with F.A.C. Rules 17-4.120 and 17-30.300, 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 (BACT)
 - (b) Determination of Prevention of Significant Deterioration (PSD)
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

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

GENERAL CONDITIONS:

records of all data used to complete the application for 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;
6. the results of such analyses.

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

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305

and 52FTM44000306

Permit/Cert. No.: A044-207419

Date of Issue: March 18, 1993

Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

1. Nitrogen oxides (NOx) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

(A) 160.9 pounds per hour from each engine.

(B) 6.0 grams per (horsepower*hour) from each engine.

(C) 300.9 tons in any 12 consecutive month period for the combined sum total from both engines.

2. Sulfur dioxide (SO₂) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

(A) 43.63 pounds per hour from each engine.

(B) 81.59 tons in any 12 consecutive month period for the combined sum total from both engines.

3. Particulate matter (PM)/PM₁₀ emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

(A) 8.54 pounds per hour from each engine.

(B) 0.10 pound per million Btu heat input from each engine.

(C) 15.97 tons in any 12 consecutive month period for the combined sum total from both engines.

4. Carbon monoxide (CO) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

(A) 53.62 pounds per hour from each engine.

(B) 2.0 grams per (horsepower*hour) from each engine.

(C) 100.27 tons in any 12 consecutive month period for the combined sum total from both engines.

5. Volatile organic compound (VOC) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305

and 52FTM44000306

Permit/Cert. No.: A044-207419

Date of Issue: March 18, 1993

Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

(A) 26.81 pounds per hour from each engine.

(B) 1.0 gram per (horsepower*hour) from each engine.

(C) 50.13 tons in any 12 consecutive month period for the combined sum total from both engines.

6. Beryllium (Be) emissions shall not exceed any of the following limits [Rules 17-296.330, 17-212.400(1)(c), and 17-212.400(2)(d)4., F.A.C.]:

(A) 0.00054 pounds per hour from each engine.

(B) 2.0 pounds in any 12 consecutive month period for the combined sum total from both engines.

7. Visible emissions from each diesel generator shall not be equal to nor greater than 20% opacity.
[Rule 17-296.310(2)(a), F.A.C.].

8. KWCES shall not discharge air pollutants which cause or contribute to an objectionable odor. [Rule 17-296.320(2), F.A.C.].

9. The hours of operation for this facility shall not exceed 1,870 full load equivalent hours in any 12 consecutive month period (total of 3,740 full load equivalent engine hours).
[Rule 17-296.330, F.A.C.].

10. KWCES is permitted to burn only new/virgin No. 2 fuel oil with a maximum sulfur content of 0.50% by weight.
[Rule 17-296.330, F.A.C.].

11. The heat input rate to each diesel generator shall not exceed 85.4 million Btu per hour (606 gallons per hour).
[Requested by applicant].

12. The sum total consumption of fuel oil at this facility (both diesel generators combined) shall not exceed 2.27 million gallons in any 12 consecutive month period.
[Requested by applicant].

13. KWCES shall test each diesel generator for the following pollutants on an annual basis within 45 days of the date June 1. Each compliance test shall be conducted in accordance with 40 CFR 60, Appendix A, using the method indicated. [Permit AC44-152197].

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

- (A) NOx - EPA Method 20.
- (B) SO₂ - EPA Method 6 or ASTM D 2880-71 for sulfur in oil.
- (C) PM/PM₁₀ - EPA Method 5.
- (D) Visible emissions - EPA Method 9.

14. KWCES shall test each diesel generator for the following pollutants within one year prior to the expiration date of this permit. Each compliance test shall be conducted in accordance with 40 CFR 60, Appendix A, using the method indicated. [Rule 17-297.340(1)(c), F.A.C.].

- (A) CO - EPA Method 10.
- (B) VOC - EPA Method 25. (Note: On May 17, 1991, the Department denied a request to utilize EPA Method 25A; see ASP-91-F-01).
- (C) Be - EPA Method 104. (Note: On May 17, 1991, the Department denied a request to utilize fuel sampling in lieu of EPA Method 104; see ASP-91-F-01).

15. KWCES shall conduct emissions testing on each diesel generator while operating within 90% - 100% of the maximum heat input rate of 85.4 million Btu per hour. The actual heat input rate, electrical generator output, and diesel engine horsepower output shall be specified in each test report. [Rule 17-4.070(3), F.A.C.].

16. KWCES shall file all test reports with the South District Office of the Department as soon as practical, but no later than 45 days after the test is complete. [Rule 17-297.570(2), F.A.C.].

17. KWCES shall notify the South District Office of the Department at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. [Rule 17-297.340(1)(i), F.A.C.].

18. In order to document continuing compliance with the hourly SO₂ emission limit of specific condition 2 and the fuel sulfur limit of specific condition 10, KWCES shall keep records of the

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305

and 52FTM44000306

Permit/Cert. No.: A044-207419

Date of Issue: March 18, 1993

Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

analyses or upon analyses of as-received samples. The records shall be maintained for a minimum of 2 years and shall be made available to the Department upon request. [Rule 17-4.070(3), F.A.C.].

19. In order to document compliance with the hours of operation limitation of specific condition 9, the fuel oil consumption limit of specific condition 12, and the annual NOx emission limit of specific condition 1, KWCES shall keep daily records of the hours of operation, the fuel oil consumption, and the NOx emissions. At a minimum, the records shall indicate (a) the daily hours of operation for each individual diesel generator, (b) the daily hours of operation expressed as full load equivalent engine hours (both units combined), (c) the daily sum total fuel oil consumption in gallons for both units combined, (d) the daily sum total NOx emissions in pounds for both units combined, (e) a cumulative total hours of operation expressed as full load equivalent engine hours for the current month, (f) a cumulative sum total fuel oil consumed in gallons for the current month, (g) a cumulative sum total NOx emissions in tons for the current month, (h) a rolling cumulative total hours of operation expressed as full load equivalent engine hours for the previous 12 consecutive months, (i) a rolling cumulative sum total fuel oil consumed in gallons for the previous 12 consecutive months, and (j) a rolling cumulative sum total NOx emissions in tons for the previous 12 consecutive months.

[Rule 17-4.070(3), F.A.C.].

20. KWCES shall install, calibrate, maintain, and operate continuous monitoring equipment, in accordance with the manufacturer's instructions, to continuously monitor and record opacity and NOx emissions. KWCES shall maintain a complete file of all measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; all continuous emissions monitoring system performance evaluations, all continuous emissions monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required, recorded in a permanent legible form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.

[Permit AC 44-152197 and Rule 17-4.070(3), F.A.C.].

21. For each calendar quarter, KWCES shall submit to the Department a written report of emissions in excess of the emission limiting standards as set forth in this permit. The

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

report shall be postmarked by the 30th day following the end of each calendar quarter. The report shall include at least the following information [Rules 17-4.070(3), 17-210.700(1), 17-210.700(4), and 17-210.700(6), F.A.C.]:

- (A) The quarterly hours of operation for each individual diesel generator.
- (B) The magnitude of excess emissions, any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
- (C) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions.
- (D) The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted.
- (E) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.
- (F) When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

22. KWCES shall submit an annual operation report (DER Form 17-210.900(4), attached) to the South District Office of the Department by March 1st each year. The attached form should be reproduced and used for the annual submittals. [Rule 17-4.070(3), F.A.C.].

23. KWCES shall take all reasonable precautions to prevent emissions of unconfined particulate matter. [Rule 17-296.310(3), F.A.C.].

24. If the Department has reason to believe that any applicable emission standard is being violated, then the Department may require KWCES to conduct compliance tests which identify the nature and quantity of pollutant emissions and to provide a report on the results of said tests. [Rule 17-297.340(2), F.A.C.].

25. Construction/modification permit number AC 44-221256 might have been subject to the new source review (NSR) requirements of

PERMITTEE:

Key West City Electric
System (KWCES)

I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: AO44-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

NOx emissions had been relaxed any further, or if the federally enforceable hours of operation limit had been relaxed. If KWCES requests relaxation of any federally enforceable limits, then the Department will determine whether the NSR requirements of Rule 17-212.400, F.A.C. shall apply as though modification AC 44-221256 had not occurred. [Rule 17-212.400(2)(g), F.A.C.].

26. Best Available Control Technology (BACT) will be re-evaluated if KWCES requests an increase in or exceeds the permitted hours of operation. Selective Catalytic Reduction for NOx control will be required at a minimum for BACT if deemed technologically feasible. In no event shall the BACT control installation and compliance testing occur later than 30 months from the date that KWCES requested to exceed the permitted hours of operation or actually exceeded the permitted hours of operation. [Permit AC 44-152197].

27. The three existing 16.5 MW steam units at the Key West Plant shall not operate. KWCES shall surrender the operation permits for the three 16.5 MW steam units within 30 days after this permit becomes final agency action. [Permit AC 44-152197].

28. KWCES shall send all notifications and reports required by this permit to (a) the South District Office of the Department in Fort Myers, and (b) the South District Branch Office in Marathon, FL.

29. Issuance of this permit does not relieve KWCES from complying with applicable emission limiting standards or other requirements of Rules 17-210, 17-212, 17-252, 17-272, 17-273, 17-275, 17-296, and 17-297, F.A.C., or any other requirements under federal, state, or local law. Future regulations may impact this facility at some future date. KWCES shall comply with any applicable future regulations when they become effective. [Rule 17-210.300, F.A.C.].

30. In order to renew this operation permit, KWCES must submit an application for renewal by November 1, 1997. [Rule 17-4.090(1), F.A.C.].

PERMITTEE:

Key West City Electric
System (KWES)

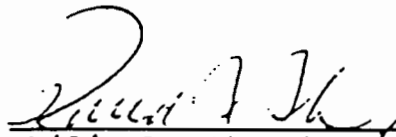
I.D. No.: 52FTM44000305
and 52FTM44000306
Permit/Cert. No.: A044-207419
Date of Issue: March 18, 1993
Expiration Date: December 31, 1997

SPECIFIC CONDITIONS:

NOTE: In the event of an emergency the permittee shall contact the Department by calling (904)488-1320. During normal business hours, the permittee shall call (813)332-6975.

Issued this 18th day of March, 1993.

STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL REGULATION


Philip R. Edwards
Director of
District Management

PRE/GAM/jw

14 Pages Attached



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:
Utility Board of the
City of Key West
1001 James Street
P.O. Drawer 6100
Key West, FL 33041

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996
County: Monroe
Latitude/Longitude: 24°33'49"N
81°44'03"W
Project: 23.5 MW Simple Cycle
Combustion Turbine

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.). 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 specifically described as follows:

For the relocation of a simple cycle combustion turbine (CT) generator from Key West Power Plant to the existing Stock Island Power Plant (near Key West) in Monroe County. This generator is a General Electric (GE) Frame 5 model PG5341 CT (equipped with water injection for fuel oil firing) with a rated capacity of 23.5 megawatts at ISO conditions. The GE CT will have a heat input at 59°F of 312 MMBtu/hr (oil). The CT will be fired with No. 2 low sulfur fuel oil with a sulfur content not to exceed 0.05% by weight. NO_x emissions are controlled by a water injection system.

The source/emission unit(s) shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Key West City Electric System application received February 14, 1994.
2. DEP's letter dated March 10, 1994.
3. R.W. Beck's letter dated June 10, 1994.
4. DEP's letter dated July 28, 1994.
5. R.W. Beck's letter dated March 3, 1995.
6. DEP's letter dated April 10, 1995.
7. R.W. Beck's letter dated April 20, 1995.

PERMITTEE:
City Electric System

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996

GENERAL CONDITIONS:

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 any 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 F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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

PERMITTEE:
City Electric System

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996

GENERAL CONDITIONS:

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.

SPECIFIC CONDITIONS:

The construction and operation of the Project shall be in accordance with all applicable provisions of Chapters 62-210 to 62-297, F.A.C. In addition to the foregoing, the Project shall comply with the following conditions as indicated.

A. General Requirements

1. Pursuant to Rule 62-212.200(56), F.A.C., Potential to Emit (PTE), the maximum heat input to the GE combustion turbine (CT) at an ambient temperature of 59°F shall not exceed 312 MMBtu/hr while firing fuel oil. Heat input may vary depending on ambient conditions and the CT characteristics. Manufacturer's curves or equations for correction to other temperatures shall be provided to DEP for review and approval 90 days prior to the initial compliance test. The approved manufacturer's curves shall be used to establish heat input rates over a range of temperatures for the purpose of compliance determination.

2. Pursuant to Rule 62-212.200(56), F.A.C., only No. 2 fuel oil is allowed to be fired in the CT. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight.

3. Pursuant to Rule 62-212.200(56), F.A.C., the maximum No. 2 fuel oil consumption allowed to be burned in the CT is 7,100,000 gallons per year, which is equivalent to 2888.5 hours per year of operation at full-load. The CT may operate for more than 2888.5 hours per year if operating at part-load.

4. Pursuant to Rule 62-296.310(3), F.A.C., Unconfined Emissions of Particulate Matter, the emissions of unconfined particulate matter shall be minimized during the relocation and construction period by covering or watering dust generating areas.

5. The facility shall comply with all the requirements of 40 CFR Part 60 Subpart GG.

PERMITTEE:
City Electric System

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PSD-FL-210
Expiration Date: December 31, 1996

SPECIFIC CONDITIONS:

C. Performance Testing

1. Initial (I) compliance tests shall be performed on the CT while firing oil. Testing of emissions shall be conducted at 95-100% of the manufacturer's rated heat input based on the average ambient air temperature during the test. Annual (A) compliance tests shall be performed on the CT if the No. 2 fuel was used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods in accordance with 40 CFR 60, Appendix A, as adopted by reference in Chapter 62-297, F.A.C.:

- a. Reference Method 5B for PM (I, A).
- b. Reference Method 9 for VE (I, A).
- c. Reference Method 10 for CO (I, A).
- d. Reference Method 20 for NOx (I, A).

e. ASTM D4294 (or equivalent) for sulfur content of distillate oil (I, A). Compliance with SO₂ emission limits will be demonstrated if the fuel oil analysis indicates a sulfur content of 0.05% by weight or less.

f. Other methods may be used for compliance testing after obtaining prior Departmental approval, in writing.

2. The No. 2 fuel oil shall be monitored for the sulfur content. The frequency of determination shall be in accordance with the requirements of 40 CFR 60.334. Testing for sulfur content of the fuel oil in the storage tanks shall be conducted upon each occasion that fuel is transferred to the storage tanks. Testing for fuel oil lower heating value shall also be conducted on the same schedule.

D. Monitoring Requirements

1. For the simple cycle unit, the permittee shall install, operate, and maintain a continuous monitoring system (CMS) to monitor and record the fuel consumption, the ratio of water to fuel being fired in the turbine, and the electrical output in MW. The system shall be accurate to within ± 5.0 percent and shall be approved by the Department.

PERMITTEE:
City Electric System

Permit Number: AC 44-245399
PSD-FL-210
Expiration Date: December 31, 1996

SPECIFIC CONDITIONS:

h. 40 CFR 60.8(d) - By postmarking or delivering notification of the date of each performance test required by this permit at least 30 days prior to the test date; and,

i. Rule 62-297.345, F.A.C. - By providing stack sampling facilities for the turbine.

j. All notifications and reports required by this Specific Condition shall be submitted to the Department's Air Program of the South District office. Performance test results shall be submitted within 45 days of completion of such test.

3. The following protocols shall be submitted to the Department's Air Program of the South District office for approval;

a. CMS Protocol - Within 60 days after selection of the CMS, but prior to the initial startup, a CMS protocol describing the system, its installation, operating and maintenance characteristics and requirements.

b. Performance Test Protocol - At least 90 days prior to conducting the initial performance tests required by this permit, the permittee shall submit to the Department's Air Program of the South District office a protocol outlining the procedures to be followed and the test methods that will be used to verify compliance with the conditions of this permit. The Department shall approve the testing protocol provided that it meets the requirements of this permit.

F. Modifications

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

G. No. 2 Fuel Oil Storage Tank

The permittee shall be in compliance with the monitoring requirements specified in 40 CFR 60.116b(b), which requires maintaining a record of the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

Best Available Control Technology (BACT) Determination
 Key West City Electric System
 Monroe County
 PSD-FL-210

The applicant proposes to relocate a simple cycle combustion turbine (CT) generator from the Key West Power Plant, where it is currently permitted, to the existing Stock Island Power Plant (near Key West) in Monroe County. The CT is a General Electric Frame 5 model PG5341 unit with a nominal base load rating of 23.5 megawatt (MW) at ISO conditions [ISO standard day conditions means 288 degrees Kelvin (59°F), 60 percent relative humidity and 101.3 kilopascals pressure]. The Stock Island Power Plant currently consists of a nominal 37 MW steam-electric generating unit, two nominal 8.6 MW medium speed diesel-electric generating units, three nominal 2 MW high speed diesel-electric generating units, fuel storage tanks, and other electrical generating support equipment. The CT will be fired with No. 2 low sulfur fuel oil with a sulfur content not to exceed 0.05 percent, by weight, and a fuel oil consumption limit of 7.1 million gallons per year.

The applicant has indicated that the maximum annual air pollutant emission rates for the CT, based on consumption of 7.1 million gallons of No. 2 fuel oil, with a maximum sulfur content of 0.05%, by weight, will be:

Pollutant	Emissions (TPY)	PSD Significant Emission Rate (TPY)	Subject to PSD review?
NOx*	138	40	Yes
SO ₂	24	40	No
PM/PM ₁₀ **	43	25/15	Yes
CO**	152	100	Yes
VOC	15	40	No
Lead	0.004	0.6	No

* - Based on firing No. 2 fuel oil (0.05% sulfur by weight) at a maximum of 7.1 million gals/yr at full load.

** - Based on firing No. 2 fuel oil (0.05% sulfur by weight) at a maximum of 7.1 million gals/yr at 50% load.

Rule 62-212.400, Florida Administrative Code (F.A.C.), Stationary Source Preconstruction Review, requires a BACT review for all regulated pollutants emitted in an amount equal to or greater than the significant emission rates listed in the previous table.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission source in question the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objection.

The air pollutant emissions from simple cycle power plants can be grouped into categories based upon what control equipment and techniques are available to control emissions from these facilities. Using this approach, the emissions can be classified as follows:

- o Combustion Products (e.g., particulate matter and trace metals). Controlled generally by good combustion of clean fuels.
- o Products of Incomplete Combustion (e.g., CO and VOCs). Control is largely achieved by proper combustion techniques.
- o Acid Gases (e.g., SO₂, NO_x). Controlled generally by gaseous control devices and fuel quality.

Grouping the pollutants in this manner facilitates the BACT analysis because it enables the equipment available to control the type or group of pollutants emitted and the corresponding energy, economic, and environmental impacts to be examined on a common basis. Although all of the pollutants addressed in the BACT analysis may be subject to a specific emission limiting standard as a result of PSD review, the control of "nonregulated" air pollutants is considered in imposing a more stringent BACT limit on a "regulated" pollutant (i.e., particulates, sulfur dioxide, fluorides, sulfuric acid mist, etc.), if a reduction in "nonregulated" air pollutants can be directly attributed to the control device selected as BACT for the abatement of the "regulated" pollutants.

BACT POLLUTANT ANALYSIS

COMBUSTION PRODUCTS

Particulate Matter (PM/PM₁₀)

The design of the CT system ensures that particulate matter emissions will be minimized by combustion control and the use of clean fuels. The particulate matter emissions from the combustion turbine, when burning No. 2 fuel oil (0.05% sulfur, by weight), will not exceed 18 lb/hr at 50% load.

A review of the EPA's BACT/LAER Clearinghouse indicates that the lowest NO_x emission limit established to date for a combustion turbine is 6 ppmvd at 15% oxygen. This level of control was accomplished through the use of water injection and a selective catalytic reduction (SCR) system.

SCR is a post-combustion method for control of NO_x emissions. The SCR process combines vaporized ammonia with NO_x in the presence of a catalyst to form nitrogen and water. The vaporized ammonia is injected into the exhaust gases prior to passage through the catalyst bed. The SCR process can achieve up to 90% reduction of NO_x with a new catalyst. As the catalyst ages, the NO_x reduction efficiency at constant ammonia slip will decrease.

The effect of exhaust gas temperature on NO_x reduction depends on the specific catalyst formulation and reactor design. Generally, SCR units can be designed to achieve effective NO_x control over a 100-300°F operating window within the bounds of 450-800°F. The preferable operating window is within the bounds of 600-750°F for effective NO_x control.

Most commercial SCR systems operate over a temperature range of about 600-750°F. At levels above and below this window, the specific catalyst formulation will not be effective and NO_x reduction will decrease. Operating at high temperatures can permanently damage the catalyst through sintering of surfaces. Increased water vapor content in the exhaust gas (as would result from water or steam injection in the gas turbine combustor) can shift the operating temperature window of the SCR reactor to slightly higher levels.

As stated by the applicant, the exhaust temperature of the proposed simple cycle CT is approximately 1000°F. At temperatures of 1000°F and above, the zeolite catalyst (reported to operate within 600-950°F) will be irreparably damaged, and the temperature is high enough to oxidize ammonia to NO_x. The heat recovery steam generator allows attainment of, and provides relative stability for catalyst operation within the optimum temperature range (600-750°F) for a combined cycle operation. In this case, application of an SCR system to a simple cycle combustion turbine appears to be technically infeasible.

The applicant further looked at the dry low-NO_x burner technology for this project. The dry low-NO_x combustors are primarily utilized when natural gas is the fuel fired. However, when the fuel fired is distillate oil, water or steam injection must be utilized along with dry low-NO_x combustors to obtain emission levels comparable to those which are obtained by the use of conventional combustors with the application of water or steam

CO Control

The Department is in agreement with the applicant's proposal of combustor design and good operating practices as BACT for CO for this project.

Other Emissions Control

The emission limitations for PM and PM₁₀ is based on previous BACT determinations for similar facilities. Although the emissions of this pollutant could be controlled by particulate matter control devices, such as a baghouse or scrubber, the amount of emission reductions would not warrant the added expense. Therefore, the Department does not believe that the BACT determination would be affected by the emissions of this pollutant. The Department accepts the applicant's proposed control of fuel quality for this pollutant as BACT for the simple cycle unit.

The emission limits for the Key West City Electric System project of the simple cycle unit for 23.5 MW are thereby established as follows at 15% O₂:

23.5 MW SIMPLE CYCLE COMBUSTION TURBINE

Pollutant	Emission Standards/Limitations(a)	Method of Control
NO _x	75 ppmvd @ 15% O ₂	Water Injection
CO	20 ppmvd @ 15% O ₂ @100% load 136 ppmvd @ 15% O ₂ @50% load	Combustion Controls Use of Good Quality Fuel Oil and Limited Operation
PM & PM ₁₀	18 lb/hr	Combustion Controls, Fuel Quality

(a) No. 2 fuel oil with a maximum of 0.05% sulfur, by weight, and consumption of 7.1 million gallons per year.

+ DEP only Fields
* - ~~Asterisk~~ Required for upload fields

Emissions Unit Information Section 1

37 MW Steam Electric Generator (Ralph Garcia Steam Plant)

List of Applicable Regulations

40CFR72 - Regulations on Permits

40CFR73 - SO2 Allowance System

40CFR75 - Regulations for CEMs under Acid Rain Requirements

40CFR77 - Excess Emissions for Acid Rain Units

40CFR78 - Appeal Procedures for Acid Rain Units

62-4.001 through 62-4.160, FAC - Permits Part I General

62-4.210, FAC - Construction Permits

62-4.220, FAC - Operating Permits

62-210, FAC - Stationary Sources

62-296.405(1), FAC - Spec Emiss Limiting & Perf Stds for Existg Foss Fuel Fire Stm Gen >250 MMBtu/hr

40CFR70 - State Operating Permits

62-103.150, FAC - Public Notice of Application and Proposed Agency Action

62-213, FAC - Operation Permits for Major Sources of Air Pollution (Title V)

62-204.240, FAC - Ambient Air Quality Standards

62-296.320(4)(b), FAC - General Visible Emission Standards

62-296.320(2), FAC - General Pollutant Emission Limiting Standards, Objectionable Odor

62-297.310, FAC - General Test Requirements

62-297.620, FAC - Exceptions and Approvals of Alternative Procedures and Requirements

62-296.320(4)(c), FAC - Unconfined Emissions of Particulate Matter

62-297.401, FAC - Compliance Test Methods

62-212.300, FAC - Sources not Subject to PSD Nonattainment Requirements

III. Part 6b - 1

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

Effective : 3-21-96

Emissions Unit Information Section 1
37 MW Steam Electric Generator (Ralph Garcia Steam Plant)

List of Applicable Regulations

III. Part 6b - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

40CFR70 - State Operating Permits

62-103.150, FAC - Public Notice of Application and Proposed Agency Action

62-210, FAC - Stationary Sources, except 62-210.550, FAC - Stack Height

62-213, FAC - Operation Permits for Major Sources of Air Pollution (Title V)

62-272.300, FAC - Ambient Air Quality Standards

62-273, FAC - Air Pollution Episodes

62-296.310(2)(a), FAC - General Visible Emission Standards

62-296.320(2), FAC - General Pollutant Emission Limiting Standards, Objectionable Odor

62-297.310 through 62-297.400, FAC - Compliance Test Requirements

62-297.570, FAC - Compliance Test Reports

62-296.310(3), FAC - Unconfined Emissions of Particulate Matter

List of Applicable Regulations

40CFR70 - State Operating Permits

62-103.150, FAC - Public Notice of Application and Proposed Agency Action

62-210, FAC - Stationary Sources, except 62-210.550, FAC - Stack Height

62-213, FAC - Operation Permits for Major Sources of Air Pollution (Title V)

62-272.300, FAC - Ambient Air Quality Standards

62-273, FAC - Air Pollution Episodes

62-296.310(2)(a), FAC - General Visible Emission Standards

62-296.320(2), FAC - General Pollutant Emission Limiting Standards, Objectionable Odor

62-297.310 through 62-297.400, FAC - Compliance Test Requirements

62-297.570, FAC - Compliance Test Reports

62-296.310(3), FAC - Unconfined Emissions of Particulate Matter

Emissions Unit Information Section 4
2 MW Diesel Peaking Unit #3

List of Applicable Regulations

40CFR70 - State Operating Permits

62-103.150, FAC - Public Notice of Application and Proposed Agency Action

62-210, FAC - Stationary Sources, except 62-210.550, FAC - Stack Height

62-213, FAC - Operation Permits for Major Sources of Air Pollution (Title V)

62-272.300, FAC - Ambient Air Quality Standards

62-273, FAC - Air Pollution Episodes

62-296.310(2)(a), FAC - General Visible Emission Standards

62-296.320(2), FAC - General Pollutant Emission Limiting Standards, Objectionable Odor

62-297.310 through 62-297.400, FAC - Compliance Test Requirements

62-297.570, FAC - Compliance Test Reports

62-296.310(3), FAC - Unconfined Emissions of Particulate Matter

III. Part 6b - 5

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

62-4.001 through 62-4.160, FAC - Permits Part I General

62-4.210, FAC - Construction Permits

62-4.220, FAC - Operating Permits

62-210, FAC - Stationary Sources

62-212.400, FAC - Prevention of Significant Deterioration

40CFR70 - State Operating Permits

62-103.150, FAC - Public Notice of Application and Proposed Agency Action

62-213, FAC - Operation Permits for Major Sources of Air Pollution (Title V)

62-204.240, FAC - Ambient Air Quality Standards

62-296.320(4)(b), FAC - General Visible Emission Standards

62-296.320(2), FAC - General Pollutant Emission Limiting Standards, Objectionable Odor

62-297.310, FAC - General Test Requirements

62-297.620 , FAC - Exceptions and Approvals of Alternative Procedures and Requirements

62-296.320(4)(c), FAC - Unconfined Emissions of Particulate Matter

40CFR72.1 thru 72.7 - Acid Rain Prog. Gen. Provisions (except Retired units exempt. & Std Reqments)

40CFR72.10 thru 72.13 - Acid Rain Prog Gen. Provisions (except Retired units exempt. & Std Reqments)

62-297.401, FAC - Compliance Test Methods

Emissions Unit Information Section 6
8.8 MW Medium Speed Diesel Unit #2

List of Applicable Regulations

40CFR70 - State Operating Permits

62-4.001 through 62-4.160, FAC - Permits Part I General

62-4.210, FAC - Construction Permits

62-4.220, FAC - Operating Permits

62-103.150, FAC - Public Notice of Application and Proposed Agency Action

62-210, FAC - Stationary Sources

62-212.400, FAC - Prevention of Significant Deterioration

62-213, FAC - Operation Permits for Major Sources of Air Pollution (Title V)

62-204.240, FAC - Ambient Air Quality Standards

62-296.320(4)(b), FAC - General Visible Emission Standards

62-296.320(2), FAC - General Pollutant Emission Limiting Standards, Objectionable Odor

62-297.310, FAC - General Test Requirements

62-297.620, FAC - Exceptions and Approvals of Alternative Procedures

62-296.320(4)(c), FAC - Unconfined Emissions of Particulate Matter

40CFR72.1 thru 72.7 - Acid Rain Prog. Gen. Provisions (except Retired units exempt. & Std Reqments)

40CFR72.10 thru 72.13 - Acid Rain Prog Gen. Provisions (except Retired units exempt. & Std Reqments)

62-297.401, FAC - Compliance Test Methods

III. Part 6b - 7

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

Effective : 3-21-96.

List of Applicable Regulations

- 40CFR70 - State Operating Permits
- 40CFR60.7 - Notification and Recordkeeping (NSPS)
- 40CFR60.8 - Performance Tests (NSPS)
- 40CFR60.11 - Compliance with Standards and Maintenance Requirements (NSPS)
- 40CFR60.12 - Circumvention (NSPS)
- 40CFR60.13 - Monitoring Requirements (NSPS)
- 40CFR60.19 - General Notification and Reporting Requirements (NSPS)
- 40CFR60, Subpart GG - Standards of Performance for Stationary Gas Turbines (NSPS)
- 62-4.001 through 62-4.160, FAC - Permits Part I General
- 62-4.210, FAC - Construction Permits
- 62-4.220, FAC - Operating Permits
- 62-103.150, FAC - Public Notice of Application and Proposed Agency Action
- 62-210, FAC - Stationary Sources
- 62-212.400, FAC - Prevention of Significant Deterioration
- 62-213, FAC - Operation Permits for Major Sources of Air Pollution (Title V)
- 62-204.240, FAC - Ambient Air Quality Standards
- 62-296.320(4)(b), FAC - General Visible Emission Standards
- 62-296.320(2), FAC - General Pollutant Emission Limiting Standards, Objectionable Odor
- 62-297.310, FAC - General Test Requirements
- 62-297.620, FAC - Exceptions and Approvals of Alternative Procedures and Requirements
- 62-296.320(4)(c), FAC - Unconfined Emissions of Particulate Matter

III. Part 6b - 8

Emissions Unit Information Section 7
24 MW Gas Turbine Electric Generator

List of Applicable Regulations
62-297.401, FAC - Compliance Test Methods

III. Part 6b - 9

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Leo Carey, Manager
Utility Board of the City of
Key West-City Electric System
Stock Island Power Plant
Post Office Drawer 6100
Key West, Florida 33041-6100

4a. Article Number

Z392940803

4b. Service Type

- | | |
|---|---|
| <input type="checkbox"/> Registered | <input type="checkbox"/> Insured |
| <input checked="" type="checkbox"/> Certified | <input type="checkbox"/> COD |
| <input type="checkbox"/> Express Mail | <input type="checkbox"/> Return Receipt for Merchandise |

7. Date of Delivery

JUL 14 1995

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

Thank you for using Return Receipt Service.

UNITED STATES POSTAL SERVICE

Official Business

RECEIVED

JUL 25 1995



PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, \$300

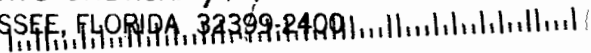


Bureau of
Air Regulation

Print your name, address and ZIP Code here

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR RESOURCES MANAGEMENT
BUREAU OF AIR REGULATION - TITLE V
2600 BLAIR STONE ROAD, MS 5505
TALLAHASSEE, FLORIDA 32399-2400

32399-2400 99



file copy



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 7, 1995

Mr. Leo Carey, Manager
Utility Board of the City of Key West -
City Electric System
Stock Island Power Plant
Post Office Drawer 6100
Key West, Florida 33041-6100

Re: Title V Operation Permit Application
Facility ID No.: 52FTM440003


Dear Mr. Carey:

On June 26, 1995 the Department received an application for a Title V operation permit for the City Electric System's Stock Island Power Plant. The application package submitted is being returned to you because the application was not sealed by a professional engineer (P.E.) registered in the State of Florida.

The P.E. certification page must be signed, dated and sealed. The requirement for P.E. certification is contained at Rule 62-4.050(3), F.A.C. Page 9 of the instructions for DEP Form No. 62-210.900(1) references this requirement.

If you should have any questions, please contact Bruce Mitchell at (904)488-1344.

Sincerely,


John C. Brown, Jr., P.E.
Administrator
Title V Section

JCB/sk

copy to: P. Comer



Department of Environmental Protection

Sohn

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 7, 1995

Mr. Leo Carey, Manager
Utility Board of the City of Key West -
City Electric System
Stock Island Power Plant
Post Office Drawer 6100
Key West, Florida 33041-6100

Re: Title V Operation Permit Application
Facility ID No.: 52FTM440003

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If you should have any questions, please contact Bruce Mitchell at (904)488-1344.

Sincerely,

John C. Brown, Jr., P.E.
Administrator
Title V Section

JCB/sk

copy to: P. Comer

*Is it a
new e.u.
comerex operati?*

*Deadline
proposed*

*180 days of startup
or
June 1, 1996
whichever is later*

Facility is existing.

UTILITY BOARD OF THE CITY OF KEY WEST

POST OFFICE DRAWER 6100

KEY WEST, FLORIDA 33041-6100

**CERTIFIED MAIL
RETURN RECEIPT**

June 20, 1995



TELEPHONE: (305) 295-1000

RECEIVED

JUN 26 1995

Bureau of
Air Regulation

John Brown
Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road, MS#5500
Tallahassee, Florida 32399-2400

Re: Title V and Acid Rain Permit Application for Stock Island Power Plant

Dear Mr. Brown:

In compliance with the requirements of Chapter 62-213, FAC, we have prepared and enclosed an application for a Title V Operating Permit and an Acid Rain Permit for City Electric System's Stock Island Power Plant. Specifically, we have enclosed an application for air permit - long form on computer disk using ELSA version 1.1 accompanied by four hard copies of Section 1 and the Attachments and Figures portion of the application.

If you have any questions or need additional information regarding this submittal, please call me at (305)295-1147.

Sincerely,

UTILITY BOARD OF THE CITY OF KEY WEST
"CITY ELECTRIC SYSTEM"
Leo Carey, General Manager

Joe Stone
Environmental Services Supervisor

JS/pw

cc:
L. Carey
L. Thompson
C. Jansen

File
Enclosure
TITLVAPP.DOC

UTILITY BOARD MEMBERS:

William T. Cates, Chairman • Marty Arnold, Vice-Chairman
Otha P. Cox, Member • Leonard H. Knowles, Member • John H. Robinson, Jr., Member

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

Utility Board of the City of Key West - City Electric System
Stock Island Power Plant
6900 Front Street
Stock Island, Florida
Monroe County
AIRS ID: 0870003

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official :

Name : Leo Carey
Title : Manager

2. Owner or Authorized Representative or Responsible Official Mailing Address :

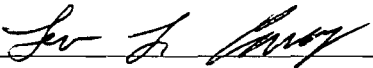
Organization/Firm : Utility Board of the City of Key West
Street Address : P.O. Drawer 6100
City : Key West
State : FL Zip Code : 33041-6100

3. Owner/Authorized Representative or Responsible Official Telephone Numbers :

Telephone : (305)294-5272 Fax.: (305)294-3685

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the facility (non-Title V source) addressed in this Application for Air Permit or the responsible official, as defined in Chapter 62-213, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. Further, I agree to operate and maintain the air pollutant emissions units and air pollution control equipment described in this application so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. If the purpose of this application is to obtain an air operation permit or operation permit revision for one or more emissions units which have undergone construction or modification, I certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*



Signature

6/19/95

Date

* Attach letter of authorization if not currently on file.

Scope of Application

<u>Emissions Unit ID</u>	<u>Description of Emissions Unit</u>
001	37 MW Steam Electric Generator (Ralph Garcia Steam Plant)
002	2 MW Diesel Peaking Unit #1
003	2 MW Diesel Peaking Unit #2
004	2 MW Diesel Peaking Unit #3
005	8.8 MW Medium Speed Diesel Unit #1
006	8.8 MW Medium Speed Diesel Unit #2
Unknown	24 MW Gas Turbine Electric Generator

Purpose of Application and Category

Category I : All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain :

Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number :

Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed :

Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number :

Operation permit to be revised :

Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application.

Operation permit to be revised/corrected :

Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

Category II : All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain :

- Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s) :

- Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed :

- Air operation permit revision for a synthetic non-Title V source.

Operation permit to be revised :

Reason for revision :

Category III : All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain :

- Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any :

- Air construction permit to make federally enforceable an assumed restriction on the potential

Professional Engineer Certification

1. Professional Engineer Name : Ivan L. Clark

Registration Number : 13832 (CO)

2. Professional Engineer Mailing Address :

Organization/Firm : R.W. Beck

Street Address : 1125 17th Street, Suite 1900

City : Denver

State : CO

Zip Code : 80202-2615

3. Professional Engineer Telephone Numbers :

Telephone : (303)299-5247

Fax : (303)297-2811

4. Professional Engineer Statement :

I, the undersigned, hereby certified, except as particularly noted herein, that :*

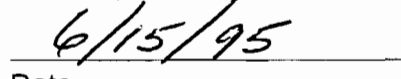
(1) To the best of my knowledge, there is reasonable assurance (a) that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions in the Florida Statutes and rules of the Department of Environmental Protection; or (b) for any application for a TitleV source air operation permit, that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in the application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application;

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application; and

(3) For any application for an air construction permit for one or more proposed new or modified emissions units, the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.



Signature



Date

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact :

Name : Joe Stone
Title : Environmental Supervisor

2. Application Contact Mailing Address :

Organization/Firm : Utility Board - City of Key West
Street Address : P.O. Drawer 6100
City : Key West
State : FL Zip Code : 33041-6100

3. Application Contact Telephone Numbers :

Telephone : (305)294-5272 Fax : (305)294-3685

Application Comment



Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

See Instructions for Form No. 62-210.900(1)

stew on manual tracking PATS

I. APPLICATION INFORMATION

This section of the Application for Air Permit form provides general information on the scope of this application, the purpose for which this application is being submitted, and the nature of any construction or modification activities proposed as a part of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department on diskette, this section of the Application for Air Permit must also be submitted in hard-copy.

Identification of Facility Addressed in This Application

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility name, if any; and a brief reference to the facility's physical location. If known, also enter the ARMS or AIRS facility identification number. This information is intended to give a quick reference, on the first page of the application form, to the facility addressed in this application. Elsewhere in the form, numbered data fields are provided for entry of the facility data in computer-input format.

Utility Board of the City of Key West	
Stock Island Power Plant	
Facility ID#	S2 Km440003
AIRS ID#	0870003

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	06/26/95
2. Permit Number:	AV44-273232
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

Submitted hard copy

Section I

Attachments & Figures

Plant layout

Process flow diagrams

Fuel analyses

Desc. of Control Equip

Desc. of Stack Sampling

Add'l Applicable Regmnts copies of current permits

Acid Rain App

Phase II

Boxer ID # 1

STATE OF FLORIDA, DEP, BUREAU OF AIR REGULATION, TITLE V SECTION
TELEPHONE CONVERSATION RECORD

TO: file

FROM: SCOTT SHEPLAK

DATE: 07/06/95 TIME: ~ 3:30 p.m.

WITH: Mr. Joe Stone, Env. Svcs. Spvr

REPRESENTING: Utility Board of the City of Key West

TELEPHONE NO.: (305) 295-1147

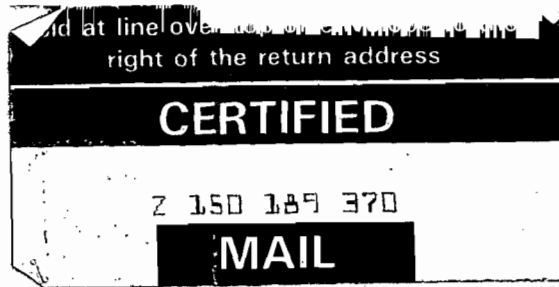
SUBJECT: Title IV & Acid Rain Permit Application
Facility ID # SZPTM44000

SUMMARY: I called to inform the facility the permit
application must be certified by a FL P.E.
I informed we would be mailing back his submittal.

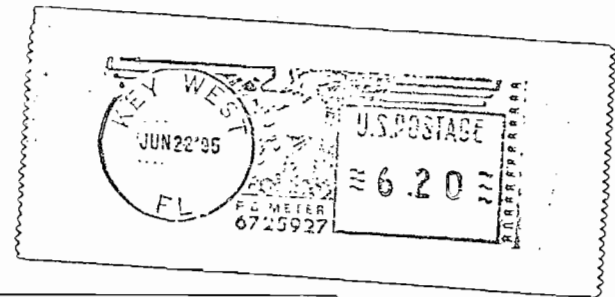
I also informed the Title IV permit application dates
may be moved again. If so, something in writing would
go out.

PERMITP.XLS

	A	B	C	D	E	F	G	H
1	PERMIT PRIORITY	PERMITP.XLS	print A1..G35		6/27/95	sort A4..G50		
2					TODAY IS	ACTION :		
3FACILITY.....	DESCRIPTION.....	DEP FILE #	REC'D	PATS DAY	TYPE	BY	NOTES:
4	Utility Board of the City of Key West	Stock Island Plant	AV44-	6/26/95	2	DAY 60	8/24/95	
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gls



FROM
UTILITY BOARD OF THE CITY OF KEY WEST, FLORIDA
"CITY ELECTRIC SYSTEM"
P.O. DRAWER 6100
KEY WEST, FLORIDA 33041

FOR John Brown FDEP
Air Resources Management

2600 Blair Stone Rd. MS#5500

Tallahassee, Florida 32399-2400

TO POSTMASTER: FORWARDING AND RETURN POSTAGE GUARANTEED

Filer V App.



file - original copy

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 7, 1995

Mr. Leo Carey, Manager
Utility Board of the City of Key West -
City Electric System
Stock Island Power Plant
Post Office Drawer 6100
Key West, Florida 33041-6100

Re: Title V Operation Permit Application
Facility ID No.: 52FTM440003

Dear Mr. Carey:

On June 26, 1995 the Department received an application for a Title V operation permit for the City Electric System's Stock Island Power Plant. The application package submitted is being returned to you because the application was not sealed by a professional engineer (P.E.) registered in the State of Florida.

The P.E. certification page must be signed, dated and sealed. The requirement for P.E. certification is contained at Rule 62-4.050(3), F.A.C. Page 9 of the instructions for DEP Form No. 62-210.900(1) references this requirement.

If you should have any questions, please contact Bruce Mitchell at (904)488-1344.

Sincerely,

John C. Brown, Jr., P.E.
Administrator
Title V Section

JCB/sk

copy to: P. Comer

Requirements | Dates | Fees | Party | Comments | Add info | eXit

----- Permitting Application -----

| Permit #: PATS:AO44273232 Issue: Expire: |

----- PATS History -----

| PATS NO 273232 TYPE/SUBTYPE AO/1A STATUS WI ISSUED
| OFFICE BAQ COUNTY 44 AS OF 07-JUL-1995 EXPIRES
| PROCESSOR SCOTT SHEPLAK

✓ 8/31/16

| LATITUDE DD 24 MM 33 SS 49 LONGITUDE DD 81 MM 44 SS 3

| QUAD_NAME BASIN 000 QUADRANT 000

| PROJECT TITLE V & ACID RAIN APPLICATION

| APPLICANT KEY WEST CITY ELECTRIC SYSTEM

| AGENT R. W. BECK & ASSOCIATES

7/14/15

Re: Utility Board City of Key West
PATS # 273232

Enter value for APP NUMBER.

Count: *1

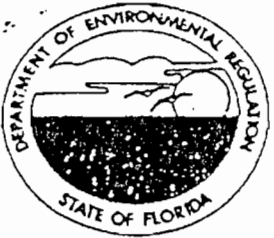
Patty,

We sent this one back.
Please update PATS.

Thank,

Scott

Scott -
We had logged this into PATS but I never re-entered into ARMS - now we can change old PATS data in ARMS - do not withdraw old PATS record - see attached Patty



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Brannan, Secretary

RECEIVED

MIKE HENNINGSON

R.W. BECK
DENVER

June 25, 1991

JUL 1 1991

PRODUCTION DEPT.

Mr. L. T. Curry, Jr.
Utility Board of the City
of Key West
Post Office Drawer 6100
Key West, FL 33041-6100

Dear Mr. Curry:

Re: Relocation of Your General Electric Frame 5 (22 MW) Gas Turbine

This letter responds to your informal inquiry as to whether a construction permit is required to relocate your General Electric Frame 5 (22 MW) gas turbine from your Key West Power Plant to your Stock Island Power Plant. I concur with the oral opinion given to you by Cleve Holladay that the relocation of the turbine cannot be accomplished by amending the present air operating permit. Therefore, a construction permit is required.

Based on our calculations and information in our permitting files, the installation of the gas turbine at the Stock Island Plant would be a major modification as a result of significant net emission increases of SO₂ and NO_x. Based on information contained in our permit files, the Stock Island Plant is a major facility. Since the installation of the gas turbine is projected to be a major modification to a major facility, it would then be subject to Prevention of Significant Deterioration (PSD) requirements under Rule 17-2.500, F.A.C. In order to be exempt from the PSD rules, the turbine would have to be owned by the Utility Board and located on property contiguous or adjacent to the Stock Island Plant. Based on the information provided in your April 8, 1991 letter, the distance between the turbine's present location at the Key West Power Plant and the Stock Island Plant is approximately four miles and the facilities are not adjacent or contiguous.

For your convenience, I am enclosing copies of Chapter 17-2, F.A.C.; Chapter 17-4, F.A.C.; and a construction permit application. For PSD and BACT requirements, please refer to Rules 17-2.500 and 17-2.630, F.A.C. See Rule 17-4.050(4)(a), F.A.C., regarding our construction permit fees. It is expected that these fees will increase around November 1, 1991, so you should file your

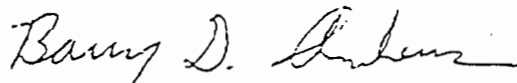
Mr. L. T. Curry, Jr.
Page Two
June 25, 1991

construction permit before that time. Please include all calculations, assumptions, and reference materials used in preparing the application and provide us six sets of the application. All required air dispersion modeling should be provided to us in both paper format and computer disk format. A professional engineer (PE) registered in Florida will have to seal the permit application and all technical information associated with it.

Because you did not seek a declaratory statement from the Department under Section 120.565, F.S. and Part III of Chapter 17-103, F.A.C., this opinion is not binding on you, the public, or the Department. Therefore, this letter does not constitute final agency action.

If you have any questions please call me or Cleve Holladay at (904)488-1344 or Gary Smallridge at (904)488-9730.

Sincerely,



fi C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/CH/kt

enclosures

cc: D. Knowles, SF District
G. Smallridge, OGC

4

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

April 4, 1988

RECEIVE

APR 14 1988

Robert R. Padron, General Manager
Utility Board of the City of Key West
City Electric System
Post Office Box 6100
Key West, Florida 33041-6100

APR 15 1988

MANAGER'S OFFICE

RE: Monroe County - AP
Utility Board of the City of Key West
City Electric System, Gas Turbine
Trumbo Road - Key West

Dear Mr. Padron:

Enclosed is Permit Number AO44-147179 to operate the subject gas turbine issued pursuant to Section(s) 403.087, Florida Statutes.

Persons whose substantial interests are affected by this action have a right, pursuant to Section 120.57, Florida Statutes (FS) to petition for an administrative determination (hearing) on it. The petition must conform to the requirements of Chapters 17-103 and 28-5.201, FAC, and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of receipt of this notice. Failure to file a petition within the fourteen (14) days constitutes a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, FS. This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with this paragraph or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, FAC. Upon timely filing of a petition or a request for an extension of time this action will not be effective until further Order of the Department.

When the Order (Action) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, FS, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone, Tallahassee, Florida 32399-2400; 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

9-14-80

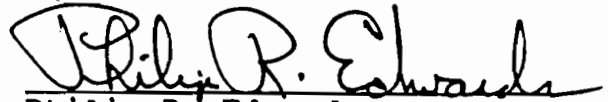
cc L.T. Curry
R. H. Hill

This facility
Shot down.

of Appeal must be filed within thirty (30) days from the date the Final Order is filed with the Clerk of the Department.

Executed in Ft. Myers, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Philip R. Edwards
District Manager
South Florida District Office
2269 Bay Street
Fort Myers, FL 33901-2896

PRE/00/1s
Copies furnished to:

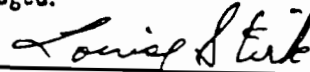
DER-Marathon Office

CERTIFICATE OF SERVICE

This is to certify that this PERMIT and all copies were mailed before the close of business on *April 12, 1988*, to the listed persons.

CLERK STAMP

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to S 120.52
Florida Statutes, with the designated Depart-
ment Clerk, receipt of which is hereby acknow-
ledged.



CLERK

4-12-88

DATE

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTH FLORIDA DISTRICT
2269 BAY STREET
FORT MYERS, FLORIDA 33901-2896
(813)332-2667.



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY
PHILIP R. EDWARDS
DISTRICT MANAGER

PERMITTEE: Robert R. Padron, Gen. Mgr.
Utility Board of the City
of Key West
City Electric System
P. O. Box 6100
Key West, FL 33041-6100

I.D.No: 52/44/0002/06
Permit/Certification
Number: AO44-147179
Date of Issue: 04-04-88
Expiration Date: 04-04-93
County: Monroe

Latitude: 24° 33' 40" N
Longitude: 81° 47' 51" W
Section/Town/Range: 31/67S/25E
Project: Utility Board of the
City of Key West
City Electric System
Gas Turbine
Trumbo Road - Key West

Handwritten notes:
22-02m
or 90ft

Handwritten notes:
Stack Island
24° 33' 49" N
81° 44' 03" E or 4 mi away

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 drawing(s), plans, and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

Operate a gas turbine power plant with a rated output of 23.45 MW at ISO conditions fired with No. 2 distillate fuel oil having a maximum heat input of 321.1 MMBTU/HR. Emissions from this source are controlled by a water injection system.

Plant is located on Trumbo Road, Key West, Florida.

PERMITTEE: Utility Board of the
City of Key West

I.D. Number: 52/44/0002/06
Permit/Certification No. A044-147179
Date of Issue: 04-04-88
Expiration Date: 04-04-93

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 Section 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 therefor 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.
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.

PERMITTEE: Utility Board of the
City of Key West

I.D. Number: 52/44/0002/06
Permit/Certification No. AO44-147179
Date of Issue: 04-04-88
Expiration Date: 04-04-93

GENERAL CONDITIONS:

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 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 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.

PERMITTEE: Utility Board of the
City of Key West

I.D. Number: 52/44/0002/06
Permit/Certification No. AO44-147179
Date of Issue: 04-04-88
Expiration Date: 04-04-93

GENERAL CONDITIONS:

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)
- () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
- () 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.

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.

PERMITTEE: Utility Board of the
City of Key West

I.D. Number: 52/44/0002/06
Permit/Certification No. AO44-147179
Date of Issue: 04-04-88
Expiration Date: 04-04-93

SPECIFIC CONDITIONS:

1. The circular 24-hour strip chart to monitor the actual ratio of the water flow (GPM)/fuel oil flow (GPM) and the electrical output in MW shall be properly maintained and calibrated so as to be functional at all times.
2. Nitrogen oxides (NO_x) emissions shall not exceed 75 ppm by volume at 15 percent oxygen on a dry basis in accordance with the requirements of U. S. EPA "Standards of performance for stationary gas turbines", Part 60, Subpart GG.
3. Nitrogen oxides test is required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method 20 published in 40 CFR-60, Appendix A. Such test shall be conducted prior to the renewal of this permit. Results shall be submitted to the Department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing. Annual tests may be required if the Department inspections show a need for such tests.
4. Compliance with Sulfur Dioxide emissions will be assumed if the fuel oil analysis report indicates a sulfur content of 0.5% by weight or less.
5. Visible emissions shall be less than 20% opacity.
6. Visible emission tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method Nine as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted once per year commencing April 1989. Results shall be submitted to the Department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing.
7. Submit a fuel oil analysis report indicating sulfur content and heat value on a monthly basis or each new shipment received.
8. Operating period for this gas turbine shall not exceed 2,885.5 hours per year.

PERMITTEE: Utility Board of the
City of Key West


I.D. Number: 52/44/0002/06
Permit/Certification No. AO44-147179
Date of Issue: 04-04-88
Expiration Date: 04-04-93

SPECIFIC CONDITIONS:

9. An annual operation report (DER Form 17-1.202(6) attached) shall be submitted by March 1st each year. The attached form shall be reproduced by the permittee and used for future annual submittals.
10. Stack sampling facilities provided by the owner shall be in accordance with the requirements of Chapter 17-2.700(4), Florida Administrative Code.
11. All fugitive dust generated at this site shall be adequately controlled.
12. This facility shall be operated in such a fashion so as to preclude objectionable odors.
13. Notification and reporting requirements of this permit shall also be sent to the Department of Environmental Regulation, South Florida District Branch Office, 11400 Overseas Highway, Suites 219-224, Marathon, Florida 33050.

Issued this 4th day of April, 1988.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION


Philip R. Edwards
District Manager

PRE/00/1s
____ Pages Attached

DER Form 17-1.201(5)
Effective November 30, 1982

Page 6 of 6

Verified Scanned

ykz 06/12/96



Stock Island
FIRST CLASS MAIL



CAUTION

CONTENTS ENCLOSED



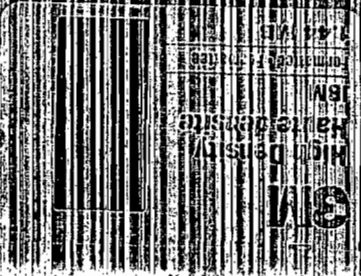
TITLE V PERMIT APPLICATION
ELSA VERSION 1.3.a

CITY ELECTRIC SYSTEM
Stock Island Power Plant
v.s.
ykz



TITLE V PERMIT APPLICATION
ELSA VERSION 1.3.a

CITY ELECTRIC SYSTEM
Stock Island Power Plant
v.s.
ykz



TO Steve W.

DATE 10/31 TIME 4:35 PM

WHILE YOU WERE OUT

FROM Linda Long

of _____

PHONE 303 - 299 - 5288
AREA CODE NUMBER EXTENSION

TELEPHONED	PLEASE CALL	WILL CALL AGAIN
RETURNED YOUR CALL	CALL IMMEDIATELY	
CAME TO SEE YOU	WANTS TO SEE YOU	

MESSAGE Lotus or word files only

Mike Robinson also worked on ELSA
doesn't see .LDB or.mdb file
extensions.

By J.A.