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July 5, 2005

- CERTIFIED MAIL - RETURN RECEIPT REQUESTED -

Michael Opalinski
Seminole Electric Cooperative, Inc.
Post Office Box 272000
Tampa, Florida 33688-2000

**RE: Payne Creek Generating Station
Modification to Conditions of Certification
DEP Case Number PA89-25SA-C
OGC Case Number 05-0896**

ORDER MODIFYING CONDITIONS OF CERTIFICATION

Dear Mr. Opalinski:

On August 15, 1995, the Siting Board issued to Seminole Electric Cooperative, Inc (Seminole) a final site certification for the construction and operation of the facility now known as the Payne Creek Generating Station. That certification was subsequently modified on December 21, 1999.

On August 25, 2004, Seminole filed with the Department's Office of Siting Coordination a Request for Modification of Certification for the Payne Creek Generating Station. Copies of that Request were provided by Seminole to all parties to the original site certification proceeding. Seminole also filed its application for an air construction permit with the Department's Bureau of Air Regulation. By those applications, Seminole requested approval to construct and operate the Payne Creek Peaker Project, consisting of simple cycle combustion turbine generating units.

On May 4, 2005, the DEP Bureau of Air Regulation issued a "Written Notice of Intent to Issue Air Permit" for the Peaker Project, a modification of the Permit PSD-FL-344 for the Payne Creek Generating Station. Pursuant to Rule 62-17.211(4), Florida Administrative Code ("F.A.C.") the Department is required to modify the Conditions of Certification for this facility to conform them to the modified PSD permit.

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On May 15, 2005, all parties to the certification proceeding were provided with notice by certified mail of the Department's intent to modify the Conditions of Certification for this facility, along with a copy of the proposed Order Modifying Conditions of Certification. Additionally, on June 3, 2005, notice of the Department's intent to modify the Conditions of Certification for this facility was published on the Department's internet home page at <http://www.dep.state.fl.us/> under the link or button titled "Official Notices." Those notices specified that pursuant to Section 403.516, Florida Statutes ("F.S."), and Rule 62-17.211, F.A.C., all parties to the certification proceeding have 45 days from the issuance of the notice by mail to such party's last address of record in which file a written objection to the modification; that any person who is not already a party to the certification proceeding and whose substantial interests will be affected by the requested modification has 30 days from the date of publication of the public notice in the FAW to object in writing; that pursuant to Rule 62-17.280(1)(c), F.A.C., failure to act within the time frame constitutes a waiver of the right to become a party; and that the Department will issue a Final Order Modifying the Conditions of Certification for this facility if no written objections are received by the Department.

No objections to the modification have been received by the Department. The Conditions of Certification for the Payne Creek Generating Station are hereby modified as follows:

Condition **II. AIR**

The construction and operation of the certified units project shall be in accordance with all applicable provisions of Chapters 62-210 through 62-297 and 62-4, Florida Administrative Code (F.A.C.), and 40 CFR 60, Subpart GG, Appendix A, Appendix B, and Appendix F and the respective PSD Permits PSD-FL-214 and PSD-FL-344 as amended for those individual units. The following emission limitations and conditions A.-H. reflect the BACT determinations for PSD Permit PSD-FL-214 and Emission Units 001 and 002 for the 315 megawatts (nominal) (MW); two 157.5 MW combined cycle combustion turbines) of generating capacity. Each combustion turbine (CT) will be connected to a heat recovery steam generator (HRSG), which will recover the waste heat to produce steam for utilization in a single 173 MW (net) steam generator. There is no fuel firing in the associated HRSG.

In August 2004, the licensee requested approval of five Twin Pac 60-MW simple-cycle combustion turbines for peaking purposes. The following emission limits II.I.1.- 40. reflect the emission limits and requirements for the five Twin Pac 60 MW combustion turbines pursuant to PSD-FL-344. With the addition of the Twin Pac peaking units, tThe facility will have a total nominal generating capacity of 800 488 MW (nominal). In addition to the foregoing, the project shall comply with the following conditions of certification as indicated, provided, however, that in the event of conflict between the following conditions of certification (II.A.-H.) and Permit PSD-FL-214, the latter shall control.

A. – H. No change

I. Peaking Units

Emission Units 005-009 shall comply with PSD Permit PSD-FL-344 as amended and the following conditions provided, however, that in the event of conflict between the following conditions of certification (II.I.) and Permit PSD-FL-344, the latter shall control:

<u>E.U. ID No.</u>	<u>COMMON EMISSION UNIT DESCRIPTION</u>
005 - 009	Pratt & Whitney Twin Pac Combustion Turbines each representing approximately 60 megawatts of peaking power.

APPLICABLE STANDARDS AND REGULATIONS

1. Prevention of Significant Deterioration: The emission units addressed in this section are subject to a PSD Review for nitrogen oxides (NO_x), sulfur dioxide (SO₂), particulate matter (PM₁₀), carbon monoxide (CO), Volatile Organic Compounds (VOC) and particulate matter (PM₁₀). {PSD-FL-344} [Rule 62-212.400, F.A.C.]

2. NSPS Requirements: The combustion turbines shall comply with all applicable requirements of 40 CFR 60, adopted by reference in Rule 62-204.800(7) (b), F.A.C.

(a) Subpart A, General Provisions, including:

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

(b) Subpart GG, Standards of Performance for Stationary Gas Turbines: These provisions include a requirement to correct test data to ISO conditions; however, such correction is not used for compliance determinations with the BACT standards.

PERFORMANCE RESTRICTIONS

3. Combustion Turbines: The licensee is authorized to install, tune, operate and maintain five new combustion turbine sets with electrical generators (Pratt & Whitney Twin Pac). Each unit is designed to produce approximately 60 MW of electrical power.

4. Permitted Capacity: The heat input to each combustion turbine set from firing natural gas shall not exceed 635.6 MMBtu per hour based on the following:

100% base load, a higher heating value (HHV) for natural gas and a compressor inlet air temperature of 50° F. The heat input to each combustion turbine from firing No. 2 fuel oil shall not exceed 576.8 MMBtu per hour based on the following: 100% base load, HHV and a compressor inlet air temperature of 78° F. The licensee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. Heat input rates will vary depending upon compressor conditions and the combustion turbine characteristics. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves on file with the Department. [Design, Rule 62-210.200, F.A.C. (Definition - PTE)]

5. Simple Cycle, Peaking Operation: Each combustion turbine shall operate only in simple cycle mode not to exceed the permitted hours of operation allowed by these conditions. This restriction is based on the licensee's request, which formed the basis of the PSD applicability which resulted in the emission standards specified in these conditions. For any request to convert this unit to combined cycle operation by installing/connecting to heat recovery steam generators or changes to the fuel quality or quantity which may cause an increase in short or long-term emissions, the licensee may be required to submit a full PSD permit application complete with a new proposal of the best available control technology as if the unit had never been built. [Rules 62-212.400(2) (g) and 62-212.400(6) (b), F.A.C.]

6. Allowable Fuels: Each combustion turbine shall only be fired with natural gas containing no more than 1 grain of sulfur per 100 dry standard cubic feet of gas (monthly average) and 0.05% sulfur distillate oil (or superior). The licensee shall demonstrate compliance with the fuel sulfur limit by keeping the records specified in these conditions. [Applicant Request, Rule 62-210.200, F.A.C. (Definition - PTE)]

7. Hours of Operation: Each Twin Pac shall operate no more than 2000 hours on natural gas and 500 hours on distillate fuel oil, subject to the exceptions defined in Condition II.I.17. The licensee shall install, calibrate, operate and maintain a monitoring system to measure and accumulate the hours of operation for each Twin Pac. In the event that any increase to the hours of operation (of any fuel type) is sought prior to December 31, 2010, a construction permit application shall be submitted for the installation of a SCR (consistent with the conditions of this license) prior to the increase being granted. If an increase from the 2000 hours on natural gas and 500 hours on distillate fuel oil is desired after December 31, 2010, the licensee shall be required to submit a full PSD permit application complete with a new proposal of the best available control technology as if the unit had never been built. [Rule 62-212.400, F.A.C. (BACT); Rule 62-212.400(2) (g), F.A.C.; Rule 62-210.200, F.A.C.]

8. Operating Procedures: The determinations established by these conditions rely on “good operating practices” to minimize emissions. Therefore, all operators and supervisors shall be properly trained to operate and maintain the combustion turbines and pollution control systems in accordance with the guidelines and procedures established by the manufacturer. The training shall include good operating practices as well as methods of minimizing excess emissions. [Applicant Request; Rule 62-4.070(3); Rule 62-212.400, F.A.C. (BACT)]

9. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of this license due to breakdown of equipment or destruction by fire, wind or other cause, the licensee shall notify the Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner’s intent toward reconstruction of destroyed facilities. Such notification does not release the licensee from any liability for failure to comply with the conditions of this license or the regulations. [Rule 62-4.130, F.A.C.]

EMISSIONS CONTROLS

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

11. Water Injection/Dry Low NO_x Burner Technology: The licensee shall install, calibrate, tune, operate, and maintain a dry low NO_x burner and/or water injection system for each combustion turbine. The system shall be designed and operated so as to ensure that NO_x emissions are sufficient to achieve the NO_x emission limits in Condition II.I.17. [Rule 62-212.400, F.A.C. (BACT)]

12. Oxidation Catalyst: To control CO and VOC emissions, each combustion turbine shall include an oxidation catalyst. [Design and Rule 62-212.400, F.A.C.]

13. SCR: Should an SCR be installed to control NO_x emissions, each combustion turbine limit will be 5.0 ppm (gas) and 8.0 ppm (oil). In the event an SCR is not installed, the NO_x limits shall be according to Condition II.I.17. The installation of SCR prior to December 31, 2010 shall void the natural gas operating hours limitation in Condition II.I.7., and allow for 8760 hours of operation per year, 2400 hours of which may be while firing oil. The ammonia slip rate shall be limited to 5 ppmvd @ 15% O₂. All NO_x limits are

in units of ppmvd corrected to 15% oxygen. [Rule 62-212.400, F.A.C. (BACT); Rule 62-210.200, F.A.C. (PTE)]

14. Circumvention: The licensee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

EMISSIONS STANDARDS

15. Summary: The following table summarizes the emissions standards for each pollutant and total emissions in lb/hr and TPY (PTE) for informational and convenience purposes only; such standards are not separately enforceable. This table does not supersede any of the terms or conditions of these conditions:

<u>Pollutant</u>	<u>Twin Pac Emission Standards (limits)</u>	<u>CT Emissions (lb/hr)</u>		<u>Emission Unit (lb/year)</u>	<u>TPY for 5 EU's</u>
		<u>OIL</u>	<u>GAS</u>		
<u>NO_x</u>	<u>lb/hr equiv 20 ppm (gas) 42 ppmvd (oil) @ 15% O₂</u>	<u>102.4</u>	<u>51</u>	<u>153,200</u>	<u>383</u>
<u>CO</u>	<u>19.9 TPY²</u>	<u>2.7</u>	<u>13.1</u>	<u>27,550</u>	<u>68.87</u>
<u>SO₂</u>	<u>Natural Gas & 0.05% S oil</u>	<u>29.4</u>	<u>1.8</u>	<u>18,300</u>	<u>45.75</u>
<u>PM₁₀</u>	<u>VE</u>	<u>14</u>	<u>6</u>	<u>19,000</u>	<u>47.5</u>
<u>VOC</u>	<u>CO as surrogate</u>	<u>9.2</u>	<u>16.6</u>	<u>37,800</u>	<u>94.5</u>

Notes: (1) Assumed 2000 hours of oil operation and 500 hours of natural gas operation at highest emission rate.

(2) Calculated based upon applicant proposed oxidation catalyst at 90% removal efficiency and proposed limit.

16. Carbon Monoxide (CO): CO emissions from each Twin Pac shall not exceed 19.9 TPY. The licensee shall demonstrate compliance with this standard by conducting performance tests and emissions monitoring in accordance with EPA Method 10 and the requirements of these conditions. [Rule 62-212.400(2)(g), F.A.C. (PSD Avoidance)]

17. Nitrogen Oxides (NO_x):

a. NOX emissions from each Twin Pac while firing gas shall be controlled to achieve an equivalent of 20 ppm at full load for 2000 hours per year, which equates to 102,000 lbs over a rolling 12 calendar month period while firing natural gas as per the attached compliance spreadsheet, attachment and incorporated herein as a part of this permit as attachment CS. In the event that during any rolling 12 calendar month period, the NOX emissions while firing natural gas are in excess of 102,000 lbs, a corresponding "hours limitation" shall apply to that Twin Pac unit for the next calendar month of actual operation. The hours limitation shall be calculated in accordance with attachment CS and will yield an equivalent and off-setting NOX reduction for the next calendar month of actual operation. This hours limitation adjustment will ensure a truing up of NOX emissions on a monthly

basis. During the next calendar month of actual operation, any hours operated in excess of the calculated hours limitation ("available hours") shall represent a violation of this permit.

b. NOX emissions from each Twin Pac shall not exceed a 64 lb/hr average over any calendar month while firing natural gas.

c. During any 12 calendar month rolling average period, should the actual NOX emissions for a Twin Pac unit total less than 102,000 lbs, it shall be permissible for that Twin Pac unit to fire an additional amount of natural gas (over the 2000 hours limitation in Condition II.I. 7) provided that:

(1) The 12-month rolling average of 102,000 lbs of NOX for natural gas firing is not exceeded, and

(2) The allowable hours of oil firing (500 hours per Twin Pac per 12 month period) shall be reduced by one hour for each hour of additional gas firing. In no circumstance shall it be permissible for a Twin Pac to operate over 2500 total hours during any 12 month period.

d. NOX emissions shall not exceed 42 ppmvd while firing fuel oil.

e. during the initial twelve calendar months of operation, NOX emissions while firing natural gas shall not exceed 102,000 lbs per Twin Pac, nor 64 lb/hr averaged over any calendar month.

f. Compliance with the standard specified herein shall satisfy the NSPS and BACT requirements.

g. The licensee shall demonstrate compliance with this standard by conducting performance tests, emissions monitoring and continuous water-to-fuel ratio monitoring in accordance with 40 CFR Part 60 Subpart GG, as well as all other conditions of this permit.

h. The attached Compliance Spreadsheet shall be used to calculate NOX emissions, in accordance with Specific Condition 34.

[Rule 62-212.400, F.A.C.]

18. Particulate Matter (PM/PM₁₀) Sulfur Dioxides (SO₂) and Volatile Organic Compounds (VOC):

a. Fuel Specifications. Emissions of PM, PM₁₀, and SO₂ shall be limited by the use of pipeline-quality natural gas containing no more than 1 grain per standard cubic feet, the use of 0.05% Sulfur oil and good combustion techniques as specified in these conditions. The licensee shall demonstrate compliance with the fuel sulfur limit by maintaining the records specified by these conditions. [Rule 62-212.400, F.A.C. (PSD Applicability)].

b. VE Standard. Visible emissions from each combustion turbine shall not exceed 10% opacity, based on a 6-minute average. The licensee shall demonstrate compliance with this standard by conducting tests in accordance with EPA Method 9 and the performance testing requirements of these conditions. [Rule 62-212.400, F.A.C. (PSD Applicability)]

c. Compliance with the CO standard specified within these conditions shall act as a surrogate for the VOC requirements.

EXCESS EMISSIONS

19. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited. These emissions shall be included in the calculation of the 12-month rolling averages to demonstrate compliance with the continuous NO_x emissions standard. [Rule 62-210.700(4), F.A.C.]

20. Excess Emissions Allowed: Providing the licensee adheres to best operational practices to minimize the amount and duration of excess emissions, the following conditions shall apply:

a. During startup and shutdown, visible emissions excluding water vapor shall not exceed 20% opacity for more than 2 hours in any 24-hour period. [Design; Rule 62-210.700(1) and (5), F.A.C.]

b. During all startups, shutdowns, and malfunctions, the continuous emissions monitor (water-to-fuel ratio or CEMS) shall monitor and record

emissions. However, up to 2 hours of monitoring data during any 24-hour period may be excluded from continuous compliance demonstrations as a result of startups, shutdowns, and documented malfunctions. A documented malfunction means a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile, or electronic mail. In case of malfunctions, the licensee shall notify the Compliance Authorities within one working day. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Design; Rules 62-210.700(1), (5), and 62-4.130, F.A.C.]

EMISSIONS PERFORMANCE TESTING

21. Sampling Facilities: The licensee shall design the combustion turbine stack to accommodate adequate testing and sampling locations in order to determine compliance with the applicable emission limits specified by these conditions. Permanent stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C. [Rules 62-4.070 and 62-204.800, F.A.C., and 40 CFR 60.40a(b)]

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

a. EPA Method 9 - Visual Determination of the Opacity of Emissions from Stationary Sources;

b. EPA Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources;

c. EPA Method 7E - Determination of Nitrogen Oxides Emissions from Stationary Sources (Instrumental Analyzer Procedure); or EPA Method 20 - Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines; or ASTM D6522-00 Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers and Process Heaters Using Portable Analyzers, as specified in 40 CFR 60.335;

d. EPA Method 25 or 25A - Determination of Volatile Organic Concentrations. (EPA Method 18 may be conducted to account for the non-regulated methane portion of the VOC emissions); and

e. Conditional Test Method 027 – Measurement of Ammonia Slip; this shall be required in the event that SCR is installed.

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

23. Test Notification: The licensee shall notify the Compliance Authority in writing at least 30 days prior to initial NSPS performance tests and at least 15 days prior to any other required tests. [40 CFR 60.7, 40 CFR 60.8 and Rule 62-297.310(7) (a)9., F.A.C.]

24. Initial Tests Required: Initial performance tests to demonstrate compliance with the emission standards specified in these conditions shall be conducted within 60 days after achieving at least 90% of maximum production rate, but not later than 180 days after initial operation of the emissions unit. Initial performance tests shall be conducted for CO, NO_x, VOC, ammonia slip (if SCR installed) and visible emissions while combusting each fuel. Initial NO_x performance tests shall be conducted in accordance with the requirements of NSPS Subpart GG and shall also be converted into units of the NSPS emissions standard. [Rule 62-297.310(7) (a)1., F.A.C.]

25. Annual Performance Tests:

a. To demonstrate compliance with the emission standards specified in these conditions, the licensee shall conduct annual performance tests for NO_x, CO, and visible emissions from each combustion turbine for each fuel. VOC emission tests are not required annually provided the CO emission standards are being met. The CO standard shall be demonstrated by the measurement of CO emissions upstream and downstream of the oxidation catalyst and by calculating CO removal efficiency. In the event that the measured removal efficiency is less than or equal to 85%, the Department shall be immediately notified and the oxidation catalyst shall be renewed within 120 calendar days of the test date. Failure to fully comply with this requirement shall represent a violation of this permit. Once the oxidation catalyst is renewed, the Department shall be notified as to the actual date complete. Testing for ammonia slip is required during the first scheduled annual performance tests after the cumulative hours of operation on each combustion turbine exceed 1,500 hours of oil firing or 5,000 hours of gas firing starting from the initial installation of the SCR catalysts. Thereafter, ammonia testing is required during the first scheduled annual performance tests after subsequent cumulative 1,500 hours of oil firing and 5,000 hours of gas firing in each combustion turbine or after regeneration, replacement or addition to the SCR catalyst system. If conducted at permitted capacity, NO_x emissions data collected during the annual NO_x continuous monitor RATA required pursuant to 40 CFR 75 may be substituted for the required annual performance test. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th). In the event that the operation of a combustion turbine is less than 400 hours per year on natural

gas or distillate oil, annual testing is not required for that year and that fuel. [Rule 62-297.310(7) (a), F.A.C.]

b. For purposes of demonstrating ongoing qualification as Low Mass Emission (LME) Units, the licensee shall comply with the procedures outlined in 40 CFR 75.19.

c. Following 3 years of annual testing for each combustion turbine, the licensee may request a reduction in the testing frequency (including retesting of Appendix E NO_x-to-heat input correlation for each combustion turbine) as set forth below:

i. The licensee shall demonstrate to the Department's satisfaction that a group or groups of combustion turbines are performing identically;

ii. No more than three of the ten combustion turbines may be considered as identical for the purposes of grouping, i.e. there shall be no less than 4 total groups;

iii. The combustion turbine which is selected for testing within each group will be rotated annually;

iv. The operating hour exemption from testing shall not apply to an entire group of combustion turbines, i.e. every group shall be required to demonstrate annual compliance during every federal fiscal year;

v. Should the combustion turbine selected for annual testing within a group fail to comply with any permitted emission standard or trigger an additional requirement within this permit, every combustion turbine within that group shall be considered to have done likewise and shall be treated as such; and

vi. The Department reserves the right to discontinue the reduction in testing frequency for annual compliance demonstrations.

[Rule 62-4.070, F.A.C.]

26. Tests Prior to Permit Renewal: Prior to renewing the air operation permit (Title V), the licensee shall conduct performance tests for CO, NO_x, VOC and visible emissions from each combustion turbine. Testing for ammonia slip meeting the requirements of Condition 25 (above) 'Annual Performance Tests' will satisfy the requirements of this condition. These tests shall be conducted within the 12-month period

prior to renewing the air operation permit. For pollutants required to be tested annually, the licensee may submit the most recent annual compliance test to satisfy the requirements of this provision. [Rule 62-297.310(7) (a)3., F.A.C.]

27. Tests After Major Repairs or Replacements: The Department may require that additional compliance testing be conducted within 90 days after major repairs or replacements are performed. [Rule 62-297.310(7) (a)4., F.A.C.]

28. Combustion Turbine Testing Capacity: Initial performance tests shall be conducted in accordance with 40 CFR 60.8 and 40 CFR 60.335 for pollutants subject to a New Source Performance Standard (NSPS) in Subpart GG for stationary gas turbines. Other required performance tests for compliance with standards specified in these conditions shall be conducted with each combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. However, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for inlet temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Emissions performance tests shall meet all applicable requirements of Chapters 62-204 and 62-297, F.A.C. [Rule 62-297.310(2), F.A.C.]

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

30. Applicable Test Procedures:

a. Required Sampling Time.

i. 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. [Rule 62-297.310(4) (a)1., F.A.C.]

ii. The minimum observation period for a visible emissions compliance test shall be sixty (60) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C.]

b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet. [Rule 62-297.310(4)(b), F.A.C.]

c. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C. [Rule 62-297.310(4)(d), F.A.C.]

31. 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. [Rule 62-297.310(5)(a), F.A.C.]

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)(b), F.A.C.]

32. 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.]

CONTINUOUS MONITORING REQUIREMENTS

33. NO_x CEMS: The combustion turbines qualify as Low Mass Emission (LME) Units for the purposes of Acid Rain. Accordingly, the licensee has indicated that these emissions units will follow the procedures outlined in 40 CFR 75.19 in lieu of NO_x CEMS. However, should the licensee elect or be otherwise required to install NO_x CEMS, such NO_x monitoring devices shall comply with the requirements of 40 CFR 60.334(b) for 40 CFR Part 75 monitoring systems. A monitoring plan shall be provided to the Department's Emissions Monitoring Section Administrator, EPA Region 4, and the Compliance Authority for review no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62. The plan shall consist of data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location. A monitor for carbon dioxide may be used in place of the oxygen monitor, but the system shall be capable of correcting the emissions to 15% oxygen. [Rule 62-212.400, F.A.C. (BACT) and 40 CFR 75]

34. Water-to-fuel ratio: Each Twin Pac shall be fitted with continuous water to fuel ratio monitoring equipment, as per 40 CFR 75 Appendix E. Appendix E is an alternative monitoring protocol that may be used by oil and gas-fired peaking units in lieu of installing a CEMS to measure NO_x emissions. Hourly NO_x emissions (lbs for natural gas, ppm for oil) shall be correlated to the results of a series of stack tests based on the heat input to the unit at various water-to-fuel injection ratios. Based upon the measured water-to-fuel ratio, and the measured heat input for each fuel, the actual NO_x emissions shall be calculated. With the appropriate load selection, the Subpart GG performance testing may also be utilized to satisfy the NO_x-to-heat input correlation testing requirements of Appendix E. Retesting of Appendix E NO_x-to-heat input correlation for each combustion turbine shall be required annually, except as provided for within Specific Condition 25 of this license. The licensee shall solicit a list from the turbine manufacturer of at least four operating parameters (indicative of NO_x formation) with acceptable ranges to serve as QA/QC parameters as per Appendix E. The manufacturer supplied ranges for the parameters, shall be used on an hourly basis to establish that the unit is being operated in a normal fashion and, therefore, that the NO_x-to-heat input correlation (by fuel type) can be used with validity.

COMPLIANCE DEMONSTRATIONS

35. Records Retention: All measurements, records, and other data required by these conditions shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]

36. Fuel Records: The Licensee shall demonstrate compliance with the fuel sulfur limits for natural gas and fuel oil specified in these conditions by maintaining

records required by 40 CFR 60.334 and 60.335. [Rules 62-4.070(3) and 62-4.160(15), F.A.C.]

37. Monthly Operations Summary: By the fifth calendar day of each month, the Licensee shall record the hours of operation and amount of each fuel fired for each combustion turbine. An hour of operation is defined to include a totalization of every minute within a specified period (e.g. month), during which a permitted fuel is fired (regardless of the amount) divided by 60. The information shall be recorded in a written or electronic log and shall summarize the previous month of operation and the previous 12 months of operation. Information recorded and stored as an electronic file shall be available for inspection and/or printing within at least one day of a request from the Compliance Authority. [Rule 62-4.160(15), F.A.C.]

REPORTS

38. Emissions Performance Test Reports: A report indicating the results of any required emissions performance test shall be submitted to the Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.].

39. Excess Emissions Reporting and Semi-annual Reports: If excess NO_x or visible emissions occur due to malfunction, the Licensee shall notify the Compliance Authority within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Following the NSPS format in 40 CFR 60.7(c), Subpart A, periods of startup, shutdown and malfunction, shall be monitored, recorded and reported as excess emissions when emission levels exceed the standards specified in these conditions. Within thirty (30) days following each calendar semi-annual period, the Licensee shall submit a report on any periods of excess emissions that occurred during the previous semi-annual period to the Compliance Authority. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7]

40. Annual Operating Report: The Licensee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. The Annual Operating Report shall include an estimate of all HAPS emitted, such that the Department can affirm that the facility complies with its synthetic minor status. [Rule 62-210.370(2), F.A.C.]

Any party to the this Order has a right to seek judicial review of it pursuant to Section 120.68, Florida Statutes by filing a Notice of Appeal, pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal, accompanied by the applicable filing fees, with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty days from the date this Order is filed with the Clerk of the Department of Environmental Protection.

Executed in Tallahassee, Florida.

Hamilton S. Oven

Hamilton S. Oven, P.E.

Administrator, Siting Coordination Office

FILING AND ACKNOWLEDGMENT

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

Janda Korakous
Clerk

7/5/05
Date

CC by U.S. mail:

James V. Antista, Esquire
Mark Carpanini, Esquire
Lawrence N. Curtin, Esquire
Mary Ann Helton, Esquire
Craig Varn, Esquire
Scott Goorland, Esquire
Martha Moore, Esquire
Kenneth Evers, Esquire
Sheauching Yu, Esquire
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CC by electronic mail

Kathy Carter