BEFORE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In Re:	Kissimmee Utility Authority/)	
	Florida Municipal Power Agency)	
	Cane Island Power Park)	DEP FILE NO. PA98-38A
	Modification of Conditions of Certification)	OGC CASE NO. 00-0471 RECEIVED
	Osceola County, Florida)	17 States Land
)	MAY 10 2000

BUREAU OF AIR REGULATION

FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

On November 23, 1999, the Governor and Cabinet, sitting as the Siting Board, issued a final order approving certification for the Kissimmee Utility Authority/Florida Municipal Power Agency Cane Island Power Park. The site certification order approved the construction and operation of a 250 megawatt (MW) natural gas fired Unit Number 3, as well as the existing Unit Numbers 1 and 2 and associated facilities, at the existing Cane Island Power Park in Osceola County, Florida.

On November 24, 1999, the Department issued a Notice of Permit for Permit No. PSD-FL-254 for Cane Island Power Park Unit 3 that contained more restrictive nitrogen oxide emission limits than the limits adopted in the Conditions of Certification by the Siting Board. The more restrictive emission limits were the result of recommendations received from the U. S. Environmental Protection Agency on November 8, 1999, that were submitted after the certification hearing and subsequent issuance of the Recommended Order by the Administrative Law Judge pursuant to Section 403.508, Florida Statutes. This action requires the Department to make certain modifications to conform the Conditions of Certification for the above referenced facility to the PSD permit pursuant to Section 403.516, Florida Statutes (F. S.), and Section 62-17.211(4), Florida Administrative Code (F.A.C.).

Copies of the proposed modifications were made available for public review on March 9, 2000. On March 17, 2000, a Notice of Intent to Issue Proposed Modification of Power Plant Certification was published in the *Florida Administrative Weekly*. On March 9, 2000, all parties

to the original proceeding were furnished with a Notice of Intent to Issue Proposed Modification of Power Plant Certification and a copy of this proposed final order. The notices specified that all parties to the original certification proceeding have 45 days from the issuance of the notice by mail to such party's last address of record in which to object to the requested modification. Failure of any of the parties to file a response constitutes a waiver of objection to the requested modification. The notices further specified that any person who is not already a party to the certification proceeding and whose substantial interest is affected by the requested modification has 30 days from the date of publication of the public notice to object in writing. If no objections are received, then a Final Order approving the modification shall be issued by the Department. If objections are raised and agreement cannot be subsequently reached, then pursuant to §403.516(1)(c), F.S., the applicant may file a petition for modification seeking approval for those portions of the request for modification to which written objections were timely filed. No written objection to the proposed modifications has been received by the Department. Accordingly, in the absence of any timely objection,

IT IS ORDERED:

The proposed changes to the Cane Island Power Park Unit Number 3 are APPROVED.

Pursuant to Section 403.516(1)(b), F.S., the Conditions of Certification for the Cane Island

Power Park Unit Number 3 are MODIFIED as follows:

I.1. GENERAL

The following general and specific conditions shall apply to the construction and operation of the Cane Island Power Park. Prior to the completion of Cane Island Unit 3, the Cane Island Power Park may operate in accordance with existing permits. Within 90 days of the commencement of commercial operation on Unit 3, the Kissimmee Utility Authority (KUA) shall surrender any existing non-federal state operating permits for Units 1 I-and 2 at the Cane Island Power Park.

A. Definitions

- 1.-5. No change.
- 6. <u>"FWCC" "GFWFC"</u> shall mean the Florida Game and Fresh-Water Fish and Wildlife Conservation Commission.

- 7. 11. No change.
- B. No change.

II. - X. No change.

XI. MODIFICATION OF CONDITIONS

A. Pursuant to Subsection 403.516(1), F.S., the Siting Board hereby delegates the authority to the <u>Department Secretary</u> to modify any condition of this certification, except that any proposed modification to burn a fuel other than natural gas or oil shall be reviewed by the Board.

- B. No change.
- XII. No change.

XIII. AIR

- A. General And Administrative Requirements
 - 1. No change.
- 2. General Conditions: The owner and operator is subject to and shall operate under the attached-General Permit Conditions G.1 through G.15, which are listed in Appendix GC of this pPermit PSD-FL-254. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
 - 3. 8. No change.
- 9. Application for Title IV Permit: An application for a Title IV Acid Rain Permit, must be submitted to the U.S. Environmental Protection Agency Region IV office in Atlanta, Georgia, and a copy to the DEP's Bureau of Air Regulation in Tallahassee, Florida, 24 months before the date on which the new unit begins serving an electrical generator (greater than 25 MW). [40 CFR 72]
 - 10. 14. No change.
 - B. No change.
 - C. General Operation Requirements
 - 1. No change.
- 2. Combustion Turbine Capacity: The maximum heat input rates, based on the lower heating value (LHV) of each fuel to this Unit at ambient conditions of 19° 190F temperature,

55% relative humidity, 100% load, and 14.7 psi pressure shall not exceed 1,696 million Btu per hour (mmBtu/hr) when firing natural gas, nor 1,910 mmBtu/hr when firing No. 2 or superior grade of distillate fuel oil. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. [Design, Rule 62-210.200, F.A.C. (Definitions – Potential Emissions)]

- 3. 8. No change.
- 9. Simple Cycle Operation: The plant may be operated in simple cycle mode. Different limits apply depending upon whether simple cycle operation is of an intermittent nature. (such as operation due to maintenance of equipment following the combustion turbine or temporary electrical demand fluctuations), or of a longer term nature, (such as a decision to not install the heat recovery steam generator or long term electrical demand situations.)

D. Control Technology

- 1. Dry Low NO_x (DLN) combustors shall be installed on the stationary combustion turbine and Low NO_x burners shall be installed in the duct burner arrangement to comply with the simple cycle NO_x emissions limits listed in Conditions XIII.E.<u>1.1. and E.2.</u> [Design, Rules 62-4.070 and 62-212.400, F.A.C.]
 - 2. No change.
- 3. The permittee may design the heat recovery steam generator to accommodate installation of shall install a selective catalytic reduction system or oxidation catalyst technologies and to comply with the corresponding combined cycle NO_x and CO limits listed in Conditions M.XIII.E1., E.2. and E.3.. [Rules 62-212.400 and 62-4.070, F.A.C.]
 - 4. No change.
- 5. The permittee shall provide manufacturer's emissions performance versus load diagrams for the DLN and wet injection systems prior to their installation. DLN systems shall each be tuned upon initial operation to optimize emissions reductions and shall be maintained to minimize simple cycle NO_x emissions and CO emissions. [Rules 62-4.070, and 62-210.650, F.A.C.] Drift eliminators shall be installed on the cooling tower to reduce PM/PMIO emissions.

6. Drift eliminators shall be installed on the cooling tower to reduce PM/PM10 PMIO emissions.

E. Emission Limits And Standards

1. The following table is a summary of the BACT determination and is followed by the applicable specific conditions. Values for NO_{*} are corrected to 15 % O₂. These limits or their equivalent in terms of lb/hr or NSPS units, as well as the applicable averaging times, are followed by the applicable specific conditions. Each Unit shall be tested alone to comply with the applicable NSPS and as a Combined Unit to comply with the BACT limits as indicated below: [Rules 62-212.400, 62-204.800(7)(b) (Subpart GG and De), 62-210.200 (Definitions Potential Emissions) F.A.C.]

POLLUTANT	CONTROL TECHNOLOGY	BAGT DETERMINATION
PMPM ₁₀ , VE	Pipeline Natural Gas Good Combustion	10 Percent Opacity 5-ppm Ammonia Slip if SCR is used
₩	As Above	1.4 ppm (Gas, CT on, DB otY) 4 ppm (Gas, CT and DB on)) 10 ppm for F.O.
CO	As Above	12 ppm (Gas, CT on, DB off) 20 ppm (Gas, CT and DB on) 30 ppm for F.O.
NO _X (CT on, DB off)	DLN, or DLN & SCR for gas WI or SCR for fuel oil 720 Hours on fuel oil with DB On or Off	9 ppm (DLN) or 4.5 ppm (SCR) for gas 42 ppm (WI) or 15 ppm (SCR) for fuel oil 12/42 ppm (gas/oil) Intermittent Simple Cycle
NO _X (CT and DB on)	DLN & Low NO., or DLN & SCR for gas WI & Low NO.x, or SCR for fuel oil Duet burner only fires natural gas	9.4 ppm (DLN) or 4.5 ppm (SCR) for gas 42 ppm (WI) or 15 ppm (SCR) for fuel oil DB limited to 0.4 lb/MW-hr

- 2. Nitrogen Oxides (NO_x) Emissions:
 - a. Combined Cycle and Continuous Simple Cycle Operation
- i. The concentration of NO_x in the stack exhaust gas, with the combustion turbine operating on gas (fuel oil) and the duct burner on or off, shall not exceed 9 (42) 3.5 (15) ppmvd at 15% O₂ (24 on a 3-hr block average), and with the combustion turbine operating and the duct burner on shall not exceed 9.4 (42) ppmvd at 15% O₂ (24 hour block average). Compliance shall will be determined by the continuous emission monitor (CEMS). Emissions of NO_x calculated as NO₂ in the stack exhaust gas (at ISO conditions) with the combustion turbine operating shall not exceed 65 (310) 26 (108) pounds per hour (lb/hr) with the duct burner on or off and 68 (310) lb/hr with the duct burner on to be demonstrated by initial stack test. [40CFR60 Subpart GG and Rule 62-212.400, F.A.C. Applicant request on November 9, 1999]

If selective catalytic reduction (SCR) technology is installed, the concentration of NO_n in the stack exhaust gas, with the combustion turbine operating on gas (fuel oil) and the duct burner on or off, shall not exceed 4.5 (15) ppmvd @15% O₂ on a 3-hr block average.

Compliance shall be determined by the continuous emission monitor (CEMS). Emissions of NO_n calculated as NO₂ in the stack exhaust gas (at ISO conditions) with the combustion turbine operating shall not exceed 33 (108) pounds per hour (lb/hr) with the duct burner on or off to be demonstrated by initial stack test. [40CFR60 Subpart GG and Rule 62-212.400, F.A.C.]

<u>ii.</u> If SCR is installed, tThe concentration of ammonia in the exhaust gas from each combustion turbine shall not exceed 5 ppm<u>vd@ 15% O₂</u>. The compliance procedures will be included in the final permit are described in Condition XIII.I.9. [Rules 62-212.400, and 62-4.070, F.A.C.]

Unless SCR is employed, emissions of NO_x from the duct burner shall not exceed 0.4 lb/MW-hr (gross output). [Rule 62-212.400, F.A.C.]

- iii. When NO_x monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.
 - b. Intermittent Simple Cycle Operation
 - i. The concentration of NO_x in the stack exhaust gas, with the combustion

turbine operating on gas (fuel oil) shall not exceed 12 (42) ppmvd at 15% O₂ (24-hr block average). Emissions of NO_x in the stack exhaust gas (at ISO conditions) with the combustion turbine operating shall not exceed 86 (310) pounds per hour (lb/hr). [Rule 62-212.400, F.A.C. and 40CFR60 Subpart GG]

ii. Not withstanding the applicable NO_x- limit during simple cycle operation, reasonable measures shall be implemented to maintain the concentration of NO_x in the exhaust gas at 9 ppmvd at 15% O₂ or lower. Any tuning of the combustors for Dry Low NO_x-, operation while firing gas shall result in initial concentrations of 9, ppmvd @ 15% O₂ or lower. [Rules 62-212.400 and 62-4.070, F.A.C.]

iii. When NO_x monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.

c. Continuous Simple Cycle Operation

- i. The concentration of NO_s in the stack exhaust gas, with the combustion turbine operating on gas (fuel oil) shall not exceed 9 (42) ppmvd at 15% O₂ (24-hr block average). Emissions of NO_s in the stack exhaust gas (at ISO conditions) with the combustion turbine operating shall not exceed 65 (310) pounds per hour (lb/hr). [Rule 62-212.400, F.A.C.]
- ii. Notwithstanding the applicable NO_x limit during simple cycle operation, reasonable measures shall be implemented to maintain the concentration of NO_x in the exhaust gas at 9 ppmvd at 15% O₂ or lower. Any tuning of the combustors for Dry Low NO_x operation while firing gas shall initially result in subsequent NO_x concentrations of 9 ppmvd @ 15% O₂ or lower. [Rules 62-212.400 and 62-4.070, F.A.C.]

shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.

- 3. 2. Carbon Monoxide (CO) Emissions No change.
- 4. 3. Volatile Organic Compounds (VOC) Emissions No change.
- 5. 4. Sulfur Dioxide (SO₂) emissions No change.
- 6. 5. Visible emissions (VE) No change.

F. Excess Emissions

1. and 2. No change.

3. Excess Emissions Report: If excess emissions occur for more than two hours due to malfunction, the owner or operator shall notify DEP's Central District office within one (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, all excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. Following this format, 40 CFR 60.7, periods of startup, shutdown, malfunction, shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific Conditions XIII.E.1-and 2. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7 (1998 1997-version)].

G. Compliance Determination

1. Allowable Emission Limiting Standards

Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate, but not later than 180 days after of initial operation of the unit, and annually thereafter as indicated in this permit, by using the following reference methods as described in 40 CFR 60, Appendix A (1998 1997 version), and adopted by reference in Chapter 62-204.800, F.A.C.

2. Initial (I) Performance Tests

Initial (I) performance tests (for both fuels) shall be performed by the deadlines in Specific Condition XIII.G.1. Initial tests shall also be conducted after any substantial modifications (and shake down period not to exceed 100 days after re-starting the CT) of air pollution control equipment, such as installation of SCR or change of combustors. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 – September 30) pursuant to Rule 62-297.310(7), F.A.C., on these units as indicated. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing.

EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources" (I,A).

EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from

Stationary Sources" (I,A).

EPA Reference Method 20, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines." Test must be conducted with the duct burner on and with the duct burner off. Initial test only for compliance with 40 CFR 60 Subpart GG, Dc. NO, BACT limits compliance by CEMS (24 hr average or 3 hr average if SCR is installed).

EPA Reference Method 18, 25 and/or 25A, "Determination of Volatile Organic Concentrations." Initial test only

EPA Method 26A (modified) for ammonia sample collection.

EPA Draft Method 206 for ion chromatographic analysis for ammonia.

3. Continuous Compliance with the NO_x Emission Limits

Continuous compliance with the NO_x emission limits shall be demonstrated with the CEM system based on the applicable averaging time of 24 hr block average (DLN) or a 3-hr average basis(if SCR is used). Based on CEMS data, a separate compliance determination is conducted at the end of each operating day (or 3-hr period when applicable) and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous operating day (or 3-hr period when applicable). Valid hourly emission rates shall not include periods of start up, shutdown, or malfunction unless prohibited by 62-210.700, F.A.C. A valid hourly emission rate shall be calculated for each hour in which at least two NO_x concentrations are obtained at least 15 minutes apart. These excess emissions periods shall be reported as required in Condition XIII.F.3. [Rules 62-4.070 F.A.C., 62-210.700, F.A.C., 40 CFR 75 and BACT]

4. Compliance with the SO₂₅ and PM/PM₁₀10Emission Limits

Notwithstanding the requirements of Rule 62-297.340, F.A.C., the use of pipeline natural gas is the method for determining compliance for SO₂ and PM₁₀. For the purposes of demonstrating compliance with the 40 CFR 60.333, SO₂ standard, ASTM methods D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule, or natural gas supplier data may be submitted, or the natural gas sulfur content referenced in 40 CFR 75 Appendix D may be utilized.

However, the applicant is responsible for ensuring that the procedures in 40 CFR 60.335 or 40 CFR 75 are used when determination of fuel sulfur content is made. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e) (1998 1997 version).

- 5. 10. No change.
- H. No change.
- I. Monitoring Requirements
 - 1. Continuous Monitoring System

The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from these units. Periods when NO_x emissions (ppmvd @ 15% oxygen) are above the BACT standards, listed in Specific-Condition XIII.E.1.-and 2, shall be reported to the DEP Central District Office within one working day (verbally) followed up by a written explanation not later than three (3) working days (alternatively by facsimile within one working day). [Rules 62-204.800, 62-210.700, 624.130, 62-4.160(8), F.A.C. and 40 CFR 60.7 (1998-1997-version)].

2. CEMS for Reporting Eexcess Eemissions

Subject to EPA approval, tThe NO_x CEMS shall be used in lieu of the requirement for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1998 1997 version). Upon request from DEP, the CEMS emission rates for NO_x on the CT shall be corrected to ISO conditions to demonstrate compliance with the NO_x standard established in 40 CFR 60.332. [EPA Approval dated February 10, 1999]

3. CEMS in Llieu of Water to Fuel Ratio

Subject to EPA approval, tThe NO_x CEMS shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1998 1997 version). Subject to EPA approval, the calibration of the water/fuel monitoring device required in 40 CFR 60.335(c)(2) (1998 1997 version) will be replaced by the 40 CFR 75 certification tests of the NO_x CEMS. Upon request from DEP, the CEMS emission rates for NO_x on this Unit shall be corrected to ISO conditions to demonstrate compliance with the NO_x standard established in 40 CFR 60.332. [EPA Approval dated February 10, 1999]

- 4. through 7. No change.
- 8. Subpart Dc Monitoring and Record-keeping Requirements

The permittee shall comply with all applicable requirements of this Subpart [40CFR60, Subpart Dc]-1, ARMS Emissions Unit 003. Direct Power Generation, consisting of a nominal 167 megawatt combustion turbine electrical generator, shall comply with all applicable provisions of 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(7)(b), F.A.C. The Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not used for compliance determinations with the BACT standard(s).

- 9. Selective Catalytic Reduction System (SCR) Compliance Procedures
- a. An initial stack emission test for nitrogen oxides and ammonia from the CGT/HRSG pair shall be conducted: 1) for natural gas firing and 2) for distillate oil firing. The ammonia injection rate necessary to comply with the NO_x standard shall be established during the initial performance tests.
- b. The SCR shall operate at all times that the turbine is operating, except during turbine start-up and shutdown periods. During turbine start-up, permittee shall begin use of SCR (i.e., commence ammonia injection) within two (2) hours of the initial turbine firing or when the temperature of the catalyst bed reaches a suitable predetermined temperature level, whichever occurs first. During turbine shutdown, permittee shall discontinue use of the SCR (i.e., discontinue ammonia injection) when the catalyst bed temperature drops below the predetermined levels, but no more than one hour prior to the time at which the fuel feed to the turbine is discontinued. Suitable temperature for activation and deactivation of the SCR shall be established during performance testing. The permittee shall, whenever possible, operate the facility in a manner so as to optimize the effectiveness of the SCR unit while minimizing the ammonia slip to below the emission limit.
- c. The permittee shall install and operate an ammonia flow meter to measure and record the ammonia injection rate to the SCR system of the CGT/HRSG set. It shall be maintained and calibrated according to the manufacturer's specifications. During the stack test, the permittee, at each load condition, shall determine the minimum ammonia flow rate required to

meet the emission limitations. During NO_x CEM downtimes or malfunctions, the permittee shall operate at greater or equal to 100% of the ammonia injection rate determined during the stack test.

J. No change.

XIV. through XXV. No change.

Any party to this Notice has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, M.S. 35, Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fee with the appropriate district court of appeal. The Notice of Appeal must be filed within 30 days from the date that this Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this day of May 2000, in Tallahassee, Florida.

STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION

KIRBY B. GREEN, III DEPUTY SECRETARY

3900 Commonwealth Boulevard

Tallahassee, FL 32399-3000 Telephone: (850) 488-7131

FILING IS ACKNOWLEDGED ON THIS DATE,
PURSUANT TO \$120.52 FLORIDA STATUTES,
WITH THE DESIGNATED DEPARTMENT CLERK,
RECEIP OF WHICH IS HEREBY ACKNOWLEDGED.

CLERK

DATE

CERTIFICATE OF SERVICE

I CERTIFY that a true and correct copy of the foregoing Final Order Modifying

Conditions of Certification was mailed to:

A.K. (Ben) Sharma, P.E. Director of Power Supply Kissimmee Utility Authority Post Office Box 423219 Kissimmee, Florida 34742-3219

Robert V. Elias, Esquire Division of Legal Services Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

James V. Antista General Counsel Fish and Wildlife Conservation Commission Bryant Building 620 South Meridian Street Tallahassee, Florida 32399-1600

Greg Golgowski, Executive Director
East Central Florida Regional Planning Council
1011 Wymore Road
Suite 105
Winter Park, Florida 32789-1797

Ken van Assenderp, Esq.
Tasha O. Buford, Esq.
Young, van Assenderp & Varnadoe
225 South Adams Street, Suite 200
Post Office Box 1833
Tallahassee, Florida 32302-1833
on this day of May 2000.

Claude L'Engle Florida Municipal Power Agency 7201 Lake Ellenor Drive Orlando, Florida 32809

Sherry A. Spiers Assistant General Counsel Department of Community Affairs 2555 Shumard Oak Boulevard Tallahassee, Florida 32399-2100

Cecile I. Ross, Esquire South Florida Water Management District 3301 Gun Club Road, MSC 0500 Post Office Box 24680 West Palm Beach, Florida 33416-4680

Rob Magnaghi, County Manager Osceola County 17 South Vernon Avenue Room 117 Kissimmee, Florida 34741

SCOTT A. GOORLAND
Assistant General Counsel
Florida Bar No. 0066834

BEFORE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In Re: Kissimmee Utility Authority/ Florida Municipal Power Agency))	RECEIVED
Cane Island Power Park Modification of Conditions	DEP FILE NO. PA98 OGC CASE NO. 00-	1000 AAAD 4 (1) 2000
of Certification Osceola County, Florida)) !	BUREAU OF AIR REGULATION

NOTICE OF INTENT TO ISSUE PROPOSED MODIFICATION OF POWER PLANT CERTIFICATION

The Florida Department of Environmental Protection (Department) hereby provides notice of an intent to modify Power Plant Certification Conditions issued pursuant to the Florida Electrical Power Plant Siting Act, § 403.501, et seq., Florida Statutes. A Proposed Final Order has been prepared in accordance with Rule 62-17.211(4) concerning the above referenced project. A copy of the Proposed Final Order Modifying Conditions of Certification is attached.

On November 24, 1999, the Department issued a Notice of Permit, Permit No. PSD-FL-254, for Cane Island Power Park Unit 3, which contained more restrictive nitrogen oxide emission limits than the limits adopted in the Conditions of Certification by the Siting Board. The more restrictive emission limits were the result of recommendations received from the U. S. Environmental Protection Agency on November 8, 1999, that were submitted after the certification hearing and subsequent issuance of the Recommended Order by the Administrative Law Judge pursuant to section 403.508, Florida Statutes. This action requires the Department to make certain modifications to conform the Conditions of Certification for the above referenced facility to the PSD permit, pursuant to Section 403.516, Florida Statutes, and Section 62-17.211(4), Florida Administrative Code.

POINT OF ENTRY

Pursuant to § 403.516, F.S., and Rule 62-17.211(5), F.A.C., all parties to the certification proceeding have 45 days from the issuance of this notice by mail to such party's last address of record in which to object to the requested modification. Failure of any of the parties to file a response will constitute a waiver of objection to the requested modification.

Any person who is not already a party to the certification proceeding and whose substantial interest is affected by the requested modification has 30 days from the date of publication of the public notice to object in writing. The written objection must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000.

If no objections are received, then a Final Order approving the modification shall be issued by the Department. If objections are raised and agreement cannot be subsequently reached, then pursuant to § 403.516(1)(c), F.S., the applicant may file a petition for modification seeking approval for those portions of the request for modification to which written objections were timely filed.

Mediation is not available in this proceeding.

CERTIFICATE OF SERVICE

I CERTIFY that a true and correct copy of the foregoing Notice of Intent to Issue Proposed Modification of Power Plant Certification was sent by U.S. Mail or *Interagency delivery to:

A.K. (Ben) Sharma, P.E. Director of Power Supply Kissimmee Utility Authority Post Office Box 423219 Kissimmee, Florida 34742-3219

Robert V. Elias, Esquire Division of Legal Services Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

James V. Antista
General Counsel
Fish and Wildlife Conservation Commission
Bryant Building
620 South Meridian Street
Tallahassee, Florida 32399-1600

Greg Golgowski, Executive Director East Central Florida Regional Planning Council 1011 Wymore Road Suite 105 Winter Park, Florida 32789-1797

Ken van Assenderp, Esq. Tasha O. Buford, Esq. Young, van Assenderp & Varnadoe 225 South Adams Street, Suite 200 Post Office Box 1833 Tallahassee, Florida 32302-1833

on this 9^{4} day of March 2000.

Claude L'Engle Florida Municipal Power Agency 7201 Lake Ellenor Drive Orlando, Florida 32809

Sherry A. Spiers Assistant General Counsel Department of Community Affairs 2555 Shumard Oak Boulevard Tallahassee, Florida 32399-2100

Cecile I. Ross, Esquire South Florida Water Management District 3301 Gun Club Road, MSC 0500 Post Office Box 24680 West Palm Beach, Florida 33416-4680

Rob Magnaghi, County Manager Osceola County 17 South Vernon Avenue Room 117 Kissimmee, Florida 34741

SCOTT A. GOORLAND Assistant General Counsel Florida Bar No. 0066834

BEFORE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In Re:	Kissimmee Utility Authority/)	
	Florida Municipal Power Agency)	•
	Cane Island Power Park)	DEP FILE NO. PA98-38A
	Modification of Conditions)	OGC CASE NO. 00-0471
	of Certification)	
	Osceola County, Florida)	
)	

PROPOSED FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

On November 23, 1999, the Governor and Cabinet, sitting as the Siting Board, issued a final order approving certification for the Kissimmee Utility Authority/Florida Municipal Power Agency Cane Island Power Park. The site certification order approved the construction and operation of a 250 megawatt (MW) natural gas fired Unit Number 3 as well as the existing Unit Numbers 1 and 2 and associated facilities at the existing Cane Island Power Park in Osceola County, Florida.

On November 24, 1999, the Department issued a Notice of Permit for Permit No. PSD-FL-254 for Cane Island Power Park Unit 3 which contained more restrictive nitrogen oxide emission limits than the limits adopted in the Conditions of Certification by the Siting Board. The more restrictive emission limits were the result of recommendations received from the U. S. Environmental Protection Agency on November 8, 1999, that were submitted after the certification hearing and subsequent issuance of the Recommended Order by the Administrative Law Judge pursuant to section 403.508, Florida Statutes. This action requires the Department to make certain modifications to conform the Conditions of Certification for the above referenced facility to the PSD permit, pursuant to Section 403.516, Florida Statutes, and Section 62-17.211(4), Florida Administrative Code.

Copies of the proposed modifications were made available for public review on March 9, 2000. On March 17, 2000, a Notice of Intent to Issue Proposed Modification of Power Plant Certification was published in the *Florida Administrative Weekly*. On March 9, 2000, all parties

to the original proceeding were furnished with a Notice of Intent to Issue Proposed Modification of Power Plant Certification and a copy of this proposed final order. The notices specified that all parties to the original certification proceeding have 45 days from the issuance of the notice by mail to such party's last address of record in which to object to the requested modification. Failure of any of the parties to file a response constitutes a waiver of objection to the requested modification. The notices further specified that any person who is not already a party to the certification proceeding and whose substantial interest is affected by the requested modification has 30 days from the date of publication of the public notice to object in writing. If no objections are received, then a Final Order approving the modification shall be issued by the Department. If objections are raised and agreement cannot be subsequently reached, then pursuant to §403.516(1)(c), F.S., the applicant may file a petition for modification seeking approval for those portions of the request for modification to which written objections were timely filed. No written objection to the proposed modifications has been received by the Department. Accordingly, in the absence of any timely objection,

IT IS ORDERED:

The proposed changes to the Cane Island Power Park Unit Number 3 are APPROVED.

Pursuant to Section 403.516(1)(b), F.S., the Conditions of Certification for the Cane Island

Power Park Unit Number 3 are MODIFIED as follows:

I.1. GENERAL

The following general and specific conditions shall apply to the construction and operation of the Cane Island Power Park. Prior to the completion of Cane Island Unit 3, the Cane Island Power Park may operate in accordance with existing permits. Within 90 days of the commencement of commercial operation on Unit 3, the Kissimmee Utility Authority (KUA) shall surrender any existing non-federal state operating permits for Units <u>1</u> and 2 at the Cane Island Power Park.

A. Definitions

- 1. 5. No change.
- 6. <u>"FWCC" "GFWFC" shall mean the Florida Game and Fresh Water Fish and</u>
 Wildlife Conservation Commission.

- 7. 11. No change.
- B. No change.

II. - X. No change.

XI. MODIFICATION OF CONDITIONS

- A. Pursuant to Subsection 403.516(1), F.S., the Siting Board hereby delegates the authority to the <u>Department Secretary</u> to modify any condition of this certification, except that any proposed modification to burn a fuel other than natural gas or oil shall be reviewed by the Board.
 - B. No change.
- XII. No change.

XIII. AIR

- A. General And Administrative Requirements
 - 1. No change.
- 2. General Conditions: The owner and operator is subject to and shall operate under the attached-General Permit Conditions G.1 through G.15, which are listed in Appendix GC of this pPermit PSD-FL-254. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
 - 3. 8. No change.
- 9. Application for Title IV Permit: An application for a Title IV Acid Rain Permit, must be submitted to the U.S. Environmental Protection Agency Region IV office in Atlanta, Georgia, and a copy to the DEP's Bureau of Air Regulation in Tallahassee, Florida, 24 months before the date on which the new unit begins serving an electrical generator (greater than 25 MW). [40 CFR 72]
 - 10. 14. No change.
 - B. No change.
 - C. General Operation Requirements
 - 1. No change.
- 2. Combustion Turbine Capacity: The maximum heat input rates, based on the lower heating value (LHV) of each fuel to this Unit at ambient conditions of 19° 190F temperature,

55% relative humidity, 100% load, and 14.7 psi pressure shall not exceed 1,696 million Btu per hour (mmBtu/hr) when firing natural gas, nor 1,910 mmBtu/hr when firing No. 2 or superior grade of distillate fuel oil. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. [Design, Rule 62-210.200, F.A.C. (Definitions – Potential Emissions)]

- 3. 8. No change.
- 9. Simple Cycle Operation: The plant may be operated in simple cycle mode.

 Different limits apply depending upon whether simple cycle operation is of an intermittent nature. (such as operation due to maintenance of equipment following the combustion turbine or temporary electrical demand fluctuations); or of a longer term nature; (such as a decision to not install the heat recovery steam generator or long term electrical demand situations.)

D. Control Technology

- 1. Dry Low NO_x (DLN) combustors shall be installed on the stationary combustion turbine and Low NO_x burners shall be installed in the duct burner-arrangement to comply with the simple cycle NO_x emissions limits listed in Conditions XIII.E.<u>1.1. and E.2.</u> [Design, Rules 62-4.070 and 62-212.400, F.A.C.]
 - 2. No change.
- 3. The permittee may design the heat-recovery steam-generator to accommodate installation of shall install a selective catalytic reduction system or oxidation catalyst technologies and to comply with the corresponding combined cycle NO_x and CO limits listed in Conditions M.XIII.E1., E.2. and E.3.. [Rules 62-212.400 and 62-4.070, F.A.C.]
 - 4. No change.
- 5. The permittee shall provide manufacturer's emissions performance versus load diagrams for the DLN and wet injection systems prior to their installation. DLN systems shall each be tuned upon initial operation to optimize emissions reductions and shall be maintained to minimize simple cycle NO_x emissions and CO emissions. [Rules 62-4.070; and 62-210.650, F.A.C.] Drift eliminators shall be installed on the cooling tower to reduce PM/PMIO emissions.

6. Drift eliminators shall be installed on the cooling tower to reduce PM/PM10 PMIO emissions.

E. Emission Limits And Standards

1. The following table is a summary of the BACT determination and is followed by the applicable specific conditions. Values for NO_x are corrected to 15 % O₂. These limits or their equivalent in terms of lb/hr or NSPS units, as well as the applicable averaging times, are followed by the applicable specific conditions. Each Unit shall be tested alone to comply with the applicable NSPS and as a Combined Unit to comply with the BACT limits as indicated below: [Rules 62-212:400, 62-204.800(7)(b) (Subpart GG and Dc), 62-210.200 (Definitions-Potential Emissions) F.A.C.]

POLLUTANT	CONTROL TECHNOLOGY	BACT DETERMINATION
PM/PM ₁₀ , VE	Pipeline Natural Gas Good Combustion	10 Percent Opacity 5 ppm Ammonia Slip if SCR is used
VOC	As Above	1.4 ppm (Gas, CT on, DB otY) 4 ppm (Gas, CT and DB on)) 10 ppm for F.O.
co	As Above	12 ppm (Gas, CT on, DB off) 20 ppm (Gas, CT and DB on) 30 ppm for F.O.
NO _x (CT on, DB off)	DLN, or DLN & SCR for gas WI or SCR for fuel eil 720 Hours on fuel eil with DB On or Off	9 ppm (DLN) or 4.5 ppm (SCR) for gas 42 ppm (WI) or 15 ppm (SCR) for fuel oil 12/42 ppm (gas/oil) Intermittent Simple Cycle
NO _X (CT and DB on)	DLN & Low NO., or DLN & SCR for gas WI & Low NO.x, or SCR for fuel oil Duot burner only fires natural gas	9.4 ppm (DLN) or 4.5 ppm (SCR) for gas 42 ppm (WI) or 15 ppm (SCR) for fuel oil DB limited to 0.4 lb/MW hr

- 2. Nitrogen Oxides (NO_x) Emissions:
 - a. Combined Cycle and Continuous Simple Cycle Operation
- i. The concentration of NO_x in the stack exhaust gas, with the combustion turbine operating on gas (fuel oil) and the duct burner on or off, shall not exceed 9 (42) 3.5 (15) ppmvd at 15% O₂ (24 on a 3-hr block average), and with the combustion turbine operating and the duct burner on shall not exceed 9.4 (42) ppmvd at 15% O₂ (24-hour block average).

 Compliance shall will be determined by the continuous emission monitor (CEMS). Emissions of NO_x calculated as NO₂ in the stack exhaust gas (at ISO conditions) with the combustion turbine operating shall not exceed 65 (310) 26 (108) pounds per hour (lb/hr) with the duct burner on or off and 68 (310) lb/hr with the duct burner on to be demonstrated by initial stack test. [40CFR60 Subpart GG and Rule 62-212.400, F.A.C. Applicant request on November 9, 1999]

If selective catalytic reduction (SCR) technology is installed, the concentration of NO_x in the stack exhaust gas, with the combustion turbine operating on gas (fuel oil) and the duct burner on or off, shall not exceed 4.5 (15) ppmvd @15% O₂ on a 3-hr block average.

Compliance shall be determined by the continuous emission monitor (CEMS). Emissions of NO_x calculated as NO₂ in the stack exhaust gas (at ISO conditions) with the combustion turbine operating shall not exceed 33 (108) pounds per hour (lb/hr) with the duct burner on or off to be demonstrated by initial stack test. [40CFR60 Subpart GG and Rule 62-212.400, F.A.C.]

ii. If SCR is installed, tThe concentration of ammonia in the exhaust gas from each combustion turbine shall not exceed 5 ppmvd @ 15% O₂. The compliance procedures will be included in the final permit are described in Condition XIII.1.9. [Rules 62-212.400, and 62-4.070, F.A.C.]

Unless SCR is employed, emissions of NO_{*} from the duct burner shall not exceed 0.4 lb/MW-hr (gross output). [Rule 62-212.400, F.A.C.]

- iii. When NO_x monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.
 - b. Intermittent Simple Cycle Operation
 - i. The concentration of NO_x in the stack exhaust gas, with the combustion

turbine operating on gas (fuel oil) shall not exceed 12 (42) ppmvd at 15% O₂ (24-hr block average). Emissions of NO_x in the stack exhaust gas (at ISO conditions) with the combustion turbine operating shall not exceed 86 (310) pounds per hour (lb/hr). [Rule 62-212.400, F.A.C. and 40CFR60 Subpart GG]

- ii. Not withstanding the applicable NO_x- limit during simple cycle operation, reasonable measures shall be implemented to maintain the concentration of NO_x in the exhaust gas at 9 ppmvd at 15% O₂ or lower. Any tuning of the combustors for Dry Low NO_x-, operation while firing gas shall result in initial concentrations of 9, ppmvd @ 15% O₂ or lower. [Rules 62₂ 212.400 and 62-4.070, F.A.C.]
- \underline{iii} . When NO_x monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.
 - c. Continuous Simple Cycle Operation
- i. The concentration of NO_x in the stack exhaust gas, with the combustion turbine operating on gas (fuel oil) shall not exceed 9 (42) ppmvd at 15% O₂ (24-hr block average). Emissions of NO_x in the stack exhaust gas (at ISO conditions) with the combustion turbine operating shall not exceed 65 (310) pounds per hour (lb/hr). [Rule 62-212.400, F.A.C.]
- ii. Notwithstanding the applicable NO₈ limit during simple cycle operation, reasonable measures shall be implemented to maintain the concentration of NO₈ in the exhaust gas at 9 ppmvd at 15% O₂ or lower. Any tuning of the combustors for Dry Low NO₈ operation while firing gas shall initially result in subsequent NO₈ concentrations of 9 ppmvd @ 15% O₂ or lower. [Rules 62-212.400 and 62-4.070, F.A.C.]
- iii. When NO₈ monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.
 - 3. 2. Carbon Monoxide (CO) Emissions No change.
 - 4. 3. Volatile Organic Compounds (VOC) Emissions No change.
 - 5. 4. Sulfur Dioxide (SO₂) emissions No change.
 - 6. 5. Visible emissions (VE) No change.
 - F. Excess Emissions
 - 1. and 2. No change.

3. Excess Emissions Report: If excess emissions occur for more than two hours due to malfunction, the owner or operator shall notify DEP's Central District office within one (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, all excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. Following this format, 40 CFR 60.7, periods of startup, shutdown, malfunction, shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific-Conditions XIII.E.1-and 2. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7 (1998 1997-version)].

G. Compliance Determination

1. Allowable Emission Limiting Standards

Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate, but not later than 180 days after of initial operation of the unit, and annually thereafter as indicated in this permit, by using the following reference methods as described in 40 CFR 60, Appendix A (1998 1997-version), and adopted by reference in Chapter 62-204.800, F.A.C.

2. Initial (I) Performance Tests

Initial (I) performance tests (for both fuels) shall be performed by the deadlines in Specific Condition XIII.G.1. Initial tests shall also be conducted after any substantial modifications (and shake down period not to exceed 100 days after re-starting the CT) of air pollution control equipment, such as installation of SCR or change of combustors. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 – September 30) pursuant to Rule 62-297.310(7), F.A.C., on these units as indicated. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing.

EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources" (I,A).

EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from

Stationary Sources" (I,A).

EPA Reference Method 20, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines." <u>Test must be conducted with the duct burner on and with the duct burner off.</u> <u>Initial test only for compliance with 40 CFR 60 Subpart GG, Dc. NO, BACT limits compliance by CEMS (24 hr average or 3 hr average if SCR is installed).</u>

EPA Reference Method 18, 25 and/or 25A, "Determination of Volatile Organic Concentrations." Initial test only.

EPA Method 26A (modified) for ammonia sample collection.

EPA Draft Method 206 for ion chromatographic analysis for ammonia.

3. Continuous Compliance with the NO_x Emission Limits

Continuous compliance with the NO_x emission limits shall be demonstrated with the CEM system based on the applicable averaging time of 24-hr block average (DLN) or a 3-hr average basis(if SCR is used). Based on CEMS data, a separate compliance determination is conducted at the end of each operating day (or 3-hr period when applicable) and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous operating day (or 3-hr period-when applicable). Valid hourly emission rates shall not include periods of start up, shutdown, or malfunction unless prohibited by 62-210.700, F.A.C. A valid hourly emission rate shall be calculated for each hour in which at least two NO_x concentrations are obtained at least 15 minutes apart. These excess emissions periods shall be reported as required in Condition XIII.F.3. [Rules 62-4.070 F.A.C., 62-210.700, F.A.C., 40 CFR 75 and BACT]

4. Compliance with the SO₂₇ and PM/PM₁₀10Emission Limits

Notwithstanding the requirements of Rule 62-297.340, F.A.C., the use of pipeline natural gas is the method for determining compliance for SO₂ and PM₁₀. For the purposes of demonstrating compliance with the 40 CFR 60.333, SO₂ standard, ASTM methods D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule, or natural gas supplier data may be submitted, or the natural gas sulfur content referenced in 40 CFR 75 Appendix D may be utilized.

However, the applicant is responsible for ensuring that the procedures in 40 CFR 60.335 or 40 CFR 75 are used when determination of fuel sulfur content is made. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e) (1998 1997 version).

- 5. 10. No change.
- H. No change.
- I. Monitoring Requirements
 - 1. Continuous Monitoring System

The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from these units. Periods when NO_x emissions (ppmvd @ 15% oxygen) are above the BACT standards, listed in Specific Condition XIII.E.1.-and 2, shall be reported to the DEP Central District Office within one working day (verbally) followed up by a written explanation not later than three (3) working days (alternatively by facsimile within one working day). [Rules 62-204.800, 62-210.700, 624.130, 62-4.160(8), F.A.C. and 40 CFR 60.7 (1998 1997-version)].

2. CEMS for Reporting Eexcess Eemissions

Subject-to EPA approval, tThe NO_x CEMS shall be used in lieu of the requirement for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1998 1997 version). Upon request from DEP, the CEMS emission rates for NO_x on the CT shall be corrected to ISO conditions to demonstrate compliance with the NO_x standard established in 40 CFR 60.332. [EPA Approval dated February 10, 1999]

3. CEMS in Llieu of Water to Fuel Ratio

Subject to EPA approval, tThe NO_x CEMS shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1998 1997-version). Subject to EPA approval, the calibration of the water/fuel monitoring device required in 40 CFR 60.335(c)(2) (1998 1997-version) will be replaced by the 40 CFR 75 certification tests of the NO_x CEMS. Upon request from DEP, the CEMS emission rates for NO_x on this Unit shall be corrected to ISO conditions to demonstrate compliance with the NO_x standard established in 40 CFR 60.332. [EPA Approval dated February 10, 1999]

4. through 7. - No change.

determinations with the BACT standard(s).

- 8. Subpart Dc Monitoring and Record-keeping Requirements

 The permittee shall comply with all applicable requirements of this Subpart

 [40CFR60, Subpart Dc] 1, ARMS Emissions Unit 003. Direct Power Generation, consisting of a nominal 167 megawatt combustion turbine-electrical generator, shall comply with all applicable provisions of 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(7)(b), F.A.C. The Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not used for compliance
 - 9. Selective Catalytic Reduction System (SCR) Compliance Procedures
- a. An initial stack emission test for nitrogen oxides and ammonia from the CGT/HRSG pair shall be conducted: 1) for natural gas firing and 2) for distillate oil firing. The ammonia injection rate necessary to comply with the NO_x standard shall be established during the initial performance tests.
- b. The SCR shall operate at all times that the turbine is operating, except during turbine start-up and shutdown periods. During turbine start-up, permittee shall begin use of SCR (i.e., commence ammonia injection) within two (2) hours of the initial turbine firing or when the temperature of the catalyst bed reaches a suitable predetermined temperature level, whichever occurs first. During turbine shutdown, permittee shall discontinue use of the SCR (i.e., discontinue ammonia injection) when the catalyst bed temperature drops below the predetermined levels, but no more than one hour prior to the time at which the fuel feed to the turbine is discontinued. Suitable temperature for activation and deactivation of the SCR shall be established during performance testing. The permittee shall, whenever possible, operate the facility in a manner so as to optimize the effectiveness of the SCR unit while minimizing the ammonia slip to below the emission limit.
- c. The permittee shall install and operate an ammonia flow meter to measure and record the ammonia injection rate to the SCR system of the CGT/HRSG set. It shall be maintained and calibrated according to the manufacturer's specifications. During the stack test, the permittee, at each load condition, shall determine the minimum ammonia flow rate required to

meet the emission limitations. During NO_x CEM downtimes or malfunctions, the permittee shall operate at greater or equal to 100% of the ammonia injection rate determined during the stack test.

J. No change.

XIV. through XXV. No change.

Any party to this Notice has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, M.S. 35, Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fee with the appropriate district court of appeal. The Notice of Appeal must be filed within 30 days from the date that this Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this	day of	2000, in Tallahassee,
Florida.		

STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRAFT

KIRBY B. GREEN, III DEPUTY SECRETARY 3900 Commonwealth Boulevard Tallahassee, FL 32399-3000 Telephone: (850) 488-7131

Eu nic le	A CVNOVII EDO	CED ON THIS DATE
FILING IS ACKNOWLEDGED ON THIS DATE, PURSUANT TO \$120.52, FLORIDA STATUTES,		
		DEPARTMENT CLERK,
RECEIPT	OF WHICH IS F	HEREBY ACKNOWLEDGED
	CLERI	К
	DATE	