



Via Telefax

October 26, 2000

RECEIVED

OCT 27 2000

BUREAU OF AIR REGULATION

Mr. Clair Fancy, Chief  
Bureau of Air Regulation  
Florida Dept. of Environmental Regulation  
2600 Blair Stone Rd., MS 5505  
Tallahassee, FL 32399-2400

RE: Gainesville Regional Utilities  
J.R. Kelly Generating Station (Facility ID No. 0010005)  
Combined Cycle No. 1 (PSD-FL-276)  
Notice of Anticipated Initial Startup Date

Dear Mr. Fancy:

In accordance with 40 CFR 60.7(a)(2) notice is hereby provided that the anticipated date of initial startup of the above-referenced unit is November 27, 2000. Initially, the unit will operate in simple cycle mode; combined cycle operation is not projected until sometime in February 2001. Notice of the actual startup date will be provided within 15 days of such date.

Please call me at (352) 334-3400 Ext. 1284 if you have any questions.

Sincerely,

Yolanta E. Jonynas  
Sr. Environmental Engineer

xc: D. Beck  
D. DuBose  
C. Kirts, FDEP - NE District Office  
R. Klemans  
L. Lalwani, FDEP - NE District Branch Office  
A. Linero, FDEP - Tallahassee  
S. Manasco  
G. Swanson  
D. Thompson  
JRK CC1

JRKCC1initstartup.y36



Via Telefax

October 26, 2000

RECEIVED

OCT 27 2000

BUREAU OF AIR REGULATION

Mr. Clair Fancy, Chief  
Air Regulation  
Florida Dept. of Environmental Protection  
2600 Blair Stone Rd., MS 5505  
Tallahassee, FL 32399-2400

RE: Gainesville Regional Utilities  
J.R. Kelly Generating Station (Facility No. 0010005; ORIS Code: 664)  
Combined Cycle No. 1 (PSD-FL-276)  
New Unit Notification

Dear Mr. Fancy:

Pursuant to 40 CFR 75.61(a)(2)(i) notification is hereby provided that the new combustion turbine associated with the above-referenced unit is expected to exhaust emissions to the atmosphere on November 27, 2000. If this date changes, notification of the actual date will be provided as required under 40 CFR 75.61(a)(2)(ii).

Please call me at (352) 334-3400 Ext. 1789 or Yolanta Jonynas at Ext. 1284 if you have any questions.

Sincerely,

Darrell R. DuBose  
Assistant General Manager of Energy Supply/Designated Representative

- xc: D. Beck
- M. Costello, FDEP - Tallahassee
- J. Jachin, EPA - Region IV
- Y. Jonynas
- C. Kirts, FDEP - NE District Office, Jax.
- R. Klemans
- L. Lalwani, FDEP - NE District Branch Office, Gville.
- A. Linero, FDEP - Tallahassee
- G. Swanson
- D. Thompson
- JRKCC1

JRKCC140CFR75.61notice.y36

AL

Gainesville Regional Utilities 301 SE 4<sup>th</sup> Avenue (32601) P. O. Box 147117 (A136) Gainesville, FL 32614-7117

To: GRU PSD-FL-276 Fil

# FAX

Date: \_\_\_\_\_

Number of pages including cover sheet: \_\_\_\_\_

To: Fancy Clair

\_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

Fax: 850-922-6979

cc: \_\_\_\_\_

From: Yolanta E. Jonynas

\_\_\_\_\_

\_\_\_\_\_

Phone: 352/334-3400 ext. 1284

Fax: 352/334-3151

\_\_\_\_\_

REMARKS:  Urgent  For your review  Reply ASAP  Please comment

Per your request



**GAINESVILLE REGIONAL UTILITIES**  
Strategic Planning

VIA TELEFAX

May 2, 2000

Mr. Clair Fancy, Chief  
Florida Dept. of Environmental Protection  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RE: Gainesville Regional Utilities  
J.R. Kelly Generating Station Combined Cycle Unit CC1  
DEP File No. 0010005-002-AC  
PSD Permit No. PSD-FL-276

Dear Mr. Fancy:

Pursuant to 40 CFR 60.7(a)(1) notice is hereby provided that construction of the above-referenced unit commenced on March 21, 2000.

Please call me at (352) 334-3400 Ext. 1284 if you have any questions.

Sincerely,

Yolanta E. Jonynas  
Sr. Environmental Engineer

- xc: D. Beck
- C. Heidt
- C. Kirts, FDEP- NE District
- L. Lalwani, FDEP - NE District Branch Office
- G. Swanson
- JRK CC1

JRKCC1startconsruc.y35



VIA TELEFAX

RECEIVED

MAY 04 2000

May 2, 2000

BUREAU OF AIR REGULATION

Mr. Clair Fancy, Chief  
Florida Dept. of Environmental Protection  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RE: Gainesville Regional Utilities  
J.R. Kelly Generating Station Combined Cycle Unit CC1  
DEP File No. 0010005-002-AC  
PSD Permit No. PSD-FL-276

Dear Mr. Fancy:

Pursuant to 40 CFR 60.7(a)(1) notice is hereby provided that construction of the above-referenced unit commenced on March 21, 2000.

Please call me at (352) 334-3400 Ext. 1284 if you have any questions.

Sincerely,

Yolanta E. Jonynas  
Sr. Environmental Engineer

xc: D. Beck  
C. Heidt  
C. Kirts, FDEP- NE District  
L. Lalwani, FDEP - NE District Branch Office  
G. Swanson  
JRK CC1

JRKCC1startconsrucy35

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NOTICE OF PERMIT

In the Matter of an  
Application for Permit by:

Mr. Michael L. Kurtz, General Manager  
City of Gainesville, GRU  
Post Office Box 147117  
Gainesville, Florida 32614-7117

DEP File No. 0010005-002-AC (PSD-FL-276)  
133 MW Repowering Project  
Alachua County

Enclosed is the Final Permit Number 0010005-002AC (PSD-FL-276) to construct a combined cycle unit and auxiliary equipment to replace a residual oil and gas-fired steam generator and repower a steam-electrical generator at the Kelly Generating Station in Gainesville, Alachua County. The permit also establishes an enforceable nitrogen oxides emission cap of 133 tons per year for the new unit. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.



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

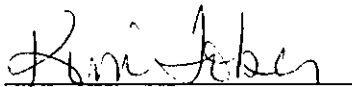
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 2-24-00 to the person(s) listed:

Michael L. Kurtz\*  
Yolanta Jonynas, GRU  
Chair, Alachua County BCC\*  
Chris Bird, Alachua County EPD  
Gregg Worley, EPA  
John Bunyak, NPS  
Chris Kirts, DEP NED  
Pat Reynolds, DEP Gainesville  
Tom Davis, P.E., ECT

Clerk Stamp

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

  
(Clerk)

2-24-00  
(Date)

## FINAL DETERMINATION

Gainesville Regional Utilities  
J.R. Kelly Generating Station  
133 MW Repowering Project  
PSD-FL-276 and 0010005-002-AC

The Department distributed a public notice package on December 17, 1999 for the project to construct a combined cycle unit to replace a gas and residual oil-fired steam generator and repower a steam turbine-electrical generator at the GRU J.R. Kelly Generating Station in Gainesville, Florida. The Public Notice of Intent to Issue was published in the Gainesville Sun on December 23, 1999. A public meeting was held on January 12, 2000, at the GRU Administration Building, Multi-purpose Room, 303 Southeast 4<sup>th</sup> Avenue in Gainesville, Florida.

EPA and the Fish and Wildlife Service commented adversely on the original application. Their primary comments related to the proposal for Best Available Control Technology (BACT) for the control of nitrogen oxides (NO<sub>x</sub>). The comments were mooted by the decision of GRU to take enforceable limitations in annual emissions thus exempting the project from PSD review and BACT for NO<sub>x</sub>.

Comments were received from GRU by electronic correspondence on January 21 and February 8. Written comments were received on January 24. Comments related to the Technical Evaluation and Preliminary Determination are acknowledged but no changes will be made, since that document was issued in final form with the Intent to Issue.

Many of GRU's comments on the draft permit and draft BACT determination are minor and are not detailed below. Most of them were incorporated as requested by GRU. Following are the more substantial comments submitted by GRU and the Department's responses.

### **SECTION II, SPECIFIC CONDITION No. 6:**

*GRU suggests deletion of reference to federal rule, 40 CFR 52.21, in this condition. GRU states that Florida has an "approved" not "delegated" program. The authority contained in 40 CFR 52.21(r)(2) does not extend to "approved" programs. GRU requests deletion of references to 40CFR52.21(r)(2).*

The Department has an obligation to be as consistent as it can be with EPA standards in administering this program. This rule reference will remain as part of this condition. GRU's application states that Projected Actual Date of Commencement of Construction is February 2000 and that Projected Actual Date of Completion of Construction is February 2001. This provision will have no practical effect on GRU.

### **SPECIFIC CONDITION No. 7**

*GRU states that Florida has an "approved" not "delegated" program and the authority contained in 40 CFR 52.21(j)(4) does not extend to "approved" programs. Furthermore, the referenced rule applies to phased construction projects. Construction on this project will be continuous (barring unforeseen circumstances). GRU adds that there is no regulatory basis for requiring a BACT re-evaluation upon extension of the permit expiration date especially where construction may already be underway and simply experiencing unforeseen events (e.g., weather or equipment delivery delays) that necessitate extension of the permit. GRU requests that this paragraph should be deleted in its entirety.*

The Department has an equivalent rule to 40 CFR 52.21(j)(4) at 62-212.400(6)(b), F.A.C. That Rule specifically references 40 CFR 51.166 (j)(4) which is identical to 40 CFR 52.21(j)(4). The Department's rule and reference to 40 CFR 51.166(j)(4) will replace 40 CFR 52.21(j)(4). The new condition is also consistent with EPA standards.

#### **SPECIFIC CONDITION No. 8**

*GRU states that the referenced rule in this condition requires that a request (to extend the permit) be made on a "timely" basis (rather than within 30 days). They add that there may be circumstances where the 30 day prior notice may not be possible in every situation. GRU suggests this condition to be modified by adding the word "if possible".*

The Department has for many years included a 60 day prior notice for a permit extension request and already changed it to 30 days for this project at the request of GRU. However the Department will make the further change at the request of GRU to 30 days *if possible*. The Department notes that if the permit expires prior to receipt of an extension request, a new application is required.

#### **SECTION III, SPECIFIC CONDITION No. 13**

*GRU suggests that reference to VOCs be deleted since there does not appear to be a regulatory basis for their inclusion. GRU states that VOCs are not regulated by the Subpart GG NSPS nor were they subject to PSD review. GRU adds that the unit was specified, designed and guaranteed to run well below the applicable NSPS limits and that the manufacturer's recommendations for tuning and maintenance will be geared towards operating the unit as designed and as contractually specified by GRU, notwithstanding the NSPS limits.*

The Department concurs with GRU that the VOCs are not regulated by the Subpart GG NSPS and not subject to PSD review. However, for reasonable assurance that the proposed limit will be met, this VOC reference and limit will not be deleted from any condition in the final permit. Only an initial VOC emission test is required for this unit.

#### **SPECIFIC CONDITION No. 15**

*GRU states that BACT was not triggered for NO<sub>x</sub> and the Department has acknowledged that the 9/42 ppmvd at 15% O<sub>2</sub> are vendor guarantees and not emission limitations. GRU affirms that the applicable emission standards are the New Source Performance Standards as set forth in 40 CFR 60, Subpart GG and as adopted by the Department in Rule 62-204.800(7)(b). GRU adds that notwithstanding these limits, the unit has been designed and guaranteed to have emissions significantly lower than the NSPS. Basically, GRU requests replacement of the 9 and 42 ppmvd NO<sub>x</sub> limits with the NSPS limits of 97 and 93 ppmvd for this unit.*

- If the unit emitted at the NSPS limits, the project would be PSD-significant with an order of magnitude to spare. The project is a synthetically-limited emission unit. As such reasonable assurance is required to preserve this condition. The original application requested 9 ppmvd NO<sub>x</sub> and a 24-hour averaging period. The limit together with the longer (720 hours) averaging time provides the Department with reasonable assurance that the annual emission cap will be met. Therefore, the NO<sub>x</sub> emission limits will remain as stated in the publicly-noticed permit except for the following minor change in the averaging time: "rolling average" to "block average", "720 hours of operation" instead of "30-day" and "calendar year" instead of "consecutive 365 day". The reference to the rules will also be revised in the final permit.



**SPECIFIC CONDITION No. 16**

*GRU proposes to delete the lb/hr requirement for this pollutant (CO). GRU states that the mass emission rate is provided for informational purposes to simplify the permit and any future potential issues associated with periodic monitoring requirements.*

This condition will not be changed as requested by GRU. It is anticipated that it will not be future potential issues associated with periodic monitoring requirements for this pollutant. This pollutant, CO, has gone thorough PSD review and has a BACT limit. BACT emissions limits should be stated in terms of both hourly emissions and pollutant concentration (or obvious technology-based limit. The lb/hr limitations also demonstrate protection of the short term ambient standards. [Refer to Enforceability of BACT—EPA NSR Workshop Manual, October 1990).

**SPECIFIC CONDITION NO. 17**

*GRU suggests that this condition be deleted since there does not appear to be a regulatory basis for it. GRU states that VOCs were not subject to PSD review and that the regulatory reference is not applicable. Also, that VOCs are not regulated under NSPS, Subpart GG.*

Refer to response in Specific Condition No. 13. This condition will not be deleted.

**SPECIFIC CONDITION No. 19**

*GRU states that BACT was not triggered for PM and that the mass emission rate (for both PM and PM<sub>10</sub>) is provided for informational purposes to simplify the permit and any future potential issues associated with periodic monitoring requirements.*

The Department will not change this condition as requested. Although VE is a surrogate for PM/PM<sub>10</sub>, the lb/hr limits (as explained above) ensure enforceability of the short term ambient standard. Recently, EPA has insisted that we PM/PM<sub>10</sub> lb/hr values in every permit issued for a turbine even if it contains a BACT opacity standard. We are not requiring annual or initial stack test for this pollutant (unless required by Rule 62-297.310(7) F.A.C.). The Department acknowledges that the GRU repowering project was significant only for PM<sub>10</sub>.

**SPECIFIC CONDITION No. 21 (Excess emissions allowed)**

*GRU requests to delete the 9/42 ppmvd emission limit and substitute the short term standard they proposed in Specific Condition No.15. They affirm that it will be for clarification and permit consistency.*

Refer to response to Specific Condition No.15.

**SPECIFIC CONDITION No. 22**

*GRU proposes to delete the sentence " these excess emissions shall be included in the 30-day rolling average (gas) and the 3-hr average (oil) for NO<sub>x</sub> from this condition."*

This condition will be revised only to the extent of changing the averaging time to be consistent with all related conditions that include an averaging time.

**SPECIFIC CONDITION No. 24**

*According to GRU, it is not clear what constitutes a "substantial modification" of air pollution control equipment. A change of combustors is given as an example but does this refer to a change of all combustors or just one or more combustors? Same type combustors or different ones? Over time, combustion equipment changes/replacements may be necessary but may not necessarily have an impact*

*on emissions. However, since emission control is integral to the combustion process these could be interpreted to be subject to this requirement. GRU believes this provision should be deleted because it is too subjective and does not have a regulatory basis. To clarify that after the initial CO compliance test, the subsequent annual compliance tests are to be conducted only while burning natural gas. There is no regulatory basis for VOC testing requirements.*

The Department is aware of situations involving other units at other facilities (e.g. the LM6000PA at Lake Cogen) that have exhibited increases in CO emissions following like kind replacements. The fact that there is uncertainty in the ability of the combustors to meet the ultimate CO BACT limit in the first year is justification to require testing following replacement of combustors. Based on the expense of installing new combustors, this is not expected to result in much additional testing. CO tests are very easy and inexpensive to conduct. Regarding the VOC testing requirements, this issue has already been discussed in the responses to Specific Condition No. 13, 15 and 17. GRU's suggestion about the "Year 2" CO compliance language is accepted as proposed. This condition will be modified to reflect the Y2 language suggested.

#### **SPECIFIC CONDITION No. 25**

*GRU proposes to delete this entire condition related to continuous compliance with the NO<sub>x</sub> emissions limits.*

The Department believes that reasonable assurance is provided by continuously monitoring NO<sub>x</sub> emissions on a continuous basis but with a relatively long averaging period. The Department will not delete this condition. However, it will be modified to reflect an averaging time (for gas or fuel oil) of 720 operating hours (block basis) instead of 30 days (gas) and 3-hr rolling average (fuel oil). Refer to response in Specific Condition No. 15.

#### **SPECIFIC CONDITION No. 26**

*GRU proposes to modify this condition stating that the proposed procedures are derived from 40 CFR 75.72 and Appendix F, Section 8.4 and will provide for consistency of data in reporting.*

The Department evaluated GRU comments and modified this condition considering some of their concerns. This condition will be modified in the final permit as follows:

##### Compliance with the NO<sub>x</sub> Emission Cap:

Total emissions of NO<sub>x</sub> from Unit CC-1 shall not exceed 133 tons per calendar year in order to net out of PSD. Annual emissions shall be calculated using the methodology in 40 CFR 75.71 and 75.72 and 40 CFR Part 75, Appendix F, Section 8.4 and shall be reported to the District office on the Annual Operating Report. The owner or operator shall notify the Department as specified in Specific Condition 39 if annual emissions exceed the NO<sub>x</sub> cap based on cumulative calculations which are done each month. [Applicant Request to Avoid PSD requirements of Rule 62-212.400, F.A.C., Rule 62-4.070, F.A.C.]

- For each calendar month or year, NO<sub>x</sub> mass emissions (in tons) will be calculated as follows:  
NO<sub>x</sub> (in tons) = (Sum of all hourly NO<sub>x</sub> mass emissions in lbs for the given time period)/2000
- Condition 39 provides a specific timeframe for reporting if the NO<sub>x</sub> cap is exceeded.

**SPECIFIC CONDITION No. 29 (Compliance with the VOC emission limit)**

*GRU proposes to delete this condition. They state that there is no regulatory basis for this requirement.*

Refer to responses in Specific Conditions No. 13 and 17

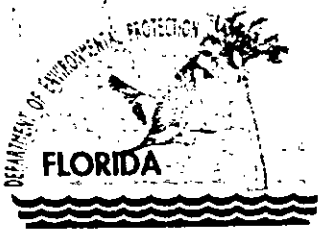
**SPECIFIC CONDITION No. 39**

*GRU proposes various changes related to the use of CEMS for reporting excess emissions. These are primarily related to the 9 and 42 ppmvd time-averaged values for NO<sub>x</sub> (gas and fuel oil).*

The Department will not change this condition as requested since previous related conditions were not changed either. It will be revised to the extent Specific Conditions Nos. 15 and 21 were revised.

**CONCLUSION**

The final action of the Department is to issue the permit with the changes described above.



# Department of Environmental Protection

Jeb Bush  
Governor

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

David B. Struhs  
Secretary

## PERMITTEE:

Gainesville Regional Utilities (GRU)  
Post Office Box 147117 (A134)  
Gainesville, Florida 32601-7060

|            |                   |
|------------|-------------------|
| Permit No. | PSD-FL-276        |
| File No.   | 0010005-002-AC    |
| SIC No.    | 4911              |
| Expires:   | December 31, 2001 |

## Authorized Representative:

Michael L. Kurtz – General Manager

## PROJECT AND LOCATION:

Air Construction Permit pursuant to the requirements for the Prevention of Significant Deterioration of Air Quality (PSD Permit) for the construction of: a nominal 83 megawatt (MW) natural gas and No. 2 distillate fuel oil-fired combustion turbine-electrical generator; an unfired heat recovery steam generator (HRSG); a 102 foot stack for combined cycle operation; a 88 foot bypass stack for simple cycle operation and ancillary equipment. Steam produced by the HRSG will be routed to the existing Unit No. 8 steam turbine-electrical generator to generate 40-50 MW of additional electricity. The combustion turbine may be equipped with inlet air conditioning devices (e.g., evaporative chillers, foggers, etc.). This unit is designated as Combined Cycle Unit CC-i and will be located at the J.R. Kelly Generating Station, 605 Southeast 3<sup>rd</sup> Street in Gainesville, Alachua County. UTM coordinates are: Zone 17; 372.0 km E; 3,280.2 km N.

## STATEMENT OF BASIS:

This Air Construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

Attached Appendices and Tables made a part of this permit:

|             |  |
|-------------|--|
| Appendix BD | BACT Determination                     |
| Appendix GC | Construction Permit General Conditions |

Howard L. Rhodes, Director  
Division of Air Resources  
Management

"More Protection, Less Process"

Printed on recycled paper.

# PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-276

## SECTION I - FACILITY INFORMATION

### FACILITY DESCRIPTION

This existing GRU J.R. Kelly Generating Station consists of: three natural gas and distillate fuel oil-fired nominal 16 MW simple cycle combustion turbine-electrical generators designated as Combustion Turbine Nos. 1, 2, and 3; two natural gas and No. 6 fuel oil-fired conventional boilers designated as Units 7 and 8; one natural gas-fired conventional boiler designated as Unit 6 (in cold standby); a recirculating cooling tower system, including two fresh-water mechanical draft cooling towers; fuel oil storage tanks; water treatment facilities, and ancilliary support equipment. The steam turbine-electrical generators associated with Units 6, 7 and 8 have nameplate ratings of 19, 25 and 50 MW respectively.

Unit No. 8 boiler will cease operation following completion of construction of Combined Cycle Unit CC-1.

### NEW EMISSION UNIT

This permit addresses the following emission unit:

| ARMS E.U. NO. | SYSTEM           | EMISSION UNIT DESCRIPTION   |
|---------------|------------------|---|
| 010           | Power Generation | Unit CC-1. One dual fuel nominal 133 Megawatt Combined Cycle Combustion Turbine-Electrical Generator with unfired HRSG. |

### REGULATORY CLASSIFICATION

The facility is classified as a Major or Title V Source of Air Pollution as defined in Rule 62-210.200. It is within an industry included in the list of the 28 Major Facility Categories per Table 62-212.400-1, F.A.C. and is a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD).

PSD review and a Best Available Control Technology (BACT) determination were required and performed for this project for emissions of carbon monoxide (CO) and particulate matter smaller than 10 microns (PM<sub>10</sub>). The new Combined Cycle Unit CC-1 is subject to the New Source Performance Standard for Stationary Gas Turbines at 40CFR60, Subpart GG.

This facility is also subject to certain Acid Rain provisions of Title IV of the Clean Air Act.

This project is not subject to the requirements of Chapter 403, Part II, F.S., Electrical Power Plant and Transmission Line Siting because the steam electric generating capacity of this facility will not change.

### RELEVANT DOCUMENTS:

The documents listed below are the basis of the permit. They are specifically related to this permitting action, but not all are incorporated into this permit. These documents are on file with the Department.

- Application received September 7, 1999
- Department's letter to GRU dated October 6, 1999
- Comments from the Fish and Wildlife Service dated October 6, 1999
- GRU's letters dated October 25, November 10, December 2 and 16, 1999; January 4 and 24, 2000
- GRU's electronic correspondence dated January 21 and February 8, 2000
- Public Notice Package including Technical Evaluation and Preliminary Determination, December 17, 1999
- Letters from EPA Region IV dated November 10 and January 21, 2000
- Department's Final Determination and BACT determination issued with this Final Permit.

# PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-276

## SECTION II - ADMINISTRATIVE REQUIREMENTS

---

1. Regulating Agencies: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number (850) 488-0114. All documents related to reports, tests, and notifications should be submitted to the DEP Northeast District Office 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590 and phone number 904/448-4300 and Northeast District Branch Office, 101 NW 75 Street, Suite 3 Gainesville, Florida 32607 and phone number 352/333-2850.
2. General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
3. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
4. Forms and Application Procedures: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]
5. Modifications: The permittee shall give written notification to the Department when there is any modification to this facility as defined in Rule 62-210.200 F.A.C.. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change. [Chapters 62-210 and 62-212, F.A.C.]
6. Construction Expiration: Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. [Rules 62-4.210(2)(3), 62-210.300(1)(a), 62-4.070(3), F.A.C and 40 CFR 52.21(r)(2)]
7. BACT Determination: In conjunction with extension of the 18 month periods to commence or continue construction, or extension of the December 31, 2001 permit expiration date, the permittee may be required to demonstrate the adequacy of any previous determination of best available control technology for the source. [Rules 62-4.070(3) and 62-212.400(6)(b), F.A.C., 40 CFR 51.166(j)(4)]
8. Permit Extension: The permittee, for good cause, may request that this PSD permit be extended. Such a request shall be submitted to the Bureau of Air Regulation 30 days prior to the expiration of the permit, if possible (Rule 62-4.080, F.A.C.).
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 24 months before the date on which the new unit begins serving an electrical generator (greater than 25 MW). [40 CFR 72]
10. Application for Title V Permit: An application for a Title V operating permit, pursuant to Chapter 62-213, F.A.C., must be submitted to the DEP's Bureau of Air Regulation, and a copy to the Department's Northeast District Office. [Chapter 62-213, F.A.C.]

# PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-276

## SECTION II - ADMINISTRATIVE REQUIREMENTS

---

11. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
12. Annual Reports: Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports shall be sent to the DEP's Northeast District and Northeast District Branch Offices by March 1st of each year.
13. Stack Testing Facilities: Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C. The permittee shall design this unit to accommodate adequate testing and sampling locations for compliance with the applicable emission limits listed in Specific Conditions No. 15 through 17. [Rule 62-4.070(3), Rule 62-297.310 (6) F.A.C.]
14. Semi-annual Reports: Except as otherwise specified herein (See Specific Condition 39), semi-annual excess emission reports, in accordance with 40 CFR 60.7 (a)(7)(c) (1999 version), shall be submitted to the DEP's Northeast District and Northeast District Branch Offices. Each excess emission report shall include the information required in 40 CFR 60.7(c) and 60.334. Excess emission reports may be submitted on a quarterly basis at the permittee's discretion.

# PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-276

## SECTION III - EMISSIONS UNIT SPECIFIC CONDITIONS

---

### APPLICABLE STANDARDS AND REGULATIONS:

1. NSPS Requirements – Subpart GG: The Unit shall comply with all applicable provisions of 40CFR60, 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 when determining compliance with the emissions limitations specified therein.
2. NSPS Requirements – Subpart A: These emission units shall comply with all applicable requirements of 40CFR60, Subpart A, General Provisions including:
  - 40CFR60.7, Notification and Recordkeeping
  - 40CFR60.8, Performance Tests
  - 40CFR60.11, Compliance with Standards and Maintenance Requirements
  - 40CFR60.12, Circumvention
  - 40CFR60.13, Monitoring Requirements
  - 40CFR60.19, General Notification and Reporting requirements
3. BACT Requirements: This emissions unit is subject to Best Available Control Technology (BACT) emissions limits for carbon monoxide (CO) and particulate matter smaller than 10 microns (PM<sub>10</sub>).
4. Applicable Regulations: Unless otherwise indicated in this permit, the construction and operation of the subject emission unit(s) shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-17, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297; and the applicable requirements of the Code of Federal Regulations (CFR) Title 40, Parts 51, 52, 60, 72, 73, and 75, adopted by reference in Rule 62-204.800, F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]

### GENERAL OPERATION REQUIREMENTS

5. Fuels: Only pipeline natural gas or maximum 0.05 percent sulfur No. 2 or superior grade of distillate fuel oil shall be fired in this unit. [Applicant Request, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]
6. Combustion Turbine Capacity: The maximum heat input rates, based on the higher heating value (HHV) of each fuel to this Unit at ambient conditions of 20°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed 1,083 million Btu per hour (mmBtu/hr) when firing natural gas, nor 1,121 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)]

{Permitting note: The heat input rates have been placed in the permit to identify the capacity of the emission unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emission's unit rate capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability. The owner or operator is expected to determine heat input whenever emission testing is required in order to demonstrate what percentage of the rated capacity that the unit was tested. Such heat input determinations may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heating value of the fuel determined by the fuel vendor or the owner or operator.}



## PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-276

### SECTION III - EMISSIONS UNIT SPECIFIC CONDITIONS

---

7. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]
8. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the DEP Northeast District Office and Northeast District Branch Office as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the 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 permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.]
9. Operating Procedures: Operating procedures shall include good operating practices in accordance with the guidelines and procedures as established by the equipment manufacturers to control emissions. [Rule 62-4.070(3), F.A.C.]
10. Hours of Operation: Combined Cycle Unit 1 may operate 8760 hours per year of which no more than 1000 hours per year may be on distillate fuel oil (0.05% S content). The unit may not operate in excess of the annual nitrogen oxides (NO<sub>x</sub>) emission cap described in Specific Condition 15 below. [Applicant Request, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]

#### CONTROL TECHNOLOGY

11. DLN Combustion Technology: The permittee shall install, tune, operate and maintain Dry Low NO<sub>x</sub> combustors on this combustion turbine. The permittee shall provide manufacturer's emissions performance versus load diagrams for the specific DLN system prior to commencement of operation. [Rule 62-4.070 F.A.C.]
12. Water Injection: The permittee shall install, calibrate, maintain and operate an automated water injection system for the unit for use when firing fuel oil. The permittee shall provide manufacturer's emissions performance versus load diagrams for the specific water injection system prior to commencement of operation. [Rule 62-4.070 F.A.C.]
13. Combustion Controls: The permittee shall employ "good operating practices" in accordance with the manufacturer's recommended operating procedures to control CO, and NO<sub>x</sub>, and VOC emissions. Prior to the required initial emissions performance testing, the combustion turbine, the DLN-1 combustors, and the control system shall be tuned to comply with the CO, and NO<sub>x</sub>, and VOC emission limits. Thereafter, these systems shall be maintained and tuned, as necessary, in accordance with manufacturer's recommendations for emissions control and to comply with the permitted emission limits. [Design, Rules 62-4.070 (3) and 62-212.400, F.A.C.].
14. Circumvention: The permittee 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.]

# PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-276

## SECTION III - EMISSIONS UNIT SPECIFIC CONDITIONS

---

### EMISSION LIMITS AND STANDARDS

The following emission limits and standards shall apply upon completion of the initial compliance tests, performance tests and certification tests, as applicable and per pollutant.

#### 15. Nitrogen Oxides (NO<sub>x</sub>) Emissions:

- Natural Gas Operation. The concentration of NO<sub>x</sub> in the stack exhaust gas shall not exceed 9 ppmvd at 15% O<sub>2</sub> on a 720 operating hour block average. Compliance will be demonstrated by the continuous emission monitor system (CEMS). Emissions of NO<sub>x</sub> in the stack exhaust shall not exceed 32 pounds per hour (lb/hr at ISO conditions) to be demonstrated by initial stack test. [Rule 62-4.070(3) F.A.C.]
- Fuel Oil Operation. The concentration of NO<sub>x</sub> in the stack exhaust gas shall not exceed 42 ppmvd at 15% O<sub>2</sub> on a 720 operating hour block average. Compliance will be demonstrated by the CEMS. Emissions of NO<sub>x</sub> shall not exceed 166 lb/hr (at ISO conditions) to be demonstrated by initial stack test. [Rule 62-4.070.(3), F.A.C.]
- Annual Emission Cap: Total emissions of NO<sub>x</sub> from Unit CC-1 shall not exceed 133 tons per calendar year in order to net out of PSD. Compliance will be demonstrated by the CEMS, as specified in Specific Condition 26. [Applicant Request to Avoid PSD requirements of Rule 62-212.400, F.A.C., Rule 62-4.070 (3), F.A.C.]

#### 16. Carbon Monoxide (CO) Emissions:

- Natural Gas – First Year. During only the first year of operation, the concentration of CO in the stack exhaust while operating on natural gas shall not exceed 25 ppmvd. Emissions of CO shall not exceed 54 lb/hr (at ISO conditions). Compliance shall be demonstrated by a stack test using EPA Method 10. [Rule 62-212.400, F.A.C.]
- Natural Gas (Second Year and Beyond) or Fuel Oil. The concentration of CO in the stack exhaust shall not exceed 20 ppmvd at 15% O<sub>2</sub> percent oxygen. Emissions of CO shall not exceed 43 lb/hr (at ISO conditions). Compliance shall be demonstrated by a stack test using EPA Method 10. [Rule 62-212.400, F.A.C.]

17. Volatile Organic Compounds (VOC) Emissions: The concentration of VOC (methane equivalent) in the stack exhaust gas while burning natural gas (fuel oil) shall not exceed 1.4 (3.5) ppmvw. Emissions of VOC while burning natural gas (fuel oil) shall not exceed 1.8 (4.5) lb/hr (at ISO conditions) to be demonstrated by initial-stack test using EPA Method 18, 25 or 25A. [Rule 62-4.070(3), F.A.C.]

18. Sulfur Dioxide (SO<sub>2</sub>) emissions: SO<sub>2</sub> emissions shall be limited by firing pipeline natural gas (sulfur content less than 20 grains per 100 standard cubic foot) or by firing No. 2 or superior grade distillate fuel oil with a maximum 0.05 percent sulfur for up to 1000 hours per year. Compliance with this requirement in conjunction with implementation of the Custom Fuel Monitoring Schedule in Specific Conditions 42 and 43 will demonstrate compliance with the applicable SO<sub>2</sub> NSPS [40CFR60 Subpart GG and Rules 62-4.070(3), and 62-204.800(7), F.A.C.]

19. Particulate Matter (PM/PM<sub>10</sub>) PM/PM<sub>10</sub> emissions shall not exceed 5 lb/hr when operating on natural gas and shall not exceed 10 lb/hr when operating on fuel oil. Visible emissions testing shall serve as a surrogate for PM/PM<sub>10</sub> compliance testing. [Rule 62-212.400, and 62-4.070(3) F.A.C.]

# PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-276

## SECTION III - EMISSIONS UNIT SPECIFIC CONDITIONS

20. Visible emissions (VE): VE emissions shall serve as a surrogate for PM/PM<sub>10</sub> emissions from the combustion turbine and shall not exceed 10 percent opacity from the stack in use. [Rules 62-4.070 (3), 62-212.400 F.A.C.]

### EXCESS EMISSIONS

21. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown, fuel switching or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period except as follows:

- During "cold start-up" to combined cycle plant operation up to four hours of excess emissions are allowed.
- During shutdowns from combined cycle operation, up to three hours of excess emissions are allowed.
- Unless authorized by the Department.

Excess NO<sub>x</sub> emissions are defined as one-hour periods when NO<sub>x</sub> emissions are above 9/42 ppmvd @ 15% oxygen while firing natural gas and fuel oil, respectively.

Cold start-up is defined as a startup that occurs after a complete shutdown lasting at least 48 hours.

NO<sub>x</sub> CEM data shall be recorded and included in calculating the annual NO<sub>x</sub> emissions cap.

[Applicant Request, G.E. Combined Cycle Startup Curves Data and Rule 62-210.700, F.A.C.].

22. 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 pursuant to Rule 62-210.700, F.A.C. These excess emissions shall be included in the 720 operating hour block average for NO<sub>x</sub>.

### COMPLIANCE DETERMINATION AND TESTING REQUIREMENTS

23. Compliance Time: Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate for each fuel, but not later than 180 days of initial start up on each fuel, and annually thereafter as indicated in this permit, by using the following reference methods as described in 40 CFR 60, Appendix A (1999 version), and adopted by reference in Chapter 62-204.800, F.A.C.
24. Annual, Initial and Performance Testing: Initial (I) performance tests (for both fuels) shall be performed by the deadlines in Specific Condition 23. 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 change of combustors. Year two (YR2) compliance testing for CO shall be performed in the second year of operation. 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 this 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). Annual testing is applicable to fuel oil and only if fuel oil is used for more than 400 hours during the preceding 12-month period.

# PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-276

## SECTION III - EMISSIONS UNIT SPECIFIC CONDITIONS

---

- EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources" I and A (YR2 and beyond, gas only).
- EPA Reference Method 20, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines." Initial test only for compliance with 40CFR60 Subpart GG. Test data shall be corrected to ISO conditions.
- EPA Reference Method 18, 25 and/or 25A, "Determination of Volatile Organic Concentrations." Initial test only.

### 25. Continuous Compliance with the time-averaged NO<sub>x</sub> Emission Limits:

- Continuous compliance with the time-averaged NO<sub>x</sub> emission limits shall be demonstrated with the CEM system based on the applicable averaging time of 720 operating hour block average basis. Based on CEMS data, a separate compliance determination is conducted at the end of each 720 operating hour block and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the next 720 operating hour block average. [Rules 62-4.070 F.A.C., 62-210.700, F.A.C., and 40 CFR 75]
- A valid hourly emission rate shall be calculated for each hour in which at least two NO<sub>x</sub> concentrations are obtained at least 15 minutes apart. Valid hourly emission rates shall not include periods of start up, shutdown, fuel switching, or malfunction unless not authorized by 62-210.700 F.A.C. or Specific Condition 21.
- Periods when the 720 operating hour block average or the 133 TPY calendar year cap NO<sub>x</sub> exceeds the emission limitations specified in Condition 15, shall be reported as required by Condition 39.

### 26. Compliance with the NO<sub>x</sub> Annual Emission Cap:

Total emissions of NO<sub>x</sub> from Unit CC-1 shall not exceed 133 tons per calendar year in order to net out of PSD. Annual emissions shall be calculated using the methodology in 40 CFR 75.71 and 40 CFR 75.72 and 40 CFR Part 75, Appendix F, Section 8.4 and shall be reported to the District office on the Annual Operating Report. The owner or operator shall notify the Department as specified in Specific Condition 39 if annual emissions exceed the NO<sub>x</sub> cap based on cumulative calculations which are done each month. [Applicant Request to Avoid PSD requirements of Rule 62-212.400, F.A.C., Rule 62-4.070, F.A.C.]

- For each calendar month or year, NO<sub>x</sub> mass emissions (in tons) will be calculated as follows:  
$$\text{NO}_x \text{ (in tons)} = (\text{Sum of all hourly NO}_x \text{ mass emissions in lbs for the given time period}) / 2000$$
- Condition 39 provides a specific timeframe for reporting if the NO<sub>x</sub> cap is exceeded.

### 27. Compliance with the SO<sub>2</sub> and PM/PM<sub>10</sub> emission 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 SO<sub>2</sub> and PM<sub>10</sub>. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO<sub>2</sub> 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

## PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-276

### SECTION III - EMISSIONS UNIT SPECIFIC CONDITIONS

---

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) (1999 version). [Applicant request]

28. Compliance with CO emission limit: An initial test for CO, shall be conducted concurrently with the initial NO<sub>x</sub> test, as required. The initial NO<sub>x</sub> and CO test results shall be the average of three valid one-hour runs. Annual compliance testing for CO may be conducted at less than capacity when compliance testing is conducted concurrent with the RATA testing for the NO<sub>x</sub> CEMS required pursuant to 40 CFR 75. Alternatively to annual testing in a given year, periodic tuning data may be provided to demonstrate compliance in the year the tuning is conducted. [Rule 62-297.310(7)(a) 4.; Rule 62-212.400 and 62-4.070(3) F.A.C.]
29. Compliance with the VOC emission limit: An initial test is required to demonstrate compliance with the VOC emission limit. Thereafter, the CO and VE limits and periodic tuning data will be employed as surrogates and no annual testing is required. [Rule 62-4.070(3) F.A.C.]
30. Testing procedures: Testing of emissions shall be conducted with the 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. In this case, 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 ambient 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. Procedures for these tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapters 62-204 and 62-297, F.A.C. [Rule 62-297.310(2) F.A.C.]
31. Test Notification: The DEP's Northeast District and Northeast District Branch Offices shall be notified, in writing, at least 30 days prior to the initial performance tests and at least 15 days before annual compliance test(s). [Rule 62-297.310(7)(a)9 F.A.C and 40 CFR 60.7 and 60.8]
32. Special Compliance Tests: The DEP may request a special compliance test pursuant to Rule 62-297.310(7), F.A.C., when, after investigation (such as complaints, increased visible emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated. [Rule 62-297.310 (7)(b) F.A.C]
33. Test Results: Compliance test results shall be submitted to the DEP's Northeast District and Northeast District Branch Offices no later than 45 days after completion of the last test run. [Rule 62-297.310(8), F.A.C.]

#### NOTIFICATION, REPORTING, AND RECORDKEEPING

34. Records: All measurements, records, and other data required to be maintained by GRU shall be recorded in a permanent form and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP representatives upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C]

## PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-276

### SECTION III - EMISSIONS UNIT SPECIFIC CONDITIONS

---

35. Compliance Test Reports: 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), F.A.C. [Rule 62-297.310(8), F.A.C]
36. Excess Emissions Report: If excess emissions occur (as specified in Condition 21) for more than two hours due to malfunction, the owner or operator shall notify DEP's Northeast District and Northeast District Branch Offices 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. Pursuant to the New Source Performance Standards, all excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. Following the format of 40 CFR 60.7, periods of startup, shutdown, fuel switching and malfunction, shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific Condition No. 15 and 20. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7 (1999 version)].

#### MONITORING REQUIREMENTS

37. Continuous Monitoring System (CEMS): 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. Upon request from EPA or DEP, the CEMS emission rates for NO<sub>x</sub> on the CT shall be corrected to ISO conditions to demonstrate compliance with the NO<sub>x</sub> standard established in 40 CFR 60.332. [Rules 62-204.800, 62-210.700, 62-4.130, 62-4.160(8), F.A.C and 40 CFR 60.7 (1999 version)].
38. Maintenance of CEMS: The CEMS shall be in continuous operation except for breakdowns, repairs, calibration checks, and zero and span adjustments. The CEMS shall meet minimum frequency of operation requirements: one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data average. [40CFR60.13]
39. CEMS for Reporting Excess Emissions: The NO<sub>x</sub> CEMS shall be used to determine periods of excess emissions. For purpose of reporting, one-hour periods when NO<sub>x</sub> emissions are above 9/42 ppmvd @ 15 % oxygen while firing natural gas/fuel oil shall be reported as excess emissions in accordance with Condition 36. CEMS downtime shall be calculated and reported according to the requirements of 40 CFR 60.7 (c)(3) and 40 CFR 60.7 (d)(2). Periods when time-averaged NO<sub>x</sub> emissions [i.e., 720 operating hour block average or the annual total (i.e., 133 TPY calendar year)] are above the emission limitations listed in Specific Condition No 15., shall be reported to the DEP Northeast District Office and Northeast District Branch Office within one working day (verbally) followed up by a written explanation postmarked not later than three (3) working days (alternatively by facsimile within one working day). [Rules 62-204.800, 62-210.700, 62-4.130, 62-4.160(8), F.A.C and 40 CFR 60.7 (1999 version)].
40. CEMS in lieu of Water to Fuel Ratio: The NO<sub>x</sub> CEMS shall be used in lieu of the fuel bound nitrogen levels and water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1999 version). The calibration of the water/fuel monitoring device required in 40 CFR 60.335 (c)(2) (1999 version) will be replaced by the 40 CFR 75 certification tests of the NO<sub>x</sub> CEMS.

# PREVENTION OF SIGNIFICANT DETERIORATION PERMIT PSD-FL-276

## SECTION III - EMISSIONS UNIT SPECIFIC CONDITIONS

---

41. CEMS Certification and Quality Assurance Requirements: The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7(a)(5) or 40 CFR Part 75. Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F or 40CFR75. The monitoring plan, consisting of data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location shall be provided to the DEP Emissions Monitoring Section Administrator and EPA for review no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62.
42. Custom Fuel Monitoring Schedule (Natural Gas): Monitoring of the nitrogen content of natural gas is not required because the fuel-bound nitrogen content of the fuel is minimal. Monitoring of the sulfur content of natural gas is not required if the vendor documentation indicates that the fuels meets the definitions of pipeline natural gas or natural gas set forth in (40CFR 72). A custom fuel monitoring schedule pursuant to 40 CFR 75 Appendix D for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2) provided the following requirements are met:
- The permittee shall apply for an Acid Rain permit within the deadlines specified in 40 CFR 72.30.
  - The permittee shall submit a monitoring plan, certified by signature of the Designated Representative, that commits to using a primary fuel of natural gas or pipeline supplied natural gas.
  - SO<sub>2</sub> emissions shall be monitored using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.
  - This custom fuel monitoring schedule will only be valid when natural gas or pipeline natural gas is used as a primary fuel. If the primary fuel for this unit is changed to a higher sulfur fuel, SO<sub>2</sub> emissions must be accounted for as required pursuant to 40 CFR 75.11(d).
43. Custom Fuel Oil Monitoring Schedule: The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at this facility an analysis which reports the sulfur content and nitrogen content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d).
44. Determination of Process Variables:
- The permittee shall operate and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
  - Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, pressure gauges, etc., shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value [Rule 62-297.310(5), F.A.C].
45. Alternate Methods of Operation: This unit may operate in simple or combined cycle modes.

**APPENDIX BD**  
**BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)**

---

**Gainesville Regional Utilities**  
**J.R. Kelly Generating Station**  
**Combined Cycle Repowering Project**

**BACKGROUND**

The applicant, Gainesville Regional Utilities (GRU), proposes to install a nominal 133 megawatt gas and distillate fuel oil-fired combined cycle unit (Unit CC-1) at the existing J.R. Kelly Generating Station, located near downtown Gainesville, Alachua County. The proposed project will result in "significant increases" with respect to Table 62-212.400-2, Florida Administrative Code (F.A.C.) of emissions of particulate matter (PM<sub>10</sub>) and carbon monoxide (CO). The project is therefore subject to review for the Prevention of Significant Deterioration (PSD) and a determination of Best Available Control Technology (BACT) in accordance with Rule 62-212.400, F.A.C.

The primary unit to be installed is a nominal 83 MW General Electric PG7121EA (7EA) combustion turbine-electrical generator, fired primarily with pipeline natural gas. The project includes an unfired heat recovery steam generator (HRSG) that will feed the existing Unit 8 steam turbine-electrical generator to produce another 40-50 MW. The project will result in the retirement of the conventional gas and residual fuel oil-fired steam generator that presently feeds the Unit 8 steam turbine-electrical generator. The project includes a 102 foot stack for combined cycle operation, and a 88 foot bypass stack for simple cycle operation. Descriptions of the process, project, air quality effects, and rule applicability are given in the Technical Evaluation and Preliminary Determination dated December 18, 1999, accompanying the Department's Intent to Issue.

**DATE OF RECEIPT OF A BACT APPLICATION:**

The application was received on September 7, 1999 and included a BACT proposal prepared by the applicant's consultant, Environmental Consulting & Technology, Inc. The application was revised on December 16, 1999 to reflect a cap on emissions of nitrogen oxides (NO<sub>x</sub>).

**REVISED BACT DETERMINATION REQUESTED BY THE APPLICANT:**

| POLLUTANT                                 | CONTROL TECHNOLOGY   | PROPOSED BACT LIMIT   |
|---|--|---|
| Particulate Matter<br>(PM <sub>10</sub> ) | Pipeline Natural Gas<br>0.05% Sulfur Distillate Oil<br>Combustion Controls | 5 lb/hr (gas)<br>10 lb/hr (oil, 1000 hrs)<br>10 percent Opacity   |
| Carbon Monoxide                           | Combustion Controls  | 25 ppmvd (gas - 1 <sup>st</sup> year)<br>20 ppmvd (gas - after 1 <sup>st</sup> yr)<br>20 ppmvd (fuel oil) |

According to the revised application, Unit CC-1, will emit approximately 133 tons per year (TPY) of NO<sub>x</sub>, 189 TPY of CO (after the first year), 9 TPY of VOC, 47 TPY of SO<sub>2</sub>, and 24 TPY of PM/PM<sub>10</sub>. Because of the shutdown of Unit 8 and an emission cap on NO<sub>x</sub>, net emissions increases from the facility are projected to be 39 TPY NO<sub>x</sub>, 171 TPY of CO (after the first year), 23 TPY of PM/PM<sub>10</sub>, 18 TPY of SO<sub>2</sub> and 7 TPY of VOC. The basis for these values is 7,760 hours of operation on natural gas and 1,000 hours on distillate fuel oil.



**APPENDIX BD**  
**BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)**

---

**BACT DETERMINATION PROCEDURE:**

In accordance with Chapter 62-212, F.A.C., this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department of Environmental Protection (Department), on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that, in making the BACT determination, the Department shall give consideration to:

- Any Environmental Protection Agency determination of BACT pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 - Standards of Performance for New Stationary Sources or 40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants.
- All scientific, engineering, and technical material and other information available to the Department.
- The emission limiting standards or BACT determination of any other state.
- The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine, for the emission unit in question, the most stringent control available for a similar or identical emission unit or emission unit category. If it is shown that this level of control is technically or economically unfeasible for the emission unit in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

The BACT evaluation should be performed for each emissions unit and pollutant under consideration. In general, EPA has identified five key steps in the top-down BACT process: identify alternative control technologies; eliminate technically infeasible options; rank remaining technologies by control effectiveness; evaluate the most effective controls considering energy, environmental, and economic impacts; and select BACT. A BACT determination must not result in the selection of control technology that would not meet any applicable emission limitation under 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).

**STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES:**

The minimum basis for a BACT determination is 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines (NSPS). Subpart GG was adopted by the Department by reference in Rule 62-204.800, F.A.C. The key emission limits required by Subpart GG are 75 ppmvd NO<sub>x</sub> @ 15% O<sub>2</sub> (assuming 25 percent efficiency) and 150 ppm SO<sub>2</sub> @ 15% O<sub>2</sub> (or <0.8% sulfur in fuel). There are no limits for CO or PM<sub>10</sub> in Subpart GG. PSD was not triggered and a BACT determination is not required for NO<sub>x</sub>, SO<sub>2</sub>, PM, VOCs, SAM. No National Emission Standard for Hazardous Air Pollutants exists for stationary gas turbines.

**APPENDIX BD**  
**BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)**

**DETERMINATIONS BY STATES:**

The following table is a sample of information on recent CO and PM<sub>10</sub> BACT or emission limits set by Florida and Southeastern States for General Electric 7EA combustion turbines. The GRU project is included for comparison. The first two projects are for simple cycle installations.

| Project Location      | CO - ppmvd<br>(or lb/mmBtu)                   | PM - lb/hr<br>(and/or % opacity)             | Technology                     | Comments                                 |
|-----------------------|---|--|--------------------------------|--|
| FPC Int. City, FL     | 20 - NG or FO<br>25 - NG 1 <sup>st</sup> year | 10 percent Opacity<br>(basis: 0.002 gr/dscf) | Clean Fuels<br>Good Combustion | 3x87 MW GE 7EA<br>12/99 1000 hrs oil     |
| TECO Hardee, FL       | 20 - NG or FO<br>25 - NG 1 <sup>st</sup> year | 10 percent Opacity<br>(basis: 0.002 gr/dscf) | Clean Fuels<br>Good Combustion | One 75 MW GE 7EA.<br>10/99 1000 hrs oil  |
| Olin Cogen, AL        | 0.07 lb.mmBtu - NG<br>(equals ~ 29 ppmvd)     |  | Clean Fuels<br>Good Combustion | One 80 MW GE 7EA<br>12/97 DB & PA        |
| GE Plastics Cogen, AL | 0.08 lb.mmBtu - NG<br>(equals ~ 33 ppmvd)     |  | Clean Fuels<br>Good Combustion | One 80 MW GE 7EA<br>5/98 Duct Burner     |
| GRU Gainesville, FL   | 20 - NG or FO<br>25 - NG 1 <sup>st</sup> year | 5/10 lb/hr - NG/FO<br>10 percent Opacity     | Clean Fuels<br>Good Combustion | One 83 MW GE 7EA<br>Repower 1000 hrs oil |

**REVIEW OF PARTICULATE MATTER (PM<sub>10</sub>) CONTROL TECHNOLOGIES:**

Particulate matter is generated by various physical and chemical processes during combustion and will be affected by the design and operation of the NO<sub>x</sub> controls. The particulate matter emitted from this unit will mainly be less than 10 microns in diameter (PM<sub>10</sub>).

Natural gas and 0.05 percent sulfur No. 2 (or superior grade) distillate fuel oil will be the only fuels fired and are efficiently combusted in gas turbines. Such fuels are necessary to avoid damaging turbine blades and other components already exposed to very high temperature and pressure. Natural gas is an inherently clean fuel and contains no ash. The fuel oil to be combusted contains a minimal amount of ash and (per the application) will be used for a maximum of 1000 hours per year making any conceivable add-on control technique for PM<sub>10</sub> either unnecessary or impractical. Annual emissions of PM<sub>10</sub> are expected to be less than 24.4 tons.

A technology review indicated that the top control option for PM<sub>10</sub> is a combination of good combustion practices, fuel quality, and filtration of inlet air.

**REVIEW OF CARBON MONOXIDE(CO) CONTROL TECHNOLOGIES**

CO is emitted from combustion turbines due to incomplete fuel combustion. Combustion design and catalytic oxidation are the control alternatives that are viable for the project. The most stringent control technology for CO emissions is the use of an oxidation catalyst.

Among the most recently permitted projects with oxidation catalyst requirements are the 500 MW Wyandotte Energy project in Michigan, the El Dorado project in Nevada, Ironwood in Pennsylvania, Millennium in Massachusetts, and Sutter Calpine in California. The permitted CO values of these units are between 3 and 5 ppmvd. Catalytic oxidation was recently installed at a cogeneration plant at Reedy Creek (Walt Disney World), Florida to avoid PSD review which would have been required due to increased operation at low load. Seminole Electric will install oxidation catalyst to meet the permitted CO limit at its planned 244 MW Westinghouse 501FD combined cycle unit in Hardee County, Florida.<sup>1</sup>

**APPENDIX BD**  
**BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)**

Most combustion turbines incorporate good combustion to minimize emissions of CO. These installations are typically permitted to achieve emissions between 10 and 30 ppmvd at full load, even as they achieve relatively low NO<sub>x</sub> emissions by SCR or dry low NO<sub>x</sub> means. GRU proposes to meet a limit of 20 ppmvd while firing natural gas or fuel oil. GRU requests that it be allowed to initially meet a limit of 25 ppmvd when firing natural gas and to achieve 20 ppmvd after one year. The reason is that GE only offers a guarantee of 25 ppmvd for natural gas on a 7EA unit.

Although GE does not offer a single digit CO guarantee on the 7EA, according to its own reports, CO single-digit emissions have been achieved simultaneously with single-digit NO<sub>x</sub> emissions on several MS7001EAs.<sup>2</sup> When the same units are operated at peak power, "expected" CO emissions are 6 ppmvd with an increase of NO<sub>x</sub> to 18 ppmvd.

According to recent data reviewed by the Department, actual CO emissions from eight 7E units undergoing conversions to 7EA and DLN-1 technology achieved between 1.3 and 10.5 ppmvd of CO with an average of 5 ppmvd.<sup>3</sup> This was accomplished while the units achieved single-digit NO<sub>x</sub> values. The Department expects similar actual performance from the GRU project.

**DEPARTMENT BACT DETERMINATION**

Following are the BACT limits determined for the GRU project assuming full load.

| POLLUTANT             | CONTROL TECHNOLOGY   | PROPOSED BACT LIMIT  |
|-----------------------|--|--|
| PM <sub>10</sub> , VE | Pipeline Natural Gas<br>0.05% Sulfur Distillate Oil<br>Combustion Controls | 5 lb/hr (gas)<br>10 lb/hr (oil, 1000 hrs)<br>10 Percent Opacity  |
| CO                    | Combustion Controls  | 25 ppmvd and 54 lb/hr (gas – 1 <sup>st</sup> year)<br>20 ppmvd and 43 lb/hr (gas – after 1 <sup>st</sup> year)<br>20 ppmvd and 43 lb/hr (fuel oil) |

**RATIONALE FOR DEPARTMENT'S DETERMINATION**

- The top technology in a top/down analysis for PM<sub>10</sub> control is good combustion control of inherently clean fuels. No further control methods are available.
- The values of 5 pounds per hour while burning natural gas and 10 lb/hr while burning fuel oil reflect BACT when coupled with a visible emissions limit of 10 percent opacity. The higher 10 lb/hr rate is limited by allowing only 1000 hours of back-up fuel oil use. Most years, fuel oil use will be substantially less than 1000 hours.
- The top technology in a top/down analysis for CO is installation of oxidation catalyst. Use of oxidation catalyst is not widespread except in CO non-attainment areas. It is used in attainment areas when a unit is used that has inherently high emissions of CO.
- GRU's consultant evaluated the use of an oxidation catalyst for the Unit 8 repowering project. The oxidation catalyst control system was estimated to increase the capital cost of the project by \$1,324,708 with an annualized cost of \$345,352 per unit. GRU consultant's estimated levelized costs for CO catalyst control at 2,029 per ton.


**APPENDIX BD  
BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)**

- The Department does not necessarily adopt this estimate, but would agree that these estimates would not be cost-effective for removal of CO (especially if emissions without control are actually much lower than 20 ppmvd as discussed above).
- The Department will set CO limits achievable by good combustion at full load as 25 ppmvd (first year of operation) and 20 ppmvd (gas) and 20 ppmvd (oil). These values are equal to those at the recently permitted 7EA units in Florida. They are similar or slightly higher than values from permitted "F" combustion turbines operating in either combined cycle or simple cycle mode. The reason is that the lower firing temperatures of the 7EA units versus the 7FA units results in less burn-out. As discussed above, the Department expects CO emissions to be in the 5 ppmvd range (even when NO<sub>x</sub> emissions are 9 ppmvd), but does not want to force a lower guarantee from GE at an excessive cost to GRU.
- The CO impact on ambient air quality is lower compared to other pollutants because the allowable concentrations of CO are much greater than for NO<sub>x</sub>, SO<sub>2</sub>, VOC (ozone) or PM<sub>10</sub>.

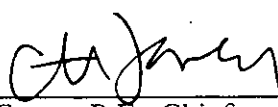
**COMPLIANCE PROCEDURES**

| POLLUTANT                       | COMPLIANCE PROCEDURE                                  |
|---------------------------------|---|
| Visible Emissions               | Method 9  |
| Particulate (PM <sub>10</sub> ) | By VE tests. EPA Method 5 if a special test is needed |
| Carbon Monoxide                 | Method 10   |

**DETAILS OF THE ANALYSIS MAY BE OBTAINED BY CONTACTING:**

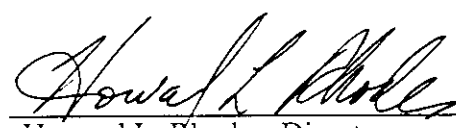
A. A. Linero, P.E. Administrator, New Source Review Section  2/18  
 Teresa Heron, Review Engineer, New Source Review Section  
 Department of Environmental Protection  
 Bureau of Air Regulation  
 2600 Blair Stone Road  
 Tallahassee, Florida 32399-2400

Recommended By:

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

2/22/00  
 \_\_\_\_\_  
 Date:

Approved By:

  
 \_\_\_\_\_  
 Howard L. Rhodes, Director  
 Division of Air Resources Management

2/23/00  
 \_\_\_\_\_  
 Date:

**APPENDIX BD**  
**BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)**

---

**REFERENCES**

---

- <sup>1</sup> Letter. Opalinski, M.P., SECI to Linero, A.A., FDEP. Turbines and Related Equipment at Hardee Unit 3. December 9, 1998.
- <sup>2</sup> Paper. Davis, L.B., GE. Dry Low NO<sub>x</sub> Combustion Systems for GE Heavy-Duty Gas Turbines. 1998.
- <sup>3</sup> Paper. Ihfe, L.M., et. al., Texaco P&G. Kern River and Sycamore Cogen Plant Upgrades and Emission Compliance. Power-Gen Conference. New Orleans, Louisiana. November 30, 1999.

AIRS ID: 0010005 Site Name: JOHN R KELLY POWER PLANT  
 Permit #: Type/Subtype: AC/1A Received: 07-SEP-1999  
 Project #: 002 Project Name: (GRU-KELLY GEN. STATION)

> Receive Request: Done

| Event               | Begin Date  | Prd | Due Date    | Rmn | Status       | End Date    |
|---------------------|-------------|-----|-------------|-----|--------------|-------------|
| Receive Request     | 07-SEP-1999 | 1   | 08-SEP-1999 |     | Done         | 07-SEP-1999 |
| Fee Verification    | 07-SEP-1999 | 2   | 09-SEP-1999 |     | Sufficient   | 09-SEP-1999 |
| Completeness Review | 07-SEP-1999 | 30  | 07-OCT-1999 |     | Incomplete   | 06-OCT-1999 |
| RESET CLOCK         | 06-OCT-1999 | 1   | 07-OCT-1999 |     | Done         | 06-OCT-1999 |
| Awaiting Addition   | 06-OCT-1999 | 45  | 20-NOV-1999 |     | Received     | 02-DEC-1999 |
| Completeness Review | 02-DEC-1999 | 30  | 01-JAN-2000 |     | Complete     | 02-DEC-1999 |
| Determine Agency    | 02-DEC-1999 | 90  | 01-MAR-2000 |     | Issue        | 17-DEC-1999 |
| Mail Public Notice  | 17-DEC-1999 | 10  | 27-DEC-1999 |     | Done         | 17-DEC-1999 |
| Date of Publication | 17-DEC-1999 | 999 | 11-SEP-2002 |     | Published    | 23-DEC-1999 |
| Awaiting Petition   | 23-DEC-1999 | 14  | 06-JAN-2000 |     | Not Received | 06-JAN-2000 |
| Issue Final         | 06-JAN-2000 | 14  | 20-JAN-2000 | -27 | Pending      |             |

Count: 11

v

<List><Replace>

*PROOF OF Publication received January 04, 2000*

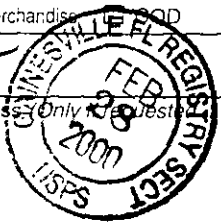
Z 031 391 868

US Postal Service  
**Receipt for Certified Mail**  
No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

|  |    |
|--|----|
| Sent to<br><i>Michael Kurtz</i>                                      |    |
| Street & Number<br><i>GRU</i>  |    |
| Post Office, State, & ZIP Code<br><i>Gainesville FL</i>              |    |
| Postage  | \$ |
| Certified Fee  |    |
| Special Delivery Fee   |    |
| Restricted Delivery Fee  |    |
| Return Receipt Showing to Whom & Date Delivered                      |    |
| Return Receipt Showing to Whom, Date, & Addressee's Address          |    |
| TOTAL Postage & Fees   | \$ |
| Postmark or Date<br><i>CC1005-002AC 2-24-00</i><br><i>PSO-FI-376</i> |    |

PS Form 3800, April 1995

|  |  |  |  |
|--|--|--|--|
| your RETURN ADDRESS completed on the reverse side? | <b>SENDER:</b><br><ul style="list-style-type: none"> <li>Complete items 1 and/or 2 for additional services.</li> <li>Complete items 3, 4a, and 4b.</li> <li>Print your name and address on the reverse of this form so that we can return this card to you.</li> <li>Attach this form to the front of the mailpiece, or on the back, if space does not permit.</li> <li>Write "Return Receipt Requested" on the mailpiece below the article number.</li> <li>The Return Receipt will show to whom the article was delivered and the date delivered.</li> </ul> | I also wish to receive the following services (for an extra fee):<br>1. <input type="checkbox"/> Addressee's Address<br>2. <input type="checkbox"/> Restricted Delivery<br>Consult postmaster for fee.   |  |
|  | 3. Article Addressed to:<br><i>Mr. Michael Kurtz, Jr. Mgr.</i><br><i>City of Gainesville, GRU</i><br><i>PO Box 147117</i><br><i>Gainesville, FL</i><br><i>32614-7117</i>   | 4a. Article Number<br><i>Z 031 391 868</i>   |  |
|  | 5. Received By (Print Name)  | 4b. Service Type<br><input type="checkbox"/> Registered<br><input type="checkbox"/> Express Mail<br><input type="checkbox"/> Return Receipt for Merchandise<br><input checked="" type="checkbox"/> Certified<br><input type="checkbox"/> Insured |  |
|  | 6. Signature (Addressee or Agent)<br><i>[Signature]</i>  | 7. Date of Delivery<br><i>0725</i>   | 8. Addressee's Address (Only if requested and fee is paid) |



Thank you for using Return Receipt Service.