INTEROFFICE MEMORANDUM

TO:

Michael Cooke

THRU:

Trina Vielhauer

Jim Pennington

FROM:

Bruce Mitche

DATE:

November 2, 2004

SUBJECT:

City of Gainesville

Gainesville Regional Utilities Deerhaven Generating Station Final Air Construction Permit

Permit Project No.: 0010006-004-AC/PSD-FL-212(A)

Amendment to Air Construction Permit No.: PSD-FL-212 and BACT Amendment to PPSA Conditions of Certification No.: PA 74-04

Attached is the Final air construction permit, Project No. 0010006-004-AC/PSD-FL-212(A), for the Deerhaven Generating Station located at 10001 NW 13th Street, Gainesville, Alachua County. There were no comments received on the Draft air construction permit during the Public Notice period, which concluded on October 21, 2004.

Since there were no comments received during the Public Notice period, then it is recommended that the Final air construction permit (letter) be signed as noticed.

Attachments

MGC/tlv/jkp/bm

NOTICE OF AIR CONSTRUCTION PERMIT

In the Matter of an Application for Permit:

Mr. Randy L. Casserleigh R.O., D.R., and Interim Assistant General Manager of Energy Supply City of Gainesville Gainesville Regional Utilities 10001 NW 13th Street Gainesville, Florida 32653 DEP File No.: 0010006-004-AC Deerhaven Generating Station

Alachua County

* Also see: 00 10006 - 003-AV

Enclosed is the Final Air Construction Permit, Number 0010006-004-AC, to remove some federally enforceable nitrogen oxides limitations (lbs/hr and TPY) that have no rule basis and are essentially equivalent emissions to the BACT standards established in the PSD Permit, No. PSD-FL-212, and its BACT Determination for combustion turbine No. 3 (these conditions were also established in the Power Plant Siting Act Conditions of Certification, No. PA 74-04). The Deerhaven Generating Station is located at 10001 NW 13th Street, Gainesville, Alachua County. This permit is issued pursuant to Chapter 403, Florida Statutes (F.S.). No comments were received during the Public Notice period.

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.

Trina L. Vielhauer

Chief

Bureau of Air Regulation

Den LVillan

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL AIR CONSTRUCTION

PERMIT (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on to the person(s) listed or as otherwise noted:

Mr. Randy L. Casserleigh *, R.O., D.R., and Interim Assistant General Manager of Energy Supply, City of Gainesville, Gainesville Regional Utilities, Deerhaven Generating Station, 10001 NW 13th Street, Gainesville, Florida 32653

Mr. Thomas W. Davis, P.E., ECTI

Mr. Chris Kirts, NED

Mr. Hamilton "Buck" Oven, P.E., PPSA

USEPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk.

ecript of which is hereby acknowledged.

Clerk)

Final Determination

City of Gainesville Gainesville Regional Utilities Deerhaven Generating Station

Air Construction Permit No.: 0010006-004-AC/PSD-FL-212(A)

Alachua County

An Intent to Issue an Air Construction Permit to Gainesville Regional Utilities's Deerhaven Generating Station, located at 10001 NW 13th Street, Gainesville, Alachua County, Florida, was distributed on September 28, 2004. The Public Notice of Intent to Issue an Air Construction Permit was published in the Gainesville Sun Newspaper on October 7, 2004. There were no comments submitted in response to the Public Notice.

The final action of the Department will be to issue the Final air construction permit (letter) as noticed.



Department of Environmental Protection

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

Colleen M. Castille Secretary

November 2, 2004

CERTIFIED MAIL - Return Receipt Requested

Mr. Randy L. Casserleigh
Responsible Official and Interim Assistant General Manager of Energy Supply
City of Gainesville
Gainesville Regional Utilities
Deerhaven Generating Station
10001 NW 13th Street
Gainesville, Florida 32653

Re:

Air Construction Permit Project No.: 0010006-004-AC/PSD-FL-212(A) Amendment to Air Construction Permit No.: PSD-FL-212 and BACT Amendment to PPSA Conditions of Certification No.: PA 74-04 Gainesville Regional Utilities – Deerhaven Generating Station Combustion Turbine No. 3

Dear Mr. Casserleigh:

This letter modification removes the equivalent federally enforceable nitrogen oxides BACT (Best Available Control Technology) limitations (lbs/hr and TPY) established in the air construction permit and Power Plant Siting Act (PPSA) Conditions of Certification, Nos. PSD-FL-212 and PA 74-04, respectively. PSD-FL-212 was issued/clerked on April 11, 1995. It has been determined that there was no rule basis for limiting the NO_x emissions in "lbs/hr" and "TPY" and that these numbers are merely equivalent emissions to the standards of "15 ppmvd, corrected to 15% oxygen, when firing natural gas" and "42 ppmvd, corrected to 15% oxygen, when firing distillate fuel oils (Nos. 1 and 2)." This letter modification also establishes that the continuous emissions monitor for nitrogen oxides will be used for compliance purposes. The changes are being incorporated into the Title V Air Operation Permit under renewal, No. 0010006-003-AV (see Specific Conditions Nos. C.0., C.6. and C.13.c.). Therefore, the following are changed: \(\frac{1}{2} \)

1. Specific Condition 6. (PSD-FL-212 and BACT). FROM:

Allowable Emissions. The maximum allowable emissions from the DHCT3, when firing natural gas or distillate fuel oils (Nos. 1 or 2), in accordance with the BACT determination, and at 95 - 100% percent load based on the manufacturer's curves submitted to the DEP, shall not exceed the following limits except during periods of start up, shutdown, load changing, fuel switching and malfunction pursuant to Rule 62-210.700, F.A.C., and the BACT analysis.

| Pollutant | Fuel | BACT Standard | Lbs/Hr | TPY |
|-------------------|------|---|--------------|----------|
| NO _x * | Gas | 15 ppmvd @ 15% Oxygen | 58 | 113(a) |
| | Oil | 42 ppmvd @ 15% Oxygen | 184 | 184(b) |
| | | | Combined (c) | 239 |
| PM ₁₀ | Gas | Good combustion; VE shall not exceed 10% opacity | 7(d) | 14(a)(d) |
| | Oil | Good combustion of low sulfur fuel oil, max. 0.05% sulfur, by weight; VE shall not exceed 10% opacity | 15(d) | 15(b)(d) |
| | | Good combustion; low sulfur fuel oil, max. 0.05% sulfur, by weight; VE shall not exceed 10% opacity | Combined (c) | 22 |

"More Protection, Less Process"

Mr. Randy L. Casserleigh

Air Construction Permit Project No.: 0010006-004-AC/PSD-FL-212(A)
Amendment to Air Construction Permit No.: PSD-FL-212 and BACT
Amendment to PPSA Conditions of Certification No.: PA 74-04
Gainesville Regional Utilities – Deerhaven Generating Station

Combustion Turbine No. 3

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| SO ₂ | Gas | Good combustion | 29(d) | 57(a)(d) |
|-------------------------------------|-----|---|-------------|----------|
| | Oil | Good combustion of low sulfur fuel oil; max. 0.05% sulfur | 53(d) | 53(b)(d) |
| | | content, by weight | Combined(c) | 81 |
| H ₂ SO ₄ Mist | Gas | Good combustion | 3(d) | 6(a)(d) |
| | Oil | Good combustion of low sulfur fuel oil; max. 0.05% sulfur | 6(d) | 6(b)(d) |
| | | content, by weight | Combined(c) | 9 |

^{*}These values will be calculated using F factors.

- (a) Based on a maximum of 3900 hours of operation with natural gas firing.
- (b) Based on a maximum of 2000 hours of operation with fuel oil firing.
- (c) Based on 1900 hours natural gas firing and 2000 hours of operation with fuel oil firing.
- (d) Compliance shall be demonstrated through combustion of pipeline natural gas and fuel oil sulfur analysis. [PA 74-04; PSD-FL-212; and, BACT]

TO:

Allowable Emissions. The maximum allowable emissions from the DHCT3, when firing natural gas or distillate fuel oils (Nos. 1 or 2), in accordance with the BACT determination, and at 95 - 100% percent load based on the manufacturer's curves submitted to the DEP, shall not exceed the following limits except during periods of start up, shutdown, load changing, fuel switching and malfunction pursuant to Rule 62-210.700, F.A.C., and the BACT analysis (including the amended BACT).

| Pollutant | Fuel | BACT Standard | |
|-------------------------------------|------|---|--|
| NO _x | Gas | 15 ppmvd @ 15% Oxygen (a) | |
| | Oil | 42 ppmvd @ 15% Oxygen (a) | |
| PM ₁₀ | Gas | Good combustion; VE shall not exceed 10% opacity (b) | |
| | Oil | Good combustion of low sulfur fuel oil, max. 0.05% sulfur, by weight; VE shall not exceed 10% opacity (b) | |
| | | Good combustion; low sulfur fuel oil, max. 0.05% sulfur, by weight; VE shall not exceed 10% opacity (b) | |
| SO ₂ | Gas | Good combustion (b) | |
| | Oil | Good combustion of low sulfur fuel oil; max. 0.05% sulfur content, by weight (b) | |
| H ₂ SO ₄ Mist | Gas | Good combustion (b) | |
| | Oil | Good combustion of low sulfur fuel oil; max. 0.05% sulfur content, by weight (b) | |

⁽a) The averaging time shall be based on the test method.

(b) Compliance shall be demonstrated through combustion of pipeline natural gas and fuel oil sulfur analysis.

[PA 74-04; PSD-FL-212; BACT; BACT, as amended; and, 0010006-004-AC and PSD-FL-212(A)]

2. Specific Condition 15. (PSD-FL-212).

FROM:

| The permittee shall install, calibrate, maintain, and operate a continuous emissions monitor in the stack to measure |
|--|
| and record the nitrogen oxides emissions from this source. One-hour |
| The NO _x CEMS will be used in lieu of the water/fuel monitoring system and fuel bound |
| nitrogen (FBN) monitoring, which are required in accordance with 40 CFR 60, Subpart GG (1993 version), and are |
| used as indicators of compliance with the NO_x standard specified in the subpart. Since the NO_x |
| 1 11 26 2 1 1 CA NO OTMO |
| |

Mr. Randy L. Casserleigh

Air Construction Permit Project No.: 0010006-004-AC/PSD-FL-212(A) Amendment to Air Construction Permit No.: PSD-FL-212 and BACT Amendment to PPSA Conditions of Certification No.: PA 74-04 Gainesville Regional Utilities – Deerhaven Generating Station Combustion Turbine No. 3

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|---|---|----|
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| | | ٠. |

| The permittee shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) in the |
|--|
| stack to measure and record the nitrogen oxides (NO _x) emissions from this source. One-hour |
| |
| determining compliance with the NO _x standard specified in the amended permit and BACT [see 0010006-004- |
| AC/PSD-FL-212(A)]. Since the NO _x |
| replaced by certification tests of the NO _x CEMS. |

This permit (letter) is issued pursuant to Chapter 403, Florida Statutes (F.S.). Any party to this order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Sincerely,

Michael G. Cooke, Director Division of Air Resource Management

Mel J. Com

MGC/rbm

cc: Mr. Chris Kirts, NED

Mr. Hamilton "Buck" Oven, P.E., PPSA Mr. Thomas W. Davis, P.E., ECTI