

## RECEIVED

MAY 16 2001

BUREAU OF AIR REGULATION

May 14, 2001

Mr. John Reynolds, P.E. Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, Florida 32399-2400

Dear Mr. Reynolds:

Re: University of Florida Construction Permit - Proof of Publication

I have enclosed the proof of publication of the Public Notice of Intent to Issue Air Construction Permit for Florida Power Corporation's University of Florida facility.

Please contact me at (727) 826-4334 if you have any questions.

Sincerely,

J. Michael Kennedy, Q.E.P.

Manager, Air Programs

TEL:727 826 4216



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To:	John Ray	nelds	From:	Mike Loundy
Company: Fax No.: Subject:	(850) 92;	3 ~ 6 9 7 9	Phone No.: Date: Pages:	(937) 826 -4334 5/14/01
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Will William Court - middle house

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THE GAINESVILLE SUN Published Daily and Sunday GAINESVILLE, FLORIDA

#### STATE OF FLORIDA COUNTY OF ALACHUA

	Naomi Williams-Jordan
Before the undersigned authority	appeared
Class	ified Assistant Manager
Who on oath says that he/she is	of THE GAINESVILLE SUN, a daily
newspaper published at Gainesville in Ala Public Notice of Intent	chua County, Florida, that the attached copy of advertisement, being a
in the matter of	
April 21,	
***************************************	
Alachua County, Florida, and that the said Alachua County, each day, and has been er Said Alachua County, Florida, for a period	NESVILLE SUN is a newspaper published at Gainesville, in said newspaper has heretofore been continuously published in said neered as second class mail matter at the post office in Gainesville, in of one year next preceding the first publication of the attached copy that he has neither paid nor promised any person, firm or corporation waspaper.
Sworn to and subscribed before me this  24. day of April A.D., 2001  Sharon X Williams  (seal) Notary Public	Phone Williams Forder
SHARON K. WILLIAMS MY COMMISSION & CC 814219 EXPIRES: Merch 3, 2003 Bonded Thru Motery Public Uniformitians	RECEIVED MAY 1 4 2001

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THE GAINESVILLE SUN Published Daily and Sunday GAINESVILLE, FLORIDA

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	Classified Assistant Manager
	of THE GAINESVILLE SUN, a daily
Į	in Alachua County, Florida, that the attached copy of advertisement, being hent
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E GAINESVILLE SUN is a newspaper published at Gainesville, in said ie said newspaper has heretofore been continuously published in suid been entered as second class mail matter at the post office in Gainesville, in period of one year next preceding the first publication of the attached copy r says that he has neither paid nor promised any person, firm or corporation iaid newspaper.

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#### Memorandum

# Florida Department of Environmental Protection

TO:

Clair Fancy Con P

THRU:

Al Linero

FROM:

John Reynolds

DATE:

April 18, 2001

SUBJECT:

Florida Power Corporation/University of Florida Cogen Plant

Replacement of 43 MW Combustion Turbine

DEP File No. 0010001-003-AC

Attached is the public notice package for replacement of a 43 MW combustion turbine at the University of Florida Cogen Plant in Gainesville. The applicant is applying to replace the existing 43 MW GE LM6000 turbine with a new more efficient model incorporating GE's SPRay INTercooling (SPRINT) technology. This technology was developed for GE's LM6000 machines to address the limiting factor of high discharge temperatures and their adverse effect on operating life of the unit. The technology involves water spray injection at the low-pressure compressor inlet as well as between the low and high-pressure compressors.

Nitrogen Oxides ( $NO_X^{\circ}$ ) emissions from the new gas turbine will be controlled by the water injection system and the emission limit will remain the same (25 ppmvd) @15%  $O_2$  for gas firing and 42 ppmvd for fuel oil firing. Since the new turbine has a maximum operating capacity of about 48 MW vs. 43 MW for the existing unit, allowable annual operating hours at maximum rates have been reduced from 8147 to 7211. The current annual NOx emission cap for the facility, which includes the combustion turbine, the duct burner, and two backup boilers, remains at 194.3 tons per year.

Due to the combustion characteristics of the replacement turbine, Carbon Monoxide (CO) emissions will be lower and will limited to 36 ppmvd (corrected to 15% oxygen) for natural gas firing vs. the current 42 ppmvd. This amounts to a decrease in allowable CO emissions from 158 to 127.5 tons per year.

Emissions of carbon monoxide, volatile organic compounds, sulfur dioxide, sulfuric acid mist, and particulate matter (PM/PM<sub>10</sub>) will be very low because of the inherently clean pipeline quality natural gas, limited fuel oil use and, the design of the GE unit.

Today (April 18) is day 41. I recommend your approval of the attached Intent to Issue.

Attachments



### RECEIVED

APR 16 2001

BUREAU OF AIR REGULATION

April 12, 2001

Mr. Al Linero, P.E. Florida Department of Environmental Protection 2600 Blair Stone Rd. Tallahassee, Florida 32399-2400

Dear Mr. Linero:

Re: Florida Power University of Florida Facility

Draft Permit No. 0010001-003-AC

Florida Power has received the preliminary draft construction permit referenced above. This letter serves to provide comments on the draft permit. These comments are as follows:

- 1. Authorized Representative: The correct spelling is Kris Edmondson.
- 2. Specific Condition 6: This condition contains both a total fuel use requirement and an annual NOx emissions cap. Given that the NOx emissions cap is the over-arching requirement, and CEMs will be used to track compliance with the cap, the fuel use limit appears somewhat superfluous. Florida Power requests that the fuel use limit be removed, and that compliance with the emissions cap using the CEMs be retained in this condition. Fuel use data would still be used to calculate the emissions from the back-up boilers, which would be added to the CEMs data for the combustion turbine (CT) and duct burner (DB).
- 3. Specific Condition 8.c.: Items 1 and 2 of this condition limit the NOx emissions from the CT/DB combination to 25 ppmvd corrected to 15% O<sub>2</sub> while on natural gas and 42 ppmvd corrected to 15% O<sub>2</sub> while burning distillate oil. These ppmvd limits would actually apply to the CT only. Since Specific Conditions 8.a. and 8.b. already limit the emissions of the CT and DB in terms of ppmvd, Ibs/hr, and tons/year, Specific Conditions 8.c.1. and 8.c.2. may not be necessary. Another alternative is to state the additive emission limits for the CT and DB together in this condition.
- 4. Specific Condition 8.c.3.: Specific Condition 8.c.3. requires that the total NOx emissions for the calendar year be reported in the annual operating report for the facility. Specific Condition 6 requires that the NOx cap not be exceeded in any federal fiscal year. Florida Power requests that the time frame reflected in Specific Condition 6 be changed to a calendar year in order for Specific Condition 8.c.3. to be meaningful in terms of tracking compliance with the NOx cap.

Mr. Al Linero April 12, 2001 Page 2

Florida Power appreciates the opportunity to review and comment on the draft permit. Please contact Mike Kennedy at (727) 826-4334 if you have any questions.

Sincerely,

Kris Edmondson Plant Manager

bcc:

J. M. Kennedy

S. H. Osbourn, ENSR