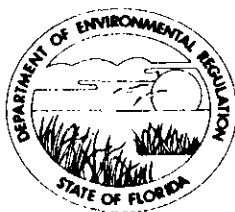


STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

March 15, 1984

Mr. Alex Alderman  
Kissimmee Utilities  
P. O. Box 1608  
Kissimmee, Florida 32741

Re: Air Pollution Permit AC 49-74856

Dear Mr. Alderman:

This letter is in reference to the documents (waiver and drawings) we received on March 7, 1984, concerning the water system proposed.

After review of the drawings submitted we determined the information included is not adequate to evaluate your request. Specifically, we need a process description of the water system proposed.

How does the present water injection system compare with the system that was submitted to the Department with the original application on September 9, 1983? Why was the department not notified that the proposed water injection system had been changed.

For purpose of complying with the NSPS monitoring of operations requirements, paragraph 60.334(a) subpart GG, 40 CFR, the system approved must be accurate to within  $\pm$  5.0 percent and must monitor and record continuously the fuel consumption and the ratio of water to fuel being fired in the turbine. Can the water meter (recorded hourly) and the integrator in the water injection system proposed supply this data in order to comply with the NSPS requirements? Please explain how this system operates.

As you are aware, the waiver of the 90 day time limit (DER Form 17-2.122(71)) will expire April 2, 1984. We hope to process your request before this date if we receive the required information on time.

Mr. Alex Alderman  
Page Two  
March 15, 1984

If you need clarification on the above subjects, please call Ed Palagyi or Teresa M. Heron of this office at (904)488-1344.

Sincerely,



C. H. Fancy, P.E.  
Deputy Bureau Chief  
Bureau of Air Quality Management

CHF/TH/s

No. 0158268

RECEIPT FOR CERTIFIED MAIL  
 NO INSURANCE COVERAGE PROVIDED—  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

SENT TO		Alex Alderman
STREET AND NO.		
P.O., STATE AND ZIP CODE		
POSTAGE		\$
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	\$
	SPECIAL DELIVERY	\$
	RESTRICTED DELIVERY	\$
	OPTIONAL SERVICES	
	RETURN RECEIPT SERVICE	
	SHOW TO WHOM AND DATE DELIVERED	\$
	SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	\$
	SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	\$
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	\$
TOTAL POSTAGE AND FEES		\$
POSTMARK OR DATE		3/16/84

PS Form 3800, Apr. 1976

SENDER: Complete Items 1, 2, and 3. Add your station in the RETURN TO: space on reverse.

1. The following service is requested (check one)  
 Show to whom and date delivered.  
 Show to whom, date and address of delivery.  
 RESTRICTED DELIVERY. Show to whom and date delivered.  
 RESTRICTED DELIVERY. Show to whom, date, and address of delivery.

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:  
 Mr. Alex Alderman  
 P. O. Box 1608  
 Kissimmee, FL 32741

3. ARTICLE DESCRIPTION:  
 REGISTERED NO. CERTIFIED NO. INSURED NO.  
 0158268

4. (Always obtain signature of addressee or agent.)  
 I have received the article described above.  
 SIGNATURE  Address  Agent

MAR 16 1984

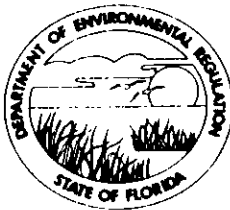
5. ADDRESS (Complete only if necessary)

6. UNABLE TO DELIVER BECAUSE

SPS

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

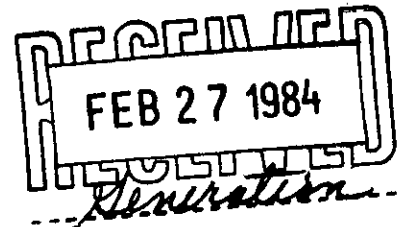
TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM  
GOVERNOR  
VICTORIA J. TSCHINKEL  
SECRETARY

February 24, 1984

Mr. Alex Alderman  
Kissimmee Utilities  
P. O. Box 1608  
Kissimmee, Florida 32741



Re: Air pollution permit AC 49-74856

Dear Mr. Alderman:

As requested, I am sending you the waiver of 90 day time limit (DER Form 17-2.122(71)). This waiver form must be completed and extended for a reasonable length of time (30 days) to review your request. The gas turbine shall comply with the NSPS Monitoring of operations requirements, paragraph 60.334(a) Subpart GG, 40 CFR. Any modifications to that requirement shall be approved by the department. Therefore, we need detailed plans of the water control system proposed.

Kissimmee Utilities' permit must be issued on or before March 3, 1984, unless we have the completed waiver form at this office before that date. At the present time, your request is denied. If the permit is issued as presently scheduled, any changes to the permit would require an application for modification.

If you need clarification on the above subject, please call Teresa M. Heron of this office at (904)489-1344.

Sincerely,

C. H. Fancy, P.E.  
Deputy Bureau Chief  
Bureau of Air Quality Management

CHF/TH/s

WAIVER OF 90 DAY TIME LIMIT

UNDER SECTION 120.60(2), FLORIDA STATUTES

License (Permit, Certification) Application No. AC49-74856  
Applicant's Name: KISSIMMEE UTILITIES

The undersigned has read Section 120.60(2), Florida Statutes, and fully understands the Applicant's rights under that section.

With regard to the above referenced license (permit, certification) application, the Applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Section 120.60(2), Florida Statutes, waives the right under Section 120.60(2), Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Section 120.60(2), Florida Statutes. Said waiver is made freely and voluntarily by the Applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 2nd day of April 1984.

The undersigned is authorized to make this waiver on behalf of the applicant.

  
Signature

James C. Welsh, P. E.  
Name of Signee

February 28, 1984  
Date

Sworn to and subscribed before me this 28th day of February 1984.



NOTARY PUBLIC STATE OF FLORIDA AT LARGE  
MY COMMISSION EXPIRES SEPT. 28, 1985  
BONDED THRU GENERAL INS. UNDERWRITE:

**COPY**

Section 120.60, Florida Statutes

(2) When an application for a license is made as required by law, the agency shall conduct the proceedings required with reasonable dispatch and with due regard to the rights and privileges of all affected parties or aggrieved persons. Within 30 days after receipt of an application for a license, the agency shall examine the application, notify the applicant of any apparent errors or omissions, and request any additional information the agency is permitted by law to require. Failure to correct an error or omission or to supply additional information shall not be grounds for denial of the license unless the agency timely notified the applicant within this 30 day period. The agency shall notify the applicant if the activity for which he seeks a license is exempt from the licensing requirement and return any tendered application fee within 30 days after receipt of the original application or within 10 days after receipt of the timely requested additional information or correction of errors or omissions. Every application for license shall be approved or denied within 90 days after receipt of the original application or receipt of the timely requested additional information or correction of errors or omissions. Any application for a license not approved or denied within the 90-day period or within 15 days after conclusion of a public hearing held on the application, whichever is latest, shall be deemed approved and, subject to the satisfactory completion of an examination, if required as a prerequisite to licensure, <sup>2</sup> (the license) shall be issued. The Public Service Commission, when issuing a license, and any other agency, if specifically exempted by law, shall be exempt from the time limitations within this subsection. Each agency, upon issuing or denying a license, shall state with particularity the grounds or basis for the issuance or denial of same, except where issuance is a ministerial act. On denial of a license application on which there has been no hearing, the denying agency shall inform the applicant of any right to a hearing pursuant to s. 120.57.

## TITLE -- WATER INJECTION SKID ASSY

DWG NO	SUB	B/M UNITS	NO. OF SHEETS	DIST CODE
124BE93	001	INCHES	01	000-000-000

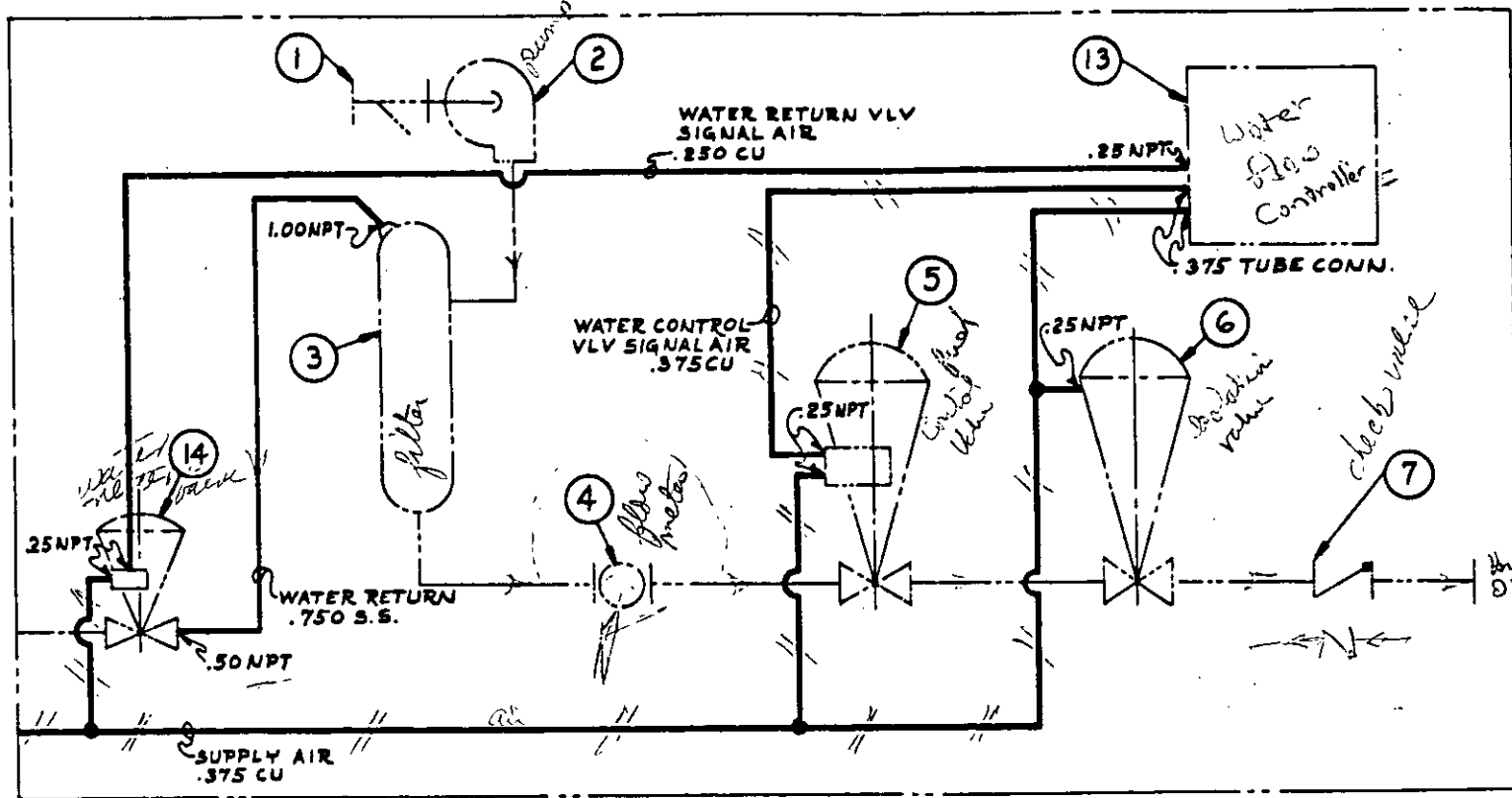
ITEM SYMB	DESCRIPTION	DEFINER	SIZE-REF INFORMATION
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001	WATER INJECT SKID PPG	BOS	PER DWG
002	PUMP & MOTOR	DWG	2-
003	FILTER	DWG	2-
004	FLOWMETER WATER	DWG	2-
005	CONTROL VALVE LIQUID FUEL	DWG	2-
006	ISOLATION VALVE	DWG	2-
007	VALVE SWING CHECK	DWG	2-
008	PRESSURE SWITCH	BOS	MERCOID DA-23-103-R105
009	PRESSURE INDICATOR	DWG	2-
010	VALVE	DWG	2-
011	PIPING SPEC	DOC	2-
012	BEDPLATE FAB & MACH	DWG	1-
013	WATER FLOW CONTROLLER	DWG	1-
014	WATER RETURN VALVE	DWG	2-
015	ENCLOSURE WATER	DWG	2-
016	CONDUIT ASSY	LAT	
017	WIRING DIAGRAM	LAT	
018	STRAINER	DWG	2-
901	WATER INJECTION SKID ASSY		1-

LAST ITEM



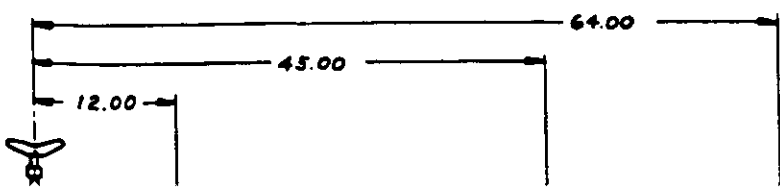




**SCHMATIC** 6/B

**NOTE:**

- 1 WATER FLOWMETER AND SWI ARE FLANGELESS AND MUST BE LINE FLANGES.
- 2 BLANK OFF AND SEAL ALL OPENINGS ( PROPERLY BRACE INTERNAL EQUIP - PAINT ALL TEMPORARY BRACES





February 14, 1984

Mr. Bill Thomas  
Bureau of Air Quality Management  
Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32301-8241

Re: Florida DER Air Construction Permit  
Kissimmee Utilities Combined Cycle Unit No. 1  
Osceola County State Permit No. AC 49-74856  
Federal Permit No. PSD-FL-087

Dear Mr. Thomas:

The following are comments on the draft Florida DER air construction permit for our new Combined Cycle Turbine Generator and are referenced to the proposed DER specific conditions (pages 5 thru 8).

Specific  
Condition(s)

Comment

2, 5

Table 2 of the Preliminary Determination, which lists the allowable emission limits for each pollutant, contains an inconsistency, which also occurs throughout the Preliminary Determination and the draft construction permit. Table 2 specifies the allowable emissions of SO<sub>2</sub> from the gas turbine to be "0.5 percent S by weight and 388 lb/hr". For the boiler, the limits are "0.5 percent S by weight".

The table should read "0.8 percent S by weight and 388 lb/hr" for the gas turbine, and "0.8 percent S by weight" for the boiler. The application submitted by Kissimmee Utilities was based upon 0.8 percent S which results in the 388 lb SO<sub>2</sub>/hr figure for the gas turbine. All air quality analysis results presented in the application and in the preliminary determination are based upon the 0.8 percent S fuel. On page 11 of the Preliminary Determination this inconsistency is also reflected.

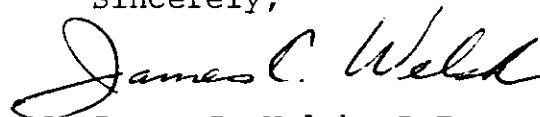
The 0.8 percent S fuel is equivalent to the NSPS for gas turbines. The high efficiency of this combined cycle operation, and the resulting minimal environ-

mental impacts, does not justify the lowering of the fuel sulfur content to 0.5 percent. In addition, economic penalties (i.e. fuel costs) would be associated with such a requirement. At a very conservative price differential between 0.5 and 0.8 percent S fuel of \$1/bbl, additional fuel costs to Kissimmee Utilities could be as great as \$683,280 per year (78 bbls/hr x 8760 hr/yr x \$1/bbl).

It is requested that the NO<sub>x</sub> emission limits for both oil and gas not be fixed concentration levels, as they are now specified in the draft permit. The NSPS formula is considered to be more appropriate, due to the fluctuations in turbine efficiency and fuel-bound nitrogen content encountered under actual operating conditions. Therefore, the only limit specified for NO<sub>x</sub> should be the NSPS formula.

- 6 The draft permit conditions do not specify which fuel (i.e. gas or oil) to test on. Kissimmee Utilities proposes to test on oil only since this represents the worst case for NO<sub>x</sub>, CO, and particulate matter emissions from the gas turbine. Gas firing produces essentially no particulate matter, emissions. Because of the configuration of the turbine, boiler and stack, it is simplest to conduct the performance tests at the main stack outlet of the boiler. Since only the gas turbine is required to be tested, no supplementary firing of fuel in the combined cycle boiler will occur during the performance tests. Thus, only gas turbine emissions will be tested, although the sample location will be downstream of the boiler.
- 7 A continuous monitoring system to measure the amount of water injected into the turbine is not currently installed at Kissimmee Utilities. However, a water meter and integrator is installed, and the meter reading will be recorded hourly by plant personnel for purposes of complying with this condition.
- 13 We request that the expiration date of this construction permit not be sooner than August 1, 1984. This will allow us sufficient time for performance testing and submittal of an operating permit application 90 days prior to expiration of the construction permit.

Sincerely,



James C. Welsh, P.E.  
City of Kissimmee  
Electric Utilities Director

OFFICE OF THE UTILITIES DIRECTOR



P.O. BOX 1608 • KISSIMMEE, FLORIDA 32744 • 305/847-2821  
529-42-1608

January 16, 1984

DER

JAN 18 1984

BAQM

Mr. C. H. Fancy  
Deputy Chief  
Bureau of Air Quality Management  
Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8241

Re: Preliminary Determination - Kissimmee Utilities  
Combined Cycle Unit #1, Osceola County  
State Permit No. AC 49-74856  
Federal Permit No. PSD-FL-087

Dear Mr. Fancy:

In compliance with the 14-day publication requirement of the Notice of Proposed Agency Action, please find enclosed a tear sheet of the Notice which appeared in the Osceola Little Sentinel, The Orlando Sentinel, Sunday, January 15, 1984.

Very truly yours,

James C. Welsh, P.E.  
Electric Utilities Director

/pf  
Enclosure

CC: David A. Buff, Environmental Science & Engineering, W/Encl.  
Charles Collins, DER St. Johns River District, W/Encl.

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**The Orlando Sentinel**

12-83

## LEGAL NOTICES

### PUBLIC NOTICE

A modification to an existing air pollution source is being proposed by Kissimmee Utilities located in the City of Kissimmee, Osceola County, Florida. The proposed modification is the construction of a 49.9 MW combined cycle gas turbine. The modification will increase emissions of air pollutants, in tons per year, by the following amounts:

PM	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
96	1702	1029	349	83

The proposed modification has been reviewed by the Florida Department of Environmental Regulation (FDER) under Chapter 403, Florida Statutes, and Federal regulation 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The Department has made a preliminary determination that the construction can be approved provided certain conditions are met. A summary of the basis for the determination and the application for State and Federal permits submitted by Kissimmee Utilities are available for public review at the following offices:

Bureau of Air Quality Management Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Florida 32301	St. Johns River District Department of Environmental Regulation 3319 Maguire Blvd., Suite 232 Orlando, Florida 32803
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Kissimmee Public Library

305 E. Broadway

Kissimmee, Florida 32741

The maximum percentages of allowable PSD increments consumed by the proposed modification will be as follows:

PM	Annual	24-Hour	3-Hour	NA
SO <sub>2</sub>	Negligible	Negligible	11	9

Any person may submit written comments to FDER regarding the proposed modification. All comments, postmarked not later than 30 days from the date of notice, will be considered by FDER in making a final determination regarding approval for construction of this source. Those comments will be made available for public review on request. Furthermore, a public hearing can be requested by any person. Such request should be submitted within 14 days of the date of this notice. Letters should be addressed to:

Mr. C.H. Fancy, P.E.  
Deputy Chief  
Bureau of Air Quality Management  
Department of Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32301

OS-403

Jan. 15, 1984



January 11, 1984

DER

JAN 16 1984

BAQM

*PaHcy*  
Mr. C. H. Fancy  
Deputy Chief  
Bureau of Air Quality Management  
Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32301-8241

Re: Preliminary Determination - Kissimmee Utilities  
Combined Cycle Unit #1, Osceola County  
State Permit No. AC 49-74856  
Federal Permit No. PSD-FL-087

Dear Mr. Fancy:

Receipt is acknowledged of your letter of January 5, 1984, with attached Public Notice and Technical Evaluation and Preliminary Determination. These were received in this office January 9 and in keeping with the requirement of 14-day publication of the Notice of Proposed Agency Action, the Public Notice will appear in the Osceola Little Sentinel, Sentinel Star, on Sunday, January 15, 1984, in the legal section. A copy of this publication will be forwarded to your office.

Very truly yours,

A handwritten signature in cursive script that reads 'James C. Welsh'.

James C. Welsh, P.E.  
Electric Utilities Director

/pf

CC: David A. Buff, P.E., Environmental Science & Engineering  
Charles Collins, DER St. Johns River District