FLORIDA POWER & LIGHT COMPANY

December 3, 1973

Mr. Peter P. Baljet
Executive Director
State of Florida
Department of Pollution Control
2562 Executive Center Circle East
Tallahassee, Florida 32301

RECEIVED DPC
DEC 3 1973
EXECUTIVE DIRECTOR

Attn: Mr. Hamilton Oven

Dear Mr. Baljet:

Re: Application for Site Certification for the Addition of 226 MW of Steam Electric Capacity at the Palatka Plant Putnam County, Florida, FPL File No. PPL-FF-4

Florida Power & Light Company hereby applies for site certification under the provisions of Florida Statute 403.506 for the addition of 226 MW of steam electric capacity at our existing Palatka Steam Electric Power Plant. FPL Check No. 79534 in the amount of $1,000.00 payable to the Department of Pollution Control is attached to cover the cost of processing this application. Also attached are four copies of aerial photo No. E-62928 showing the Palatka Plant area.

Our analysis of FPL system generating capabilities reflect that additional capacity is needed in 1975 to meet the projected peak demand. Without additional generation capability in 1975, our system capability will be 9,396 MW. The projected demand in 1975 is 9,000 MW, thus leaving an unacceptable reserve of 396 MW, or 4.4%. (Our largest generating unit at Turkey Point No. 3 is 760 MW. Thus, if this unit was not available for service, our system would not be able to generate service equal to the demand.) In response to this need for power in 1975, FPL has already made application for permits to construct 280 MW of gas turbine generating units at Palatka Plant. Through this Application for Certification, we propose to construct an additional 226 MW of steam electric generating capacity at the Palatka Plant, thus increasing our total system capability to 9,916 MW, therefore increasing our reserve capability to a more desirable 916 MW or 10.2%. In order to provide this required generating capacity, construction of this project must commence by July 1, 1974 and be completed by April 1, 1975.

This project includes the addition of heat recovery boilers to the proposed gas turbines at the Palatka Plant, and the use of supplemental firing to increase the efficiency of the production of steam in the waste heat recovery boilers. The steam produced by this system will be used to drive steam turbine generators, thus increasing the efficiency of the total operation of this combined cycle system to a level which will represent the most efficient use of fuel energy in the production of electric energy available to FPL by April 1, 1975. In addition, these units can operate using residual fuel oil.

Our engineering and environmental investigations and analyses indicate that this project can be designed, constructed, and operated so as to comply with all applicable Federal, State and local environmental standards and regulations.

Florida Power & Light Company respectfully requests that the Department of Pollution Control accept this application for site certification and expedite review and issuance of the certification for this project so that we may commence construction by July 1, 1974.

Sincerely,

W. J. Barrow, Jr.
Environmental Affairs

WJB:jjo
Attachments

STATE OF FLORIDA
DEPARTMENT OF POLLUTION CONTROL

APPLICATION TO OPERATE/CONSTRUCT POLLUTION SOURCES

SECTION I – GENERAL INFORMATION FOR ALL POLLUTION SOURCES

I TO BE FILLED IN BY APPLICANT

Source Type: Air Pollution

Type application: [ ] Operation [ ] Temporary Operation [X] Construction

Status Source: [X] New [ ] Existing [X] Modification

Source Name: Palatka Plant Combined Cycle Gas Turbine Unit 1A County: Putnam

Source Location: Street: See Location Map City: near East Palatka

(Water Source Only) Lat: ____° ____' ____" Long: ____° ____' ____"

(Air Source Only) UTM: East 443350 North 3277560

Appl. Name and Title: Florida Power & Light Company

Appl. Address: P. O. Box 3100, Miami, Florida 33101

II TO BE FILLED IN BY REGION (*BY BUREAU OF PERMITTING)

Control No: Region ____ County ____ Type ____ *Project ____

Type Permit	Date Rec'd	*Permit No.	*Issue Date	*Compl. Date	*Exp. Date

Source Description: Combined cycle gas turbine electric generating unit.

Control Equipment: Fuel treatment to reduce ash.
Stacks for dispersion of air emissions.

Water Permits

Receiving Body Code: ____ Surface Water Code: ____

Station No.: Influent: ____ Effluent: ____

Effluent:	Average	Design	% Reduction
Flow rate, MGD			
BOD, lbs/day			
Susp. Sol., lbs/day			
Other: ____			

Air Permits

Operating Time: [ ] Continuous [X] Intermittent

Fuel: Type Low sulfur (0.7%) residual fuel oil ~~MCF/hr~~ In Put 1042.5 X 10^6 Btu/hr.

Incinerator: Capacity, tons/day ____ Type Waste ____

Mfg. & Model ____

Pollutant Emissions, lbs/day	Actual	Design	Allowable
Particulate	1,668	2,502	*No standard for gas turbines.
Sulfur Oxides	12,288	18,432	*No standard for gas turbines.
Other: NOx	10,608	15,913	*No standard for gas turbines.

*The waste heat recovery boiler has less than 250 X 10^6 Btu/hr. supplemental fuel heat input.

Implementation: Estimated Appl. Filing Date ____

Estimated Start of Const. July 1, 1974 Estimated Compliance Date (Completion 4/1/75)

AIR POLLUTION SOURCES & CONTROL DEVICES

A. Identification of Air Contaminants

1) [X] Particulates
   a) [ ] Dust b) [X] Fly Ash c) [ ] Smoke d) [ ] Other (Identify)

2) [X] Sulfur Compounds
   a) [X] SO_x as SO_2 b) [ ] Reduced Sulfur as H_2S c) [ ] Other (Identify)

3) [X] Nitrogen Compounds
   a) [X] NO_x as NO_2 b) [ ] NH_3 c) [ ] Other (Identify)

4) [ ] Flourides 5) [ ] Acid Mist 6) [ ] Odor

7) [ ] Hydrocarbons 8) [ ] Volatile Organic Compounds

9) [ ] Other (Specify): _____

B. Raw Materials and Chemicals Used (Be Specific)

Description	Utilization Tons/day, lbs./day, etc.	Approximate Contaminant Content		Relate to Flow Diagram
		Type	% Wt.	
N/A				

C. Process Weight: N/A

1) Total Process Weight Rate _____ lbs./hr. [See Sec. 17-2.04(2)]
2) Product Weight _____ lb./hr. expressed as _____
3) Normal Operating Time _____, if seasonal describe: _____

D. Airborne Contaminants Discharged:

Name of Contaminant	Actual Discharge	Discharge Criteria*	Allowable Discharge*	Relate Location to Flow Diagram
Fly Ash	0.1	lb/10^6 Btu	***	From stacks (7)
SO_x as SO_2	0.8	lb/10^6 Btu	***	From stacks (7)
NO_x as NO_2	0.636	lb/10^6 Btu	***	From stacks (7)

* Refer to Chapter 17-2 Florida Administrative Code
(Discharge Criteria: Process Weight Rate, #/tonP_2O_5, #/M BTU/hr etc.)

***No applicable emission standards for gas turbines.
Supplemental fuel heat input to heat recovery boiler is less than
250 X 10^6 Btu/hr.

STATEMENTS BY APPLICANT AND ENGINEER

A. **Applicant**

The undersigned owner or authorized representative of * Florida Power & Light Company is fully aware that the statements made in this application for a construction (air) permit are true, correct and complete to the best of his knowledge and belief. Further, the undersigned agrees to maintain and operate the pollution source and pollution control facilities in such a manner as to comply with the provisions of Chapter 403 Florida Statutes and all the rules and regulations of the Department or revisions thereof. He also understands that a permit, if granted by the Department, will be non-transferable and he will promptly notify the Department upon sale or legal transfer of the permitted establishment.

W J Barrow Jr

Signature of the Owner or Authorized Representative

W. J. Barrow, Jr., Project Coordinator, Environmental Dept.

Name and Title (Please Type)

Date: April 10, 1974 Telephone No.: 305/446-3161 ext. 288

* Attach a letter of authorization

B. **Professional Engineer Registered in Florida:**

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the control and discharge of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution source(s) with appropriate control facilities, when properly maintained and operated, will comply with all applicable statutes of the State of Florida and the rules and regulations of the Department. It is also agreed that the undersigned will furnish the applicant a set of instructions for the proper maintenance and operation of the installation covered in this application.

Signature W. H. Rogers Jr

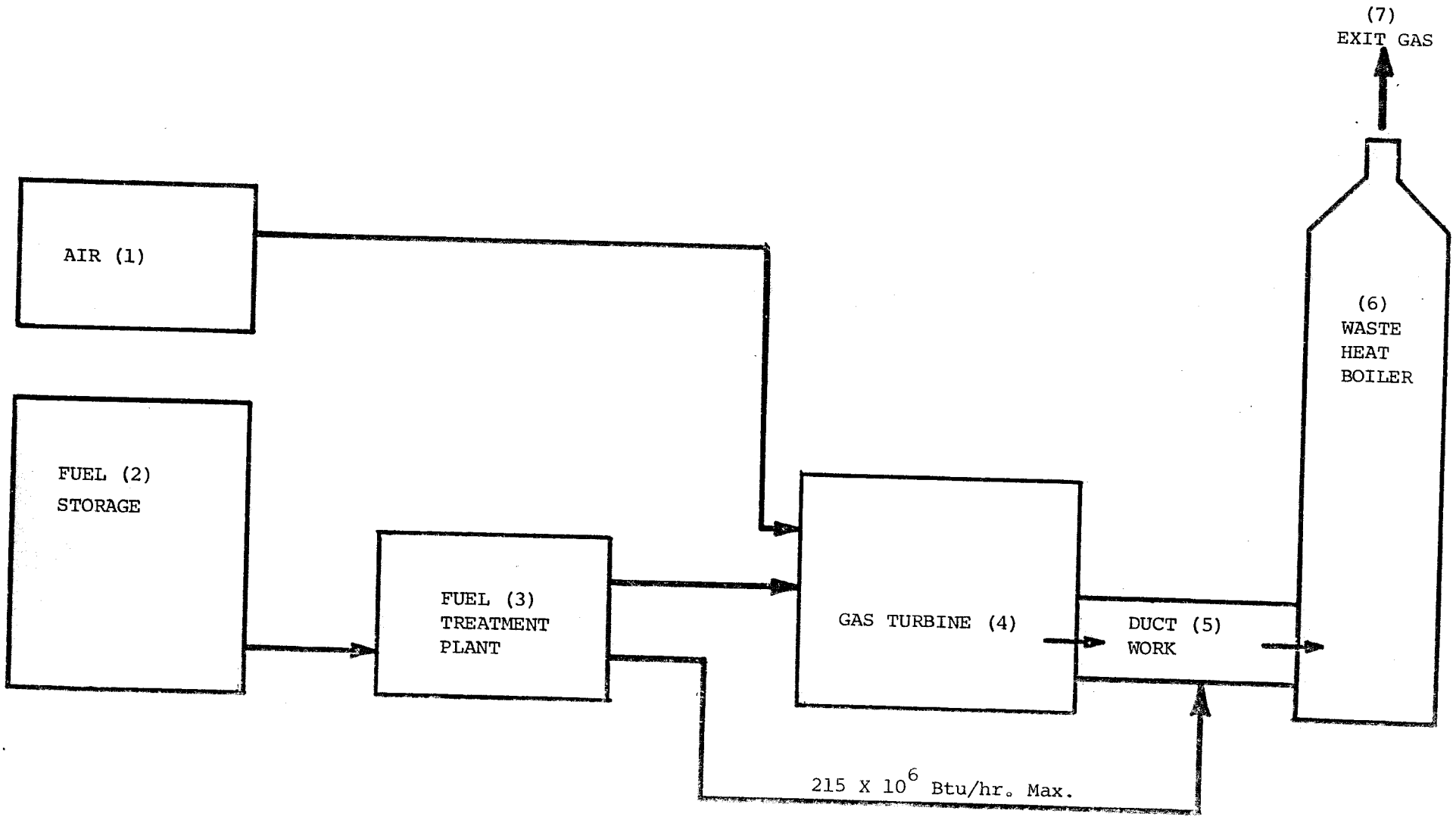
Name: W. H. Rogers, Jr.
(please type)

Florida Registration Number 5921
(Please affix seal)

Mailing Address: Florida Power & Light Company
P. O. Box 3100
Miami, Florida 33101

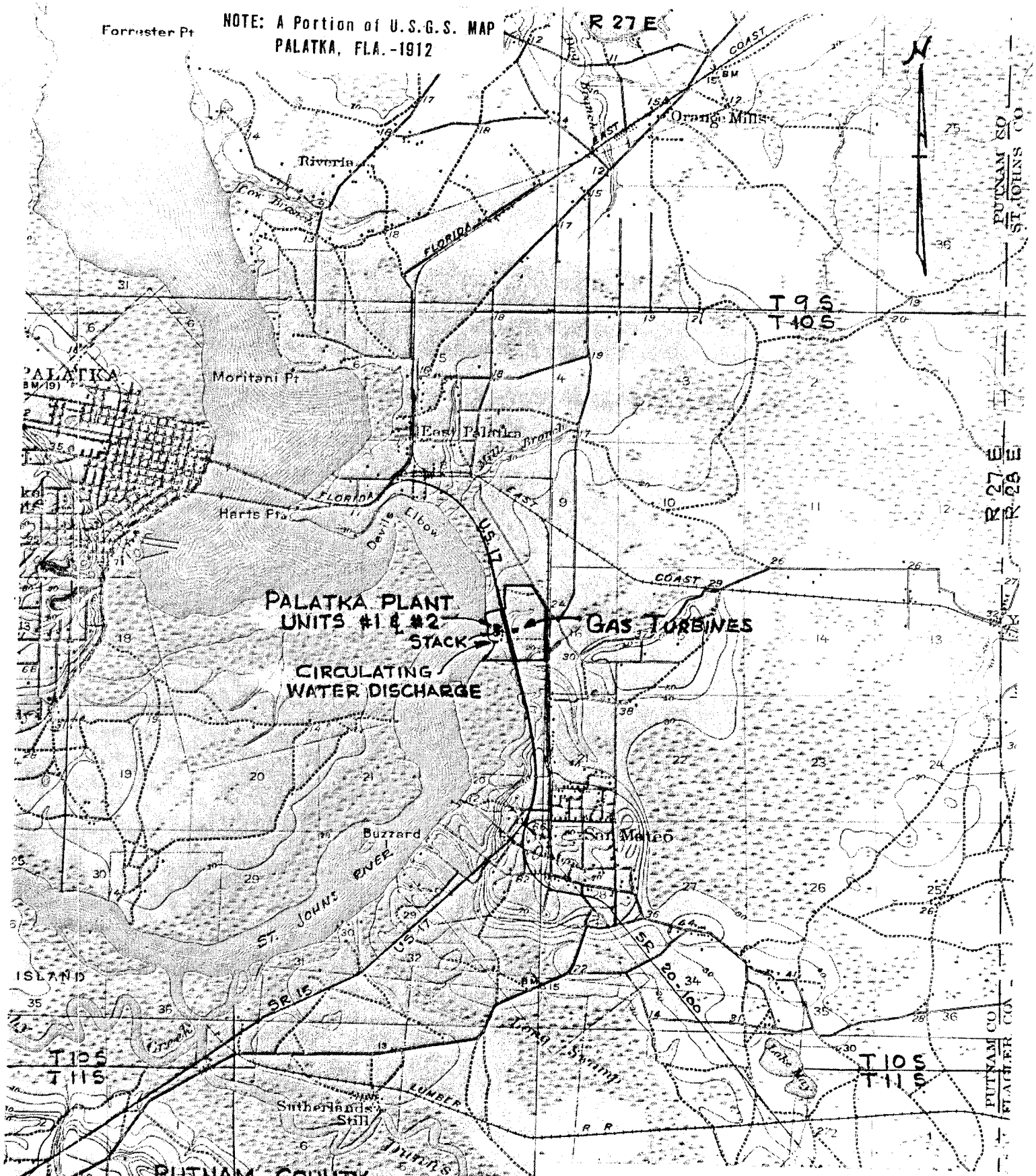
Telephone No.: 305/446-3161

Date: April 10, 1974



SHD/jjc
12-20-73

PALATKA PLANT
FLORIDA POWER & LIGHT COMPANY
COMBINED CYCLE GAS TURBINE
UNITS 1A or 1B or 2A or 2B



FLORIDA POWER & LIGHT COMPANY
PALATKA PLANT
LOCATION MAP

P. O. BOX 013100, MIAMI, FLORIDA 33101

FLORIDA POWER & LIGHT COMPANY

April 10, 1974

Mr. Peter P. Baljet
Executive Director
State of Florida
Department of Pollution Control
2562 Executive Center Circle East
Montgomery Building
Tallahassee, Florida 32301

Dear Mr. Baljet:

Mr. W. J. Barrow, Jr., Project Coordinator, Environmental Planning and Research Department, is authorized to act as agent and representative for Florida Power & Light Company in applying for air and water pollution source construction and operating permits.

Sincerely,

Donald D. Dunlop
Vice President, Environmental

DDD:jjo