LAKELAND ELECTRIC

Farzie Shelton, chE; REM

Environmental Affairs Manager of Licensing & Permitting

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 23, 2000

RECEIVED
FEB 28 2000
BUREAU OF AIR REGULATION

Mr. C.H. Fancy, P.E.
Chief Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400

Re: Air Construction Permit No. 1050004-006-AC (PSD-FL-245 –A) Lakeland Electric Unit No. 5

Dear Mr. Fancy:

In compliance with the above referenced permit (Section III. Emission Unit Specific Condition 29) and 40CFR 60.7 and 60.8, we are writing to notify the Department of our intention to perform the initial stack testing commencing on March 2, 2000. Accordingly, we intend to demonstrate compliance with the NSPS and BACT Standards while burning Natural Gas. However, at this time we do not intend to demonstrate compliance while burning low sulfur fuel oil as, to date, we have not used any fuel oil during start up of this unit. We have informed DEP Southwest District by telephone of this event, however, we will provide a copy of this letter to Mr. Bill Thomas of DEP's Southwest District and Mr. Greg Worley of the Environmental Protection Agency.

If you should have any questions, please do not hesitate to contact me.

Sincerely

Farzie Shelton

Cc: Mr. William C. Thomas P.E.
Administrator
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa Fl 33619

Mr. Greg Worley
Chief
Pre-Construction/HAP Section
United States Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8909

LAKELAND ELECTRIC

Farzie Shelton, chE; REM

Environmental Affairs Manager of Licensing & Permitting

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

January 14, 2000

RECEIVED

JAN 21 2000

BUREAU OF AIR REGULATION

Mr. C.H. Fancy, P.E.
Chief Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400

Re: Air Construction Permit No. 1050004-006-AC (PSD-FL-245 –A) Lakeland Electric Unit No. 5

Dear Mr. Fancy:

In compliance with the above referenced permit (Section III. Emission Unit Specific Condition 29) and 40CFR 60.7 and 60.8, we are writing to notify the Department of our intention to perform the initial stack testing commencing on January 14, 2000. Accordingly, we intend to demonstrate compliance with the NSPS and BACT Standards while burning Natural Gas. However, at this time we do not intend to demonstrate compliance while burning low sulfur fuel oil as, to date, we have not used any fuel oil during start up of this unit. Please note that we restarted this unit on January 7, 2000 following redesign and reassemble of some combustion components. We have informed DEP Southwest District by telephone of this event, however, we will provide a copy of this letter to Mr. Bill Thomas of DEP's Southwest District and Mr. Greg Worley of the Environmental Protection Agency.

If you should have any questions, please do not hesitate to contact me.

Sincerely

Farzie Shelton

Cc: Mr. William C. Thomas P.E.
Administrator
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa Fl 33619

Mr. Greg Worley
Chief
Pre-Construction/HAP Section
United States Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8909

Detail | Events | Facility | perMitted EU | Help | eXit

Permitting Application

Permit #:**1050004-006-AC** PATS: Issue:**29-JAN-1999** Expire:**29-JAN-2004**

Project #/Name	Owner/Company	Type/Sub	Receive
001/AMENDMENTS TO PERMIT PSD-	LAKELAND ELECTRIC	AC /M1	08-DEC-1994
002/PETROLEUM COKE AS FUEL RE	LAKELAND ELECTRIC	AC /M1	19-OCT-1995
003/MCINTOSH POWER PLANT	LAKELAND ELECTRIC	AV /00	14-JUN-1996
004/MCINTOSH POWER PLANT FACI	LAKELAND ELECTRIC	AC /1A	08-DEC-1997
005/MCINTOSH POWER PLANT EARL	LAKELAND ELECTRIC	AV /02	31-AUG-1998
006/CITY OF LAKELAND-MCINTOSH	**LAKELAND ELECTRIC**	**AC /M2**	**27-JAN-1999**
007/CITY OF LAKELAND - UNIT #	LAKELAND ELECTRIC	AC /M1	09-JUL-1999
008/CITY OF LAKELAND - UNIT 5	LAKELAND ELECTRIC	AC /M1	21-SEP-1999
009/C.D. MCINTOSH POWER PLANT	LAKELAND ELECTRIC	AV /02	24-APR-2000
010/C.D. MCINTOSH, JR.,UNIT N	LAKELAND ELECTRIC	AC /M1	29-JUL-2000
/STEAM GENERATOR	LAKELAND ELECTRIC	AO /2A	23-NOV-1988
/PEAKING UNIT #3, FUEL OIL	LAKELAND ELECTRIC	AO /2B	15-DEC-1988
/PEAKING UNIT #1, FUEL OIL	LAKELAND ELECTRIC	AO /2B	15-DEC-1988
/STEAM GENERATOR	LAKELAND ELECTRIC	AO /2A	20-DEC-1989

Press [NXTBLK] for summary information.

Count: 14 v <Replace>

Detail | Events | Facility | perMitted EU | Help | eXit

Permitting Application

Permit #:**1050003-007-AC** PATS: Issue:**30-MAY-2000** Expire:**30-MAY-2005**

Project #/Name	Owner/Company	Type/Sub	Receive
001/CUSTOM FUEL MONITOR/ISO/L	LAKELAND ELECTRIC	AC /M1	27-JUN-1995
002/LARSEN 8 REV'S	LAKELAND ELECTRIC	AO /MM	23-OCT-1995
003/REVISE TEST DATES - UNITS	LAKELAND ELECTRIC	AO /MM	18-MAR-1996
004/LARSEN POWER STATION	LAKELAND ELECTRIC	AV /00	14-JUN-1996
005/LAKELAND ELECTRIC/WATER U	LAKELAND ELECTRIC	AC /M1	20-MAR-1997
006/LAKELAND/LARSEN ADMIN COR	LAKELAND ELECTRIC	AV /03	26-OCT-1999
007/LAKELAND-LARSEN MEMORIAL	**LAKELAND ELECTRIC**	**AC /M1**	**25-FEB-2000**
008/LAKELAND/LARSEN ADMIN COR	LAKELAND ELECTRIC	AV /03	16-MAR-2000
/LARSEN MEMORIAL UNIT 5	LAKELAND ELECTRIC	AO /99	01-FEB-1985
/STEAM GENERATOR NO. 7	LAKELAND ELECTRIC	AO /99	04-APR-1985
/LARSON MEMORIAL POWER PLA	LAKELAND ELECTRIC	AO /99	04-APR-1985
/LARSEN PLANT--GAS TURBINE	LAKELAND ELECTRIC	AO /00	07-JUN-1988
/LARSON MEMORIAL POWER PLA	LAKELAND ELECTRIC	AO /2A	05-FEB-1990
/LARSON MEMORIAL POWER PLA	LAKELAND ELECTRIC	AO /2A	05-FEB-1990

Press [NXTBLK] for summary information.

Count: 14 v <Replace>

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number
- The Return Receipt will show to whom the article was delivered and the date delivered

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Kenneth W. Sowles
Assistant Managing Director
Lakeland Electric & Water Utilities
501 East Lemon St.
Lakeland, FL 33801-5079

4a. Article Number

Z 031 391 898

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

12-15-99

5. Received By: *(Print Name)*

6. Signature: *(Addressee or Agent)*

X Bonnie Brown

8. Addressee's Address *(Only if requested and fee is paid)*

Thank you for using Return Receipt Service.

PS Form **3811**, December 1994 102595-98-B-0229 Domestic Return Receipt

Z 031 391 898

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

Sent to Kenneth Sowles	
Street & Number 501 E. Lemon St.	
Post Office, State, & ZIP Code Lakeland, FL 33801-5079	
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 12/13/99	

PS Form **3800**, April 1995

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

OCT 18 1999

RECEIVED

OCT 22 1999
DIVISION OF AIR
RESOURCES MANAGEMENT

4APT-ARB

Mr. Howard L. Rhodes, Director
Department of Environmental Protection
Division of Air Resources Management
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: Initial Performance Test Extension Request for Unit No. 5 at the Lakeland Electric McIntosh Power Plant, Lakeland, Florida

Dear Mr. Rhodes.

The purpose of this letter is to provide you with comments regarding an initial performance test extension that Lakeland Electric requested for the referenced combustion turbine (CT) which is subject to 40 C.F.R. Part 60, Subpart GG (Standards of Performance for Stationary Gas Turbines). According to a September 16, 1999, letter that Lakeland Electric sent to the Environmental Protection Agency (EPA), Region 4 and to the Florida Department of Environmental Protection, Unit No. 5 started up on April 14, 1999. Based upon this startup date, the deadline for conducting an initial performance test on this CT would be October 11, 1999 (i.e., no later than 180 days after startup). As a result of serious damage that occurred to the unit during operational testing that was conducted following its startup, Unit No. 5 has been shutdown for repairs since July 30, 1999, and Lakeland Electric does not anticipate restarting the unit before mid-November. Therefore, it will be impossible to conduct the initial performance test by the applicable deadline, and Lakeland Utilities has requested an extension of the deadline for conducting its initial test. Specifically, the company has requested that the deadline for testing be extended until 60 days following the restart of the unit, and based upon our review of the relevant facts, we have concluded that the proposed testing extension is reasonable.

The EPA has previously granted initial testing extensions to owners and operators of facilities that could not be tested by the deadlines in 40 C.F.R. §60.8(a) due to mechanical breakdowns that prevented them from operating. In all of the previous determinations that we are aware of, companies were allowed to delay their initial performance test until 30 days after the facility resumed operation following the completion of repairs made to correct the mechanical breakdown(s) that prevented the company from completing the test by the applicable deadline. Although Lakeland Electric has requested a longer initial testing extension than EPA has granted in the past, we have concluded that allowing this additional time to complete the testing at Lakeland Electric is justified due to the nature of the repairs and modifications the company will have to make to Unit No. 5 before it can be restarted.

According to the September16, 1999, letter from Lakeland Electric, Unit No. 5 is the first Westinghouse 501G turbine to be built. Due to its large size (250 Megawatts) it had to be assembled onsite, and this prevented it from being factory tested prior to its installation at Plant McIntosh. During the operational testing period earlier this year, vibration problems damaged turbine equipment on two occasions, and on the second occasion, multiple components were affected when part of a broken compressor diaphragm passed through the unit and damaged other downstream equipment. In addition to redesigning and testing new equipment to correct the vibration problems that caused this damage, Lakeland Electric is also in the process of replacing fuel gas control valves that did not work properly during the previous startup testing.

When equipment failures prevent the owner or operator of an affected facility from completing an initial performance test by the deadline established in 40 C.F.R. §60.8(a) extending the deadline for initial testing until 30 days following the restart of the facility provides sufficient time to complete the testing if the repairs made prior to restarting the unit do not affect its operating characteristics significantly. In the case of Unit No. 5 at Plant McIntosh, however, a substantial number of equipment changes are being made, and much of the operational testing conducted by Lakeland Electric prior to the shutdown of the unit will probably have to be repeated before the unit can be safely run across its entire range of operation. Since the amount of operational testing that will have to be conducted when the unit restarts may be comparable to that which would have to be conducted on an entirely new unit, we have concluded that Lakeland Electric's request that the deadline for conducting an initial performance test on Unit No. 5 be extended until 60 days following the restart of the unit is reasonable.

If you have any questions about the issues addressed in this letter, please contact Mr. David McNeal of the Region 4 staff at (404) 562-9102.

Sincerely,

Douglas Neeley

R. Douglas Neeley
Chief
Air and Radiation Technology Branch
Air, Pesticides and Toxics
Management Division

cc: Mr. Clair Fancy, FL DEP
Mr. Hamilton Oven, FL DEP
Mr. Al Linero, FL DEP
Mr. Michael Harley, FL DEP