



RECEIVED
SEP 24 1999
BUREAU OF AIR REGULATION

September 20, 1999

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

Dear Mr. Linero:

Re: Crystal River Helper Cooling Towers

0170004-007-AC
PSD-FI-139A

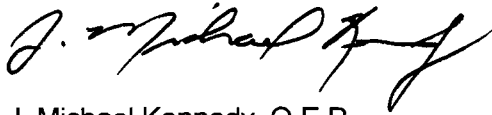
I have enclosed four copies of the pertinent permit application forms and application fee check in the amount of \$250.00 for the processing of a request to remove the requirement to test for particulates from the helper cooling towers at the Florida Power Corporation (FPC) Crystal River plant.

Over the past several months, coordination between FPC and DEP's Southwest District, Mr. Martin Costello of DEP's Tallahassee office, and EPA Region IV has resulted in a consensus that Method 5 particulate testing of the mechanical draft helper cooling towers at Crystal River is not an appropriate application of that reference method. In addition, testing of the cooling towers is impractical. The cooling tower exhaust is powered by very large fans, making it quite turbulent. Therefore, isokinetic sampling is difficult, if not impossible, to achieve. In addition, the towers are very short, so testing the required two stack diameter distance from the disturbance to the flow (fans) is not possible.

FPC requests the removal of the particulate testing requirement contained in Specific Condition 4 of construction permit number AC 09-162037 (PSD-FL-139) and Specific Condition 7 of operation permit number AO 09-236827. In order to ensure compliance, Hamon, which is the cooling tower manufacturer, performs a comprehensive inspection of the towers at the end of each operating season. Any necessary repairs are then made prior to the following operating season. Note that operation of each of the towers is limited to 4,320 hours/year, and they typically operate only from May to October.

Thank you for your consideration of this request. Please contact me at (727) 826-4334 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Michael Kennedy". The signature is fluid and cursive, with a large, stylized "J" and "K".

J. Michael Kennedy, Q.E.P.
Manager, Air Programs

CC: Joe Kahn, BAR
SWD
EPA
NPS
M. Costello, BAMMS



**Florida
Power**
CORPORATION

ACCOUNTS PAYABLE DEPT. CX1K

P. O. BOX 14042

ST. PETERSBURG, FL 33733-4042 **REMITTANCE ADVICE**

(727) 820-5257

89

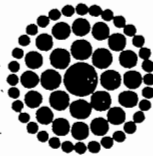
CHECK DATE 08/25/1999 VENDOR FLA DEPT OF ENVIRONMENTAL

VENDOR NO. 278473 CHECK NO. 2089170

INVOICE NO.	DATE	OUR ORDER NO.	VOUCHER	GROSS AMOUNT	DISCOUNT	NET AMOUNT
CK139607	08/20/99		9908137616	250.00	.00 TOTAL	250.00 250.00

THE ATTACHED REMITTANCE IS IN FULL SETTLEMENT OF ACCOUNT AS STATED. IF NOT CORRECT PLEASE RETURN TO ABOVE ADDRESS.

Accounts Payable Department CX1K
P.O. Box 14042
St. Petersburg, FL 33733-4042



**Florida
Power**
CORPORATION

63-115

631

DATE 08/25/1999 CHECK NO. **2089170**

PAY: \$250*DOLLARS AND 00 CENTS

\$***250.00**

SunTrust / Mid-Florida

Void after 60 days

TO
THE
ORDER
OF
FLA DEPT OF ENVIRONMENTAL
PROTECTION
2600 BLAIR STONE RD
TALLAHASSEE FL 32399-2400

Pamela A. Jaari
Treasurer

**Department of
Environmental Protection**

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

1. Facility Owner/Company Name : Florida Power Corporation			
2. Site Name : Crystal River Plant			
3. Facility Identification Number :		0170004	<input type="checkbox"/> Unknown
4. Facility Location : Crystal River			
Street Address or Other Locator :		Powerline Rd.	
City : Crystal River		County : Citrus	Zip Code : 32629
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		6. Existing Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

0170004-007-AC
P50-F1-139A

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SEP 24 1999

BUREAU OF AIR REGULATION

I. Part 1 - 1

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official :

Name : W. Jeffrey Pardue, C.E.P.
Title : Director, Environmental Services

2. Owner or Authorized Representative or Responsible Official Mailing Address :

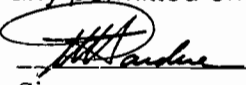
Organization/Firm : Florida Power Corporation
Street Address : P.O. Box 14042, MAC BB1A
City : St. Petersburg
State : FL Zip Code : 33733

3. Owner/Authorized Representative or Responsible Official Telephone Numbers :

Telephone : (727)826-4301 Fax : (727)826-4216

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions units.*


Signature

9/14/99
Date

* Attach letter of authorization if not currently on file.

I. Part 2 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Purpose of Application and Category

Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain :

- ☐ Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

- ☐ Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number :

- ☐ Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed :

- ☐ Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number :

Operation permit to be revised :

- ☐ Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application.

Operation permit to be revised/corrected :

I. Part 4 - 1

- ☐ Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

Category II : All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain :

- ☐ Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s) :

- ☐ Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed :

- ☐ Air operation permit revision for a synthetic non-Title V source.

Operation permit to be revised :

Reason for revision :

Category III : All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain :

- ☒ Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

I. Part 4 - 2

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

Current operation permit number(s), if any :
0970014-001-AV

- ☐] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s) :

- ☐] Air construction permit for one or more existing, but unpermitted, emissions units.

Application Processing Fee

Check one :

[X] Attached - Amount : \$250.00 [] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations :

Application to remove the requirement to test the helper cooling towers for particulate every 5 years using EPA Method 5.

2. Projected or Actual Date of Commencement of Construction :

3. Projected Date of Completion of Construction :

Professional Engineer Certification

1. Professional Engineer Name : Jennifer L. Tillman
Registration Number : 0052125

2. Professional Engineer Mailing Address :

Organization/Firm : Florida Power Corporation
Street Address : P.O. Box 14042, MAC BB1A
City : St. Petersburg State : FL Zip Code : 33733

3. Professional Engineer Telephone Numbers :

Telephone : (727)826-4132 Fax : (727)826-4216

I. Part 5 - 1

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

4. Professional Engineer Statement :

I, the undersigned, hereby certify, except as particularly noted herein, that :*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [*] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature
(seal)

Date

9/17/99

I. Part 6 - 1

DEP Form No. 62-210.900(1) - Form

Effective 3-21-96

* The purpose of this application is to obtain an amendment to the PSD construction permit for the helper cooling towers.

Application Contact

1. Name and Title of Application Contact :
Name : J. Michael Kennedy, Q.E.P. Title : Manager, Air Programs
2. Application Contact Mailing Address :
Organization/Firm : Florida Power Corporation Street Address : P.O. Box 14042, MAC BB1A City : St. Petersburg State : FL Zip Code : 33733
3. Application Contact Telephone Numbers :
Telephone : (727)826-4334 Fax : (727)826-4216

Application Comment

This application is to request removal of the requirement to test the helper cooling towers for particulate every 5 years using EPA Method 5.

A.

1. Basis for Allowable Emissions Code: OTHER		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	428 lb/hour	925 tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): 1. Permit limit; BACT determination. 2. Total emissions from 36 cells; each cell estimated to emit 11.89 lb/hr.		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

Emissions Unit Information Section 10 of 14
Allowable Emissions (Pollutant identified on front page)

Particulate Matter - PM10

A.

1. Basis for Allowable Emissions Code: OTHER		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	214 lb/hour	462 tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): 1. Permit limit; BACT determination. 2. Total emissions from 36 cells; each cell estimated to emit 5.94 lb/hr.		

B.

1. Basis for Allowable Emissions Code: OTHER		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: 462 tons/yr		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): 1. Permit limit; BACT determination. 2. Total emissions from all 36 cells.		



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AUG 21 2000

BUREAU OF AIR REGULATION

August 16, 2000

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

Dear Mr. Kahn:

Re: Crystal River Helper Cooling Towers
Withdrawal of Permit Modification Application
Permit # 017-0004-007AC, PSD FL-139A

On September 20, 1999, Florida Power Corporation (FPC) submitted an application to modify the construction permit for the helper cooling towers at the Crystal River plant. This application requested removal of the requirement to perform EPA Method 5 particulate testing on these cooling towers. As you know, the DEP recently issued an Order on Request for an Alternate Sampling Procedure (ASP) for the cooling towers. This ASP replaces the permit requirement to perform Method 5 particulate testing with a work practice standard.

Since it is no longer necessary to modify the construction permit, FPC withdraws the September 20, 1999 modification application. FPC will request that the ASP be incorporated into the Crystal River Title V operation permit.

Thank you for your cooperation on this issue. Please contact Mike Kennedy at (727) 826-4334 if you have any questions.

Sincerely,

W. Jeffrey Pardue, C.E.P.
Director

EPA
NPS

ONE POWER PLAZA, 263 - 13th Avenue South, BB1A, St. Petersburg, FL 33701-5511 •
P.O. Box 14042, BB1A • St. Petersburg • Florida 33733-4042 • (727) 820-5151
A Florida Progress Company

INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL

Date: 04-Aug-2000 03:55pm

From: Martin Costello TAL
COSTELLO_M

Dept: Air Resources Management

Tel No: 850/921-9511

To: Joseph Kahn TAL

(KAHN_J)

Subject: Crystal River ASP

attached is the ASP which allows a work practice instead of PM testing. It went out June 9th.

Let me know if you need a signed copy.

Marty

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:)	Permit No.	0170004-
004-AV)		AC 09-
162037)		PSD-FL-139
Florida Power)		
Corporation,)		
Petitioner.)	ASP No.	00-E-01

ORDER ON REQUEST
FOR
ALTERNATE PROCEDURES AND REQUIREMENTS

Pursuant to Rule 62-297.620, Florida Administrative Code (F.A.C.), Florida Power Corporation petitioned for approval to use a work practice involving inspection and preventative maintenance in lieu of EPA Methods 1 through 5 for particulate matter on one cell of Petitioner's forced draft "helper cooling towers" every five years. The forced draft "helper cooling towers" consist of 36 cells. The Crystal River Power Plant is located in Citrus County.

Having considered Petitioner's written request and all supporting documentation, the following Findings of Fact, Conclusions of Law, and Order are entered:

FINDINGS OF FACT

1. Petitioner's forced draft "helper cooling towers" are used during the warmer months to cool salt water which has been used to remove waste heat from steam generating Units 1, 2 and 3 at the Crystal River Power Plant.
2. Petitioner is currently required by permit to conduct testing for particulate matter emissions on one cell of the forced draft "helper cooling towers" every 5 years.
3. Petitioner requested relief from the requirement to use EPA Methods 1 through 5 for particulate matter testing of the forced draft "helper cooling towers" due to the unusual testing conditions and poor sampling location.

4. Section 1.2 of EPA Method 1 states, "This method is applicable to flowing gas streams in ducts, stacks, and flues. The method cannot be used when: (1) flow is cyclonic or swirling (see Section 2.4), or (3) the measurement site is less than two stack or duct diameters downstream or less than half a diameter upstream from a flow disturbance."

5. Section 2.1 of EPA Method 1 states, "Sampling or velocity measurement is performed at a site located at least eight stack or duct diameters downstream and two diameters upstream from any flow disturbance such as a bend, expansion, or contraction in the stack or duct or from a visible flame. If necessary an alternative location may be selected at a position, at least two stack or duct diameters downstream and a half diameter upstream of any flow disturbance."

6. Section 2.4 of EPA Method 1 states, "In most stationary sources, the direction of stack gas flow is essentially parallel to the stack walls. However, cyclonic flow may exist (1) after such devices as cyclones and inertial demisters following venture scrubbers, or (2) in stacks having tangential inlets or other duct configurations which tend to induce swirling; in those instances, the presence or absence of cyclonic flow must be determined. If the average value of ω is greater than 20, the overall flow condition in the stack is unacceptable and alternative methodology subject to the approval of the Administrator, must be used to perform accurate sample and velocity traverses."

7. Based on a physical inspection of the forced draft "helper cooling towers" by Department personnel the only available sampling location is at the exhaust of the tower immediately behind the fan. So the sampling location does not conform to the minimum upstream and downstream criteria for distance from a flow disturbance specified in the method.

8. Based on a physical inspection of the forced draft "helper cooling towers" by Department personnel the proximity of the only available sampling location to the axial flow fan is such that the flow at the sampling location is expected to be of a cyclonic nature.

9. Correspondence with William Grimley of the EPA Emission Measurement Center stated, "Martin: I copied your original message to about 8 people; didn't get much response; - Dan Bivins will be calling you to discuss, but it [EPA Method 5 testing] does seem unnecessary" (Exhibit 1)

10. Personnel at the EPA Emission Measurement Center have been unable to locate any evidence that EPA Methods 1 through 5 have ever been validated for

forced draft cooling towers as evidenced by Dan Bivins statement, "I have not seen any data that would substantiate any meaningful results from a Method 5 test on cooling towers." (Exhibit 2)

11. Petitioner provided information and stated, "Currently an annual inspection of the towers is conducted following the end of each operating season (the towers are used from May through October). As a result of conversations with you (Mr. Joseph Kahn) and Mr. Martin Costello, FPC proposes to conduct an additional inspection of the towers and their components during the operating season. (Exhibit 3)

12. Pursuant to conversations between Petitioner and Mr. Martin Costello, a proposed program of daily and weekly inspection of the forced draft "helper cooling towers" was drafted in order to ensure that the towers are operated and maintained so as to minimize emissions of particulate matter. (Exhibit 4)

CONCLUSIONS OF LAW

1. The Department has jurisdiction to consider Petitioner's request pursuant to Section 403.061, Florida Statutes (F.S.), and Rule 62-297.620, F.A.C.

2. Pursuant to Rule 62-297.340(2), F.A.C., the Department may require Petitioner to conduct compliance tests that identify the nature and quantity of pollutant emissions if, after investigation, it is believed that any applicable emission standard or condition of a permit is being violated.

3. Petitioner has provided reasonable justification that proposed work practice will provide a sufficient substitute for the required EPA Method 5 testing.

ORDER

1. Having considered Petitioner's written request and supporting documentation, it is hereby ordered that:

The drift elimination system on the helper cooling towers shall be maintained so as to minimize pluggage and to insure timely repair of broken sections of the drift eliminators. During the warm months when the helper cooling towers are used, the following work practice shall be implemented, in lieu of EPA Method 5, to demonstrate compliance with the originally designed removal efficiency (no more than 0.004% drift rate):

(a) Daily "walkdown" inspection of each operational cell visually checking for problems with the drift eliminators such as pluggage, algae build-up, and mechanical components (fans and pumps).

(b) Daily visual inspection of the cells which are in operation to ascertain the presence of higher than expected visible emissions when atmospheric conditions allow, and follow-up inspections and correction of problems when the daily visual inspection of the cells indicates a problem.

(c) Weekly visual inspection of the inlet water screens and prompt correction when broken sections or pluggage is discovered.

2. Any problems detected during the work practice inspections identified in items

1 (a) through (c) shall be documented in a log identifying the cell (or water screen), the inspector, the time (when discovered and hours operated before the problem was corrected), and a description of the problem and the corrective actions taken. This log shall be maintained onsite and shall be made available to DEP upon request. The log shall be maintained so as to provide an indication as to whether routine inspections have been conducted as required even when there are no problems to record.

PETITION FOR ADMINISTRATIVE REVIEW

The Department's proposed agency action will become final upon signature unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed agency action may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within twenty-one days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within twenty-one days of publication of the public notice or within twenty-one days of receipt of this notice, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within twenty-one days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a

copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;

(c) A statement of how and when petitioner received notice of the agency action or proposed action;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action;

(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in

accordance with the requirements set forth above.

Mediation is not available in this proceeding.

RIGHT TO APPEAL

Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, 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.

DONE AND ORDERED this _____ day of _____, 2000 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

HOWARD L. RHODES

Director

Division of Air Resources Management

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(850) 488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a true copy of the foregoing was mailed to Mr. Michael Kennedy, Manager of Air Programs, FPC, One Power Plaza, #263, 13 Avenue South, Florida 33701-5511, on this _____ day of June, 2000

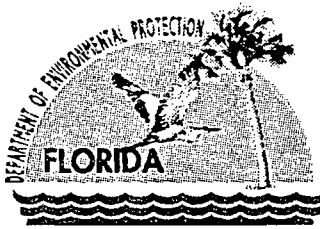
Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to
120.52(11), Florida Statutes, with the
designated Department Clerk, receipt
of _____ which is hereby
acknowledged.

Clerk

Date



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

February 3, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, C.E.P.
Director, Environmental Services
Florida Power Corporation
PO Box 14042, MAC BBIA
St. Petersburg, Florida 33733

Re: Request for Additional Information
DEP File No. 0170004-007-AC (PSD-FL-139A)
Crystal River Helper Cooling Towers – Removal of Requirement to Test

Dear Mr. Pardue:

On January 10, 2000 the Department received the additional information Florida Power Corporation submitted regarding your application for an air construction permit for to revise PSD permit PSD-FL-139 to remove the requirement to test the helper cooling towers at the Crystal River plant. The application is incomplete. In order to continue processing your application, the Department will need the additional information requested below. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. The Department has determined that an alternate sampling procedure order must be issued in order to revise your permit as requested. Martin Costello of the Department is awaiting further information from Mike Kennedy of Florida Power Corporation related to the details of a regular and frequent program of inspection and maintenance to ensure that the drift eliminators are functioning properly and that emissions are limited. The Details of this program are needed to prepare an alternate sampling procedure order. Your application will remain incomplete until Mr. Costello receives the necessary information from Florida Power Corporation.

The Department will resume processing your application after receipt of the requested information. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. Material changes to the application should also be accompanied by a new certification statement by the authorized representative or responsible official. Permit applicants are advised that Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days. If there are any questions, please call me at 850/921-9519.

Sincerely,

Joseph Kahn, P.E.
New Source Review Section

/jk

cc: Gregg Worley, EPA
John Bunyak, NPS
Bill Thomas, DEP SWD
J. Michael Kennedy, FPC

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

Z 031 391 931

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to	Jeff Pardue
Street & Number	FPC
Post Office, State, & ZIP Code	St. Pete FL
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
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PS Form 3800, April 1995

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3. Article Addressed to:

Mr. Jeffery Pardue, CEP
FPC
PO Box 14042, MAC B01A
St. Petersburg, FL

4a. Article Number

Z 031 391 931

4b. Service Type

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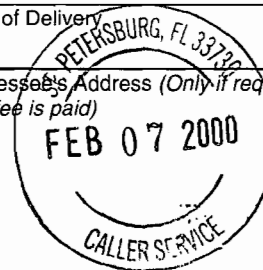
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6. Signature: (Addressee or Agent)

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PS Form 3811, 11/94



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INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL

Date: 27-Jan-2000 03:22pm

From: Martin Costello TAL
COSTELLO_M

Dept: Air Resources Management

Tel No: 850/488-0114

To: Joseph Kahn TAL

(KAHN_J)

CC: Martin Costello TAL

(costello_m)

Subject: FWD: Re: Re: Helper Cooling Towers

see attached

INTEROFFICE MEMORANDUM

Date: 26-Jan-2000 10:41am
From: J-Michael.Kennedy
J-Michael.Kennedy@fpc.com
Dept:
Tel No:

Subject: Re: Re: Helper Cooling Towers

Marty,

I'm checking with the plant environmental specialist to ensure that he's ok with your proposal. He left yesterday for a funeral, however, so it will be a few days before I can give you a definite answer. Should be Monday or so. Thanks.

Mike

-----Original Message-----

From: Martin.Costello
/internet/dd.RFC-822=Martin.Costello@dep.state.fl.us
[mailto:Martin.Costello@dep.state.fl.us]
Sent: Monday, January 24, 2000 4:04 PM
To: J-Michael.Kennedy /internet/dd.RFC-822=J-Michael.Kennedy@fpc.com
Cc: Martin.Costello /internet/dd.RFC-822=Martin.Costello@dep.state.fl.us
Subject: Re: Helper Cooling Towers
Sensitivity: Confidential

The permit condition could read like this:

The drift elimination system shall be maintained daily to minimize pluggage and to repair any broken sections of the drift eliminator. The following work practice shall be used to demonstrate compliance with the original removal efficiency (no more than 0.04 % drift rate, or 11.89 lb/hr):

- 1) daily visual inspection of each operational cell checking for pluggage, problems with the drift eliminators, algae build-up, and mechanical components problems (fans and pumps). Any problems shall be documented in a log identifying the cell, the problem, the inspector, the time(when discovered and when corrected), and a discription of corrective actions taken. This log shall be maintained onsite and shall be made available to DEP when requested.
- 2) daily visual inspection of the cells which are in operation looking for higher than expected visible emissions, and follow-up inspection and correction when this inspection indicates a problem.

3) weekly visual inspection of the inlet water screens and prompt correction when broken sections or pluggage is discovered.

Mike, does this look ok?

Marty Costello

Ed's - Marty,

Ed's -

Ed's - After we spoke yesterday, I checked back with the plant regarding their

Ed's - regular inspection and maintenance procedures on the Crystal River

Ed's - Helper Cooling Towers. The following is a summary of the items we had

Ed's - questions about.

Ed's -

Ed's - 1) A daily "walkdown" of the all of the towers is performed. A visual

Ed's - inspection is performed, checking for any problems, such as pluggage or

Ed's - holes in the drift eliminators, algae build-up, and any problems with

Ed's - mechanical components (pumps, fans, etc.). Perhaps, as a work practice

Ed's - standard in the permit, this could replace the additional inspection

Ed's - that I proposed in my letter to Joe Kahn. The daily walkdown is, of

Ed's - course, much more frequent and catches any problems early.

Ed's -

Ed's - 2) The water entering the towers was formerly treated with chlorine to

Ed's - inhibit algae formation. This practice was gradually stopped, because

Ed's - it was found that algae buildup is not a significant problem. The water

Ed's - entering the towers is filtered mechanically (screens). This greatly

Ed's - reduces the amount of material in the water that could cause problems

Ed's - such as pluggage of the drift eliminators and damage to mechanical

Ed's - components.

Ed's -

Ed's - I hope this helps. Feel free to call me at (727) 826-4334.

Thanks.

Ed's -

Ed's - Mike Kennedy

Ed's -

INTEROFFICE MEMORANDUM

Date: 26-Jan-2000 08:38am
From: Joseph Kahn TAL
KAHN_J
Dept: Air Resources Management
Tel No: 850/921-9519

To: Martin Costello TAL (COSTELLO_M)

Subject: FPC Helper Cooling Towers

Marty,

I have conferred with Pat Comer regarding the FPC helper cooling towers and she agrees with me that an alternate sampling procedure is the appropriate mechanism to address FPC's request. Basically, the emissions monitoring section has already decided that the test method is not valid and that daily visual inspection is valid and sufficient to show compliance, and this determination essentially constitutes an alternate sampling procedure, as provided by rule. What remains to be done is to codify that decision into an ASP order.

Pat disagrees that the Department should now make a determination that the original BACT be relaxed ten years after the fact because the test method is now thought to be inaccurate. I agree with her, particularly given that when the original permit was issued the emission rate limit was increased by a factor of ten to account for the uncertainties of the test method. (I mentioned this to you previously.) As I discussed with you, I am reluctant to delete the emission limit or the drift limit in the present permitting action.

I am still convinced that the appropriate way to handle FPC's request is to issue an ASP order. The order could substitute daily visual inspection and annual inspection by the manufacturer for the test method. This will also address my concern because the emission limit would remain in the permit. Note by the way that the BACT drift limit is 0.004%, not 0.04% as Mike Kennedy states in his latest letter. The difference is the factor of 10 that was used to increase the hourly emissions limit to 11.89 lb/hr.

I reviewed your proposed language regarding inspections. Your proposal to use visible emissions as an indicator of a problem may conflict with the language of the final Title V permit because that permit notes that visible emissions testing is not applicable because the emissions will include salt water droplets (which, of course include the particulate matter -- salt). If you are clear that what is intended is a daily visual observation to note irregularities in the tower emissions, that may be OK because it will not imply that a Method 9 test is needed. Also, I believe it is important to have the manufacturer inspect the cells annually, to provide a third party check on their condition. The manufacturer's report should be kept by FPC with the other records.

Let me know when you get a response from FPC and tell me if you need additional information from them to draft an order. I need to hear from you quickly because this project is on the clock. Thanks.

-Joe

INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL

Date: 24-Jan-2000 04:10pm

From: Martin Costello TAL
COSTELLO_M

Dept: Air Resources Management

Tel No: 850/488-0114

To: Joseph Kahn TAL

(KAHN_J)

CC: Martin Costello TAL

(costello_m)

Subject: FWD: Helper Cooling Towers

I have sent the following draft language to Mike Kennedy and will send his comments when he replies.

See attached which shows that a daily visual inspection of each cell is the current practice. I would require that at least once per week each cell is inspected visually while operating the cell. The permit condition could read like this:

The drift elimination system shall be maintained daily to minimize pluggage and to repair any broken sections of the drift eliminator. The following work practice shall be used to demonstrate compliance with the original removal efficiency (no more than 0.04 % drift rate, or 11.89 lb/hr):

1) daily visual inspection of each operational cell checking for pluggage, problems with the drift eliminators, algae build-up, and mechanical components problems (fans and pumps). Any problems shall be documented in a log identifying the cell, the problem, the inspector, the time (when discovered and when corrected), and a description of corrective actions taken. This log shall be maintained onsite and shall be made available to DEP when requested.

2) daily visual inspection of the cells which are in operation looking for higher than expected visible emissions, and follow-up inspection and correction when this inspection indicates a problem.

3) weekly visual inspection of the inlet water screens and prompt correction when broken sections or pluggage is discovered.

INTEROFFICE MEMORANDUM

Date: 19-Jan-2000 09:46am
From: J-Michael.Kennedy
J-Michael.Kennedy@fpc.com
Dept:
Tel No:

Subject: Helper Cooling Towers

Marty,

After we spoke yesterday, I checked back with the plant regarding their regular inspection and maintenance procedures on the Crystal River Helper Cooling Towers. The following is a summary of the items we had questions about.

1) A daily "walkdown" of the all of the towers is performed. A visual inspection is performed, checking for any problems, such as pluggage or holes in the drift eliminators, algae build-up, and any problems with mechanical components (pumps, fans, etc.). Perhaps, as a work practice standard in the permit, this could replace the additional inspection that I proposed in my letter to Joe Kahn. The daily walkdown is, of course, much more frequent and catches any problems early.

2) The water entering the towers was formerly treated with chlorine to inhibit algae formation. This practice was gradually stopped, because it was found that algae buildup is not a significant problem. The water entering the towers is filtered mechanically (screens). This greatly reduces the amount of material in the water that could cause problems such as pluggage of the drift eliminators and damage to mechanical components.

I hope this helps. Feel free to call me at (727) 826-4334. Thanks.

Mike Kennedy

INTEROFFICE MEMORANDUM

Date: 18-Jan-2000 07:58am
From: Joseph Kahn TAL
KAHN_J
Dept: Air Resources Management
Tel No: 850/921-9519

To: Martin Costello TAL (COSTELLO_M)

Subject: FPC Crystal River Helper Cooling Towers

Marty,

FPC responded to the request for additional information I sent on October 11th.

You will get a copy of this shortly. I noted a procedural problem with FPC's request to stop testing the tower cells for PM. Rule 62-297.310(7)(a)3. requires that a PM test be conducted prior to renewal of the operating permit since there is an applicable emission limit. The only provision in rule to vary that requirement is Rule 62-297.310(c) which states that a permittee may obtain an order providing that compliance be demonstrated by an alternate procedure per Rule 62-297.620. It appears clear to me that an alternate sampling procedure order is required before I can remove the testing requirement from the PSD permit. Since these orders are done by your section, please review FPC's request per Rule 62-297.620 and let me know if additional information is required from FPC. If not, let me know when you can prepare an alternate sampling procedure order. I want to respond to FPC by February 4th if additional information is needed, so please respond to me by then. Let me know if you have any questions. Thanks.

-Joe



RECEIVED

JAN 10 2000

BUREAU OF AIR REGULATION

January 6, 2000

Mr. Joseph Kahn, P.E.
Bureau of Air Regulation
New Source Review Section
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, Florida 32399-2400

Dear Mr. Kahn:

Re: Crystal River Helper Cooling Towers - Removal of Requirement to Test
Request for Additional Information

In response to your letter of October 11, 1999, Florida Power Corporation (FPC) offers the following regarding the above-referenced permit amendment application.

1. Summary of previous test results.

In June, 1993 one cell from each cooling tower was tested using Method 5 (there are a total of four towers with nine cells in each tower). The following table summarizes the results of the testing.

<u>Tower/Cell</u>	<u>Drift Rate (%)</u>	<u>Emiss. Rate (lb/hr)</u>	<u>Water Flow (gal.min.)</u>	<u>% of Capacity</u>
1-1	0.0040	1.18	20,254	99.2
2-3	0.0025	0.69	18,886	92.5
3-6	0.0030	0.82	18,722	91.7
4-9	0.0027	0.76	19,233	94.2

The permitted drift rate for these towers is 0.04%, which corresponds to a particulate limit of 11.89 lb/hr at maximum water flow capacity. Therefore, the test results are a factor of ten or more lower than the permitted levels.

2. Additional Inspection

Currently, an annual inspection of the towers is conducted following the end of each operating season (the towers are used from May through October). As a result of conversations with you and Mr. Martin Costello, FPC proposes to conduct an additional inspection of the towers and their components during the operating season.

Mr. Joseph Kahn, P.E.
January 6, 2000
Page Two

3. Changes to the Drift Elimination System

Other than routine repair and maintenance of component parts, no changes have been made to the drift elimination system since its original installation.

Thank you for your consideration of this request. Please contact me at (727) 826-4334 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Michael Kennedy".

J. Michael Kennedy, Q.E.P.
Manager, Air Programs

cc: SWD
M. Costello, BAMMS

INTEROFFICE MEMORANDUM

Date: 12-Oct-1999 09:01am
From: Joseph Kahn TAL
KAHN_J
Dept: Air Resources Management
Tel No: 850/921-9519

To: Martin Costello TAL (COSTELLO_M)

Subject: FPC Helper Cooling Towers -- Comments

Marty,

I sent the request for additional information out yesterday without the question regarding why FPC is proposing to cease testing. Thanks for your comments on the incompleteness letter.

I understand that you and Mike Harley recommended that FPC stop testing the tower cells altogether, and favored this approach over approving an ASP for a different test method that FPC proposed some time ago. I would like to get your concurrence that it is acceptable to allow FPC to cease testing these sources, and that at least part of the basis for your opinion is that Method 5 and any other isokinetic method is not appropriate for the cooling towers. I understand also that you believe that an operation and maintenance plan is likely to be more effective at minimizing drift emissions than the current requirement to test two of the 36 cells every five years. Please write me back so that I have something on record from the Emissions Monitoring section regarding this permitting action. Thanks.

-Joe

INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL

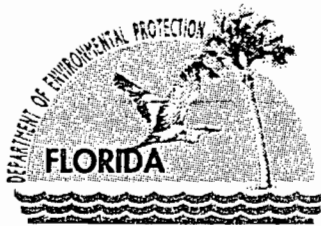
Date: 12-Oct-1999 02:46pm
From: Martin Costello TAL
COSTELLO_M
Dept: Air Resources Management
Tel No: 850/488-0114

To: Joseph Kahn TAL (KAHN_J)
CC: Mike Harley TAL (HARLEY_M)

Subject: Re: FPC Helper Cooling Towers -- Comments

You have correctly summarized my opinion on the stack tests for particulates on the Crystal River plant's Helper Cooling Towers. The current stack test requirement should be replaced with an work practice type of compliance method as allowed pursuant to Rule 62-210.200(42), the definition of BACT. The original control efficiency (drift limit) should be retained in the permit. I recommend a permit amendment which would require periodic operating and maintenance standard practices to ensure that the original design control efficiency is maintained. When blockages or broken sections of the drift eliminators are identified, the permittee should correct these problems in a timely manner. The permit language should also identify the number of layers and design type of drift eliminators in the original design (I think the slang terminology is " zig zag zig zag" for a 2 turn type design).

Ed's - Marty,
Ed's -
Ed's - I sent the request for additional information out yesterday without the
Ed's - question regarding why FPC is proposing to cease testing. Thanks for
your
Ed's - comments on the incompleteness letter.
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me back
Ed's - so that I have something on record from the Emissions Monitoring section
Ed's - regarding this permitting action. Thanks.
Ed's -
Ed's - -Joe



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

October 11, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, C.E.P.
Director, Environmental Services
Florida Power Corporation
PO Box 14042, MAC BB1A
St. Petersburg, Florida 33733

Re: Request for Additional Information
DEP File No. 0170004-007-AC (PSD-FL-139A)
Crystal River Helper Cooling Towers – Removal of Requirement to Test

Dear Mr. Pardue:

On September 24, 1999 the Department received your application and complete fee for an air construction permit for to revise PSD permit PSD-FL-139 to remove the requirement to test the helper cooling towers at the Crystal River plant. The application is incomplete. In order to continue processing your application, the Department will need the additional information requested below. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

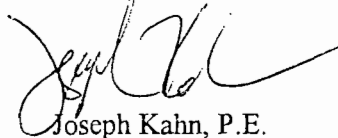
1. Please provide a summary of test results for any of the cells previously tested. Please include the date tested, the results in pounds per hour, an identification of the cell(s) tested and the operating parameters recorded during the test. Our database does not have any records of test results for the helper cooling tower cells, although we understand that testing has been conducted.
2. Martin Costello of DEP indicated that he recommended to Mike Kennedy of FPC that consideration for elimination of testing the tower cells would require a proposal for a regular and frequent program of inspection and maintenance to ensure that the drift eliminators are functioning properly and that emissions are limited. Your application did not propose such a plan, and referred only to an annual inspection. Please propose efforts that FPC can undertake on a more frequent basis to ensure proper control of drift.
3. Have changes been made to the drift elimination system since its original installation, other than routine repair and replacement of component parts, since construction of the cooling towers? If so, please describe the changes.

The Department will resume processing your application after receipt of the requested information. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to

Mr. Pardue
Request for Additional Information
Page 2 of 2
October 11, 1999

Department requests for additional information of an engineering nature. Material changes to the application should also be accompanied by a new certification statement by the authorized representative or responsible official. Permit applicants are advised that Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days. If there are any questions, please call me at 850/921-9519.

Sincerely,

A handwritten signature in black ink, appearing to read 'Joseph Kahn', is written over the typed name.

Joseph Kahn, P.E.

New Source Review Section

/jk

cc: Gregg Worley, EPA
John Bunyak, NPS
Bill Thomas, DEP SWD
J. Michael Kennedy, FPC

Best Available Copy

Z 031 392 019

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Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	0170004-007-AC 10-11-99 PSO-FI-139A Helder Cooling Towers

PS Form 3800, April 1995

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- ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Jeffrey Pardue, CEP
Director, Env. Serv.
FPC
PO Box 14042, MAC BB1A
St. Pete, FL 33733

4a. Article Number
Z 031 392 019

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise (50¢ COD)

7. Date of Delivery OCT 14 1999

5. Received By: (Print Name)

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

6. Signature: (Addressee or Agent)

X [Signature]

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