

Florida Department of
Environmental Protection

Memorandum

Done 3/19/96 Clair

TO: Howard Rhodes

THROUGH: Clair Fancy *[Signature]*
A. A. Linero *[Signature]*

FROM: Cleve Holladay *[Signature]*

DATE: March 19, 1996

SUBJECT: Florida Power Corporation Crystal River Salt Drift Study,
PA 77-09, PSD-FL-007

RECEIVED
MAR 21 1996
BUREAU OF
AIR REGULATION

Attached for your review and signature is a letter approving the discontinuation of the FPC Crystal River salt drift monitoring study. This study was required in the original PSD permit for Crystal River Units No. 4 and 5 to monitor the impacts of the cooling towers associated with these units. Fourteen years of monitoring data have been collected and analyzed by FPC. The specific condition requiring this study also provides for its reduction or elimination if no significant impacts are occurring to the surrounding area due to salt drift from these cooling towers. Based on the information provided by FPC and a site visit conducted by department personnel on January 23, 1996, it appears that this condition has been satisfied.

I recommend your approval and signature.

CHF/ch/h



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

March 20, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, Director
Environmental Services Department H2G
Florida Power Corporation
Post Office Box 14042
St. Petersburg, Florida 33733

Re: Crystal River Salt Drift Study
PA 77-09, PSD-FL-007

Dear Mr. Pardue:

The Department has reviewed the recent status reports and your requests to discontinue the salt drift impact study in the vicinity of the Florida Power Corporation (FPC) Crystal River Power Plant. Based on the information provided to the Department and the site visit conducted by department personnel on January 23, the Department has concluded that damage to nearby vegetation has occurred primarily due to natural phenomena rather than by salt drift from the plant.

The Department considers Specific Condition 5 (Ambient Monitoring) of the PSD permit modification dated November 30, 1988 to have been fulfilled. In accordance with Specific Condition 5.c., the Department approves the elimination of the monitoring program contingent on no objections in the next thirty days from EPA. Please note that the plant is still required to monitor particulate matter from the cooling towers.

We have supplied EPA with a copy of all the correspondence related to this intended action. Please note that the authority to eliminate the program applies only to the PSD permit and not to the Site Certification. The parties to the original certification were advised directly and through the notice published in the Florida Administrative Weekly of FPC's request.

Mr. W. Jeffrey Pardue
March 20, 1996
Page Two
Crystal River Salt Drift Study
PA 77-09, PSD-FL-007

If you have any questions regarding this matter, please call
Mr. Cleve Holladay at (904)488-1344 or Trudie Bell at (904)921-9886.

Sincerely,



Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/aal/l

cc: Winston Smith, EPA
John Bunyak, NPS
Hamilton Owen, DEP
Trudie Bell, DEP
Bill Thomas, SWD

2 127 633 191



Receipt for Certified Mail

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PS Form 3800, March 1993

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W. Jeffrey Pardue	
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Fla. Power Corp.	
City, State and ZIP Code	
St. Pete, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	
CRSDS 3-21-96	
PA 77-09	
050-FI-007	

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SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- 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.

3. Article Addressed to:
Mr. W. Jeffrey Pardue
Fla. Power Corp.
P.O. Box 14042
St. Pete, FL 33733

5. Signature (Addressee)
Dean Williams

6. Signature (Agent)

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

- ☐ Addressee's Address
- ☐ Restricted Delivery

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4a. Article Number

2 127 633 191

4b. Service Type

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|---|---|
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| <input checked="" type="checkbox"/> Certified | <input type="checkbox"/> COD |
| <input type="checkbox"/> Express Mail | <input type="checkbox"/> Return Receipt for Merchandise |

7. Date of Delivery

MAR 25 1996

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

Thank you for using Return Receipt Service.

PS Form 3811, December 1991

U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

FAX

FROM
SITING COORDINATION OFFICE

FAX No. 904 921-7250

OFFICE No. 904 487-0472

DATE: 3/18/96

TO: Al Linero

FAX No. 922-6979

FROM: Buck Owen

MESSAGE: _____

NUMBER OF PAGES FAXED 3

NOTICE OF INTENT TO ISSUE PROPOSED

MODIFICATION OF POWER PLANT CERTIFICATION

The Department of Environmental Protection gives notice of its intent to grant a request for modification of the conditions of certification for the Power Plant Site Certification that was issued pursuant to the Florida Electrical Power Plant Siting Act, Section 403.501, et Florida Statutes (F.S.), concerning:

Florida Power Corporation

Crystal River Power Plant Units 4 & 5

Power Plant Siting Application No. PA 77-09C

The Department is reviewing the requested modifications of the conditions of certification for Florida Power Corporation (FPC) to delete the salt drift study; allow use of natural gas for start-up, changes in stack testing, and changes in thermal discharge limitations to conform to the requirements of the NPDES permits.

A copy of the proposed modification is available from Hamilton S. Owen, P.E., Administrator, Siting Coordination Office, Department of Environmental Protection, 2720 Blair Stone Road, Suite H, Tallahassee, Florida 32301, (904) 487-0472.

Pursuant to Section 403.516, F.S., a party to the original certification proceeding has 45 days from the date of receipt of this notice in which to respond to the requested modification. A person who is not already a party to the certification proceeding and whose substantial interest will be affected by the proposed modification has 30

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DEPARTMENT OF STATE
TALLAHASSEE, FLORIDA

days from the date of publication of this notice in which to object to the requested modification. Such an objection must be in writing and received in the Office of General Counsel of the Department at 3900 Commonwealth Blvd., MS 35, Tallahassee, Florida 32399-3000. Petitioner shall mail a copy of the petition to W. Jeffrey Pardue, Florida Power Corporation H2G, P.O. Box 14042, St. Petersburg, Florida 33733, and a copy of the petition to the Division of Administrative Hearings, The Desoto Building, 1230 Apalachee Parkway, Tallahassee, Florida 32399-1550. Failure to file a response constitutes a waiver of objection to the requested modification.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner

contends require reversal or modification of the Department's action or proposed action; and

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

If an objection is raised, FPC may file a petition for modification with the Division of Administrative Hearings, pursuant to paragraph 403.516(1)(c), F.S. If FPC files such a petition, the administrative hearing process is designed to formulate agency action. Therefore, the Department's final action may be different from the position taken by it in this notice.

REVISED 1/26/96

To: Hamilton Oven
From: Trudie D. Bell
Date: January 24, 1996
Subject: PA77-09, Florida Power Corporation
Crystal River Power Plant

On January 23, Cleve Holladay and I traveled to the Crystal River Power plant to discuss the termination of the Salt Drift study and inspect the sampling site. At the plant, we met Dr. David Voigts and Mike Kennedy of Florida Power Corporation (FPC).

We visited the Open Hardwood Hammock site, which is at the northwest corner of the plant site. In this area, most of the canopy is dead. Dead palms, cedars, oaks and pines were observed. The shrub understory dominated by Iva frutescens and Lycium carolinianum appears to be healthy, as does the Juncus marsh. We walked into a vegetation sampling site just east of the above referenced site. Here we observed healthy cedar seedlings in the understory, as well as, die back in the canopy.

At the Pine vegetational sampling site, we observed die back in the canopy, including a dead cedar tree that had blown over. The root system of the dead tree was very shallow. Near this site, there was standing water under the trees. Dr. Voigts speculated that the canopy die off in this area could be related to hydrologic changes resulting from the plant construction.

We visited the Open Pine site north of the plant. This is the area which the modeling of the plant operation predicts will receive the greatest amount of salt deposition. The canopy in this area was healthy with no sign of die back.

At the Open Control site on the south side of the plant, there was some canopy damage visible, but the majority of the trees looked healthy.

At the Hardwood Control site, the vegetation being sampled for the project was destroyed during the construction of a deer hunting blind and the installation of the forage field. The canopy around the site was healthy with the exception of two very large cedars, one of which had been stuck by lightning.

South of the plant on the salt marsh is the Open Coastal Control. The canopy of palms and cedars was dead. Some of the oaks on the upland edge in the area of the site looked blighted.

REVISED 1/26/96

FPC would like to discontinue the Salt Drift study permanently for the following reasons:

- The coastal die off which extends from Crystal River north around the Big Bend is overwhelming any effect on the vegetation that salt drift from the plant may be having.

- The salt emission from the cooling towers is checked at five year intervals, so that the salt drift from the plant will continue to be monitored. ✓

We discussed the problems that the Department had will just ending the study; past objections from third parties and EPA involvement in the NPDES permit. Tying any future resumption of the Salt Drift study to the monitoring of the cooling towers was discussed. This approach seemed acceptable to FPC. Cleve and I requested that FPC look at the meteorological data gathered at the plant and attempt to correlate it to the data gathered in the Salt Drift Study. Mr. Kennedy said that he would look at the data and see if it was in a useable format.

The pattern of canopy damage at the plant site did not appear to be consistent with salt drift from the plant. The Bureau of Submerged Lands and Environmental Resources would not object to ending the Salt Drift study with a caveat that it would be resumed should there be a significant change in the salt drift from the cooling towers.

TDB/tb

(Salt Drift Station)

Cleve. I am assigning this item to you. Please discuss this matter with Marty. Get back with Dave Voights and handle. Please plan to go to Crystal river to witness data collection as necessary. Get a copy of what we sent them from Dave Voights. As it turns out, I was never copied on what went out from Buck's office.

Consult with Tom Rogers as appropriate. The bottom line is that you will need to review exactly what our purpose was in requiring the salt drift study and decide if the program has achieved its aims. I think that means only salt drift. As to the effects of the salt drift on the flora in the area, you will need to figure out if we can state that no more information is needed.

A PSD revision will be necessary to delete the salt drift program so be ready to handle some paperwork.

See if Kim started a file on FPC Crystal River and review it. Thanks.

~ January 1st, 1996

Dave Voights - FPC - Biologist (Ph.D.)
Requests someone come out on 1/16 when they conduct surveys.

Look at language they wanted to delete
Look at PSD Permit to CR Units 4+5
+ Certification

↓

TB After next Tuesday OK

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN RE:)
FLORIDA POWER CORPORATION)
POWER PLANT CERTIFICATION)
MODIFICATION REQUEST)
No. PA 77-09c)
CITRUS COUNTY, FLORIDA)

OGC No. 95-XXXX

FINAL ORDER
MODIFYING CONDITIONS OF CERTIFICATION

The Department of Environmental Protection, after notice and opportunity for hearing, modifies the Conditions of Certification for the Florida Power Corporation (FPC) power plant near Crystal River pursuant to the Florida Electrical Power Plant Siting Act, Section 403.516(1), Florida Statutes, (F.S.) and General Condition 12, Modification of Conditions, which delegates authority to modify conditions to the Department.

In September 1995, a request for modification was filed to allow termination of the salt drift study, a change in sulfur oxide stack testing, use of natural gas at Unit 4, a change in temperature of discharges on the site. Upon review of all submitted material, the Department recommends that the request be approved.

Copies of the department's proposed action were distributed to all parties to the certification proceeding and made available for public review. On October __, 1995, a Notice of Proposed Modification of Power Plant Certification was published in the Florida Administrative Weekly. As of December __, 1995, all of the parties to the original proceeding had received copies, sent by certified mail, of the intent to modify. The notice specified that a hearing would be held if a party to the original certification hearing objects within 45 days from receipt of the proposed notice of modification or if a person whose substantial interests will be affected by the proposed modification objects in writing within 30 days after issuance of the public notice. No written objection to the proposed modifications was received by the Department.

Accordingly, in the absence of any timely objection,

IT IS ORDERED:

The proposed changes to the conditions of certification for the FPC power plant are APPROVED. The Department hereby approves the modification, and, pursuant to section 403.516 (1) (6), F.S., the

Department hereby MODIFIES the conditions of certification for the FPC facility as follows:

I.B.7. Salt drift deposition, accumulation, and vegetative effects and effects on equipment shall be monitored and reported to the department in a manner and frequency approved by the department prior to operation of the first cooling tower in the currently approved manner on a quarterly basis for the remainder of 1995. The monitoring program shall be suspended for 1996, and 1997, and shall resume in 1998, for that calendar year only. After receipt of the annual report, the department may approve termination of the program or approve another three year extension.

C.5. Stack Tests for particulates and SO₂ shall be performed annually in accordance with conditions C. 2, 3, and 4 above Florida Administrative Code Rule 62-297, and 40 CFR Part 60 Appendix A and F.

H. Natural Gas

Natural Gas may be used as a startup and low-load flame stabilization fuel in Unit 4 and Unit 5.

II. A.3. Thermal Mixing Zone

The zone of thermal mixing for cooling tower blowdown shall not extend beyond the western end of the north bank of the existing discharge canal. During discharge, the blowdown from the cooling tower for units No. 4 & 5 shall be withdrawn at the point of lowest temperature of the recirculating cooling water prior to the addition of makeup water. The temperature at the point of discharge into the discharge canal shall not be greater than 96° F, maximum two (2) hour average. The temperature at the end of the discharge canal shall not exceed the limitations of Paragraph 17-3.05(3)(D) when only units 4 & 5 are operating and one or more of the recirculating water pumps from the existing units are operating. The temperature at the point of discharge into the discharge canal and into the Gulf of Mexico shall comply with the temperature limitations specified in NPDES Permits No. FL0036366 and FL0000159 respectively.

II.A.6. Cooling Tower Blowdown

The cooling tower blowdown shall contain no detectable amounts of ~~materials added for corrosion inhibition, including but not limited to zinc and chromium inhibitors~~ unless prior approval for use of such material has been granted by the department upon demonstration that the discharge is not toxic to aquatic life, does not contain priority pollutants and will not result in pollutant concentrations in excess of water quality standards

NOTICE OF RIGHTS

Any party to this Order has a right to seek judicial review of this Order pursuant to Section 120.68, Florida Statutes, by the Filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, 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 of Appeal must be filed within 30 days from the date this Order is filed with the clerk of the Department.

DONE AND ORDERED this _____ day of _____ 1995, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Virginia B. Wetherell, Secretary

Certificate of Service

I hereby certify that a copy of the Final Order Modifying Conditions of Certification of the Florida Crushed Stone company was sent to the following parties by United States mail on the _____ day of December, 1995.

Martin D. Hernandez, Esquire
Southwest Florida Water
Management District
2370 Broad Street
Brooksville, Florida 34609-6899

Lynn Capehart, Esquire
1601 NW 35th Way
Gainesville, FL 32605

Marilyn Polson
Post Office Box 387
St. Petersburg, Florida 33731

Karen Brodeen, Esquire
Department of Community Affairs
2740 Centerview Drive
Tallahassee, FL 32399-2100

Michael Palecki, Esquire
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Gary S. Sams, Esquire
Hopping Green Sams & Smith
123 S. Calhoun Street
Tallahassee, FL 32301

Charles T. "Chip" Collette
Assistant General Counsel

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MS 35
Tallahassee, FL 32399-3000
Telephone: (904) 488-9730