Memorandum

Florida Department of Environmental Protection

TO:

Howard L. Rhodes

THRU

Clair Fancy
Al Linero

FROM:

Edward J. Svec Church Shy.

DATE:

June 24, 1999

SUBJECT:

Florida Power Corporation

Crystal River Power Plant Coal/Briquette Mixture

Attached for approval and signature is Permit No. 0170004-006-AC, a modification of Permit No. 0170004-003-AC and PSD-FL-007. This project allows the combustion of a mixture of coal and briquettes. The briquettes are formed from coal fines bound by fuel oil. Florida Power Corporation requested fuel sulfur content limits on the coal/briquette mixture shipments such that there will be no increase in actual emissions of sulfur dioxide from coal fired Units 1,2 4 and 5. The Public Notice requirements have been met on June 3, 1999 by publishing in the Citrus County Chronicle. Proof of Publication was received on June 24, 1999.

I recommend your approval and signature.

Attachments

/es

BAR



Department of Environmental Protection

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

David B. Struhs Secretary

June 29, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. Jeffery Pardue
Director, Environmental Services Department Director, Environmental Services Department
Florida Power Corporation
3201 34th Street South
St. Petersburg, FL 33711

Re: DEP File No. 0170004-006-AC, Modification of Permit No. 0170004-003-AC, PSD-FL-007 Crystal River Power Plant

The applicant, Florida Power Corporation, Crystal River Power Plant, applied on March 24, 1999, to the Department for a modification to air construction permit number 0170004-003-AC for its Crystal River Power Plant located west of U.S. Highway 19, north of Crystal River, south of the Cross State Barge Canal, Citrus County. The modification is to include a coal/briquette mixture as an ailowable fuel in Crystal River Units 1,2,4, and 5. The briquettes will be blended with some of the regular coal supply and Florida Power Corporation states the sulfur content of the coal/briquette fuel mixture, percent by weight and averaged on an annual basis, will not exceed the average sulfur content of the coal combusted in each unit averaged for the past three years. The Department has reviewed the modification request. The referenced permit is hereby modified as follows:

OPERATIONAL REQUIREMENTS

- 1. Hours of Operation: These emissions units may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200, F.A.C., Definitions-potential to emit (PTE)]
- 2. <u>Fuel</u>: The emissions units described above may combust a mixture of coal and coal briquettes. [Rule 62-210.200, F.A.C., Definitions-potential to emit (PTE)]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

3. <u>Sulfur Limitation</u>: The maximum sulfur content of the coal/ briquette mixture shipment, averaged on an annual basis, shall not exceed the following:[Requested by Applicant in the application received March 24, 1999]

Emissions Unit No.	Emissions Unit Description	Average Percent Sulfur Limit, By Weight
001	Fossil Fuel Steam Generator (FFSG), Unit 1	1.05%
002	FFSG, Unit 2	1.05%
004	FFSG, Unit 4	0.68%
003	FFSG, Unit 5	0.68%

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

4. The permittee shall demonstrate compliance with the fuel sulfur limit by means of a fuel analysis provided by the vendor or the permittee upon each fuel delivery. See specific conditions 3 and 5. [Rule 62-213.440, F.A.C.]

Florida Power Corporation, Crystal River Power Plant DEP File No. 0170004-006-AC Page 2 of 3

- 5. <u>Sulfur Dioxide Fuel Sampling</u>. The following fuel sampling and analysis program shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the fuel sulfur standard:
 - a. Determine and record the as-fired fuel sulfur content, percent by weight, for coal using appropriate ASTM methods such as, ASTM D2013-72, ASTM D3177-75, and ASTM D4239-85, or latest ASTM edition methods, to analyze a representative sample of coal following each fuel delivery.
 - b. Record daily the amount of coal fired, the density of each fuel, the Btu value, and the percent sulfur content by weight of each fuel.
 - c. Utilize the information in a. and b., above, to calculate the SO₂ emission rate to ensure compliance at all times

[Rule 62-213.440, F.A.C.]

- 6. Determination of Process Variables.
- (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

7. Retention of Records. Retention of records of all monitoring data and support information shall be for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[Rule 62-213.440(1)(b)2.b., F.A.C.]

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68, F.S., 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.

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director Division of Air Resources

Management

Florida Power Corporation, Crystal River Power Plant DEP File No. 0170004-006-AC Page 3 of 3

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this permit modification was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 6-30-99 to the person(s) listed:

* W. Jeffrey Pardue, Florida Power Corporation Mike Kennedy, Florida Power Corporation Gerald Kissel, P.E., DEP, Southwest District Hamilton S. Oven, P.E., DEP

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Kun John 6-30-99 (Date)

FINAL DETERMINATION

Florida Power Corporation Crystal River Power Plant Citrus County Coal/Briquette Fuel Mixture

Permit No. 0170004-006-AC

An "Intent to Issue an Air Construction Permit" to allow the combustion of a coal/briquette fuel mixture to Florida Power Corporation for the Crystal River Power Plant located west of U. S. Highway 19, north of Crystal River, south of the Cross State Barge Canal, Citrus County was clerked on May 25, 1999. The "Public Notice of Intent to Issue Air Construction Permit" was published in the Citrus County Chronicle on June 3, 1999. The draft Air Construction Permit was available for public inspection at the Department of Environmental Protection's Southwest District office in Tampa and the permitting authority's office in Tallahassee. Proof of publication of the "Public Notice of Intent to Issue Air Construction Permit" was received on June 24, 1999.

Comments were received and the draft Air Construction Permit was changed. The comments were not considered significant enough to reissue the draft Air Construction Permit and require another Public Notice. Comments were received from one respondent, Mr. J. Michael Kennedy of Florida Power Corporation, during the 14 (fourteen) day public comment period. Listed below is each comment and the response.

Condition 3. Sulfur Limitation.

Comment: Could we add the word "shipments" after the word "mixture" to ensure that it's clear that we're talking about the shipments we receive (as opposed to the separate regular coal shipments)? It is written that way in the Technical Evaluation, so reflecting it in the permit would be consistent.

Response: The Department agrees with the comment and will add the word "shipments" after the word "mixture".

Comment: In the table, Emissions Unit No. 3 is actually FFSG, Unit 5. Unit 3 is the nuclear unit.

Response: The Department agrees with the comment and Emissions Unit 003 will identified as FFSG Unit 5.

Final Determination Permit No. 0170004-006-AC Page 2.

Comment: The question the folks in fuel supply have asked is if we could write the sulfur limit in terms of lb/mmBsu for the coal/briquette shipments rather than %sulfur. They said that some of the coal we get is high in Btu content, and the lb/mmBtu approach would provide some flexibility without increasing the emission rate. What do you think?

Response: After Florida Power Corporation provides equivalency information, the Department will express the limits in terms of pounds per million Btu, heat input.

The final action of the Department will be to issue the permit covered by the public notice as proposed except for the changes noted above.

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 card to you. Attach this form to the front of the mailpiece, or on the back if space permit. Write "Return Receipt Requested" on the mailpiece below the article. The Return Receipt will show to whom the article was delivered and delivered.	I also wish to receive the following services (for an extra fee): 1. Addressee's Address 2. Restricted Delivery Consult postmaster for fee.		
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