

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

IN RE:)
)
THE CITY OF GAINESVILLE and)
GAINESVILLE-ALACHUA COUNTY)
REGIONAL ELECTRIC, WATER and)
SEWER UTILITIES BOARD, DEER-)
HAVEN UNIT NO. 2 SITE CERTI-)
FICATION, DER CASE NO. PA)
74-04.)
)
Permittee.)
_____)

OGC # 82-0302

FINAL ORDER

On May 13, 1982, the Florida Department of Environmental Regulation gave Notice of Proposed Agency Action pursuant to Section 403.516(1), Florida Statutes, to modify the conditions of certification for the Deerhaven Unit No. 2. A copy of that Notice is attached hereto as Exhibit "A".

Pursuant to Florida Administrative Code Rule 17-1.62(1)(b), the parties to the original certification proceeding were given fourteen (14) days in which to petition for a hearing on the proposed modification; no such petition for hearing was filed. The Notice of Proposed Agency Action thereafter came before me as the head of the Department for final agency action on this matter. Having considered the Notice of Proposed Agency Action submitted herein and being otherwise fully advised, it is therefore:

ORDERED that the following modification to the Conditions of Certification for the Gainesville Regional Utilities Deerhaven Unit No. 2 is granted:

Condition I.A.2.

The percent maximum allowable sulfur content of coal consumed shall be limited as follows:

% Maximum allowable sulfur content = 6.3×10^{-5} x BTU per lb. of coal. However, the applicant may petition the Department to revise this condition by installing a flue gas desulfurization unit that will insure compliance with Section 17-2.600(5), F.A.C. The boiler shall not be operated unless this condition is complied with.

DONE AND ORDERED this 11 day of June, 1982, in Tallahassee,
Florida.

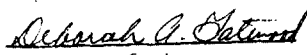
STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


VICTORIA J. TSCHINKEL
Secretary

2600 Blair Stone Road
Tallahassee, Florida 32301
Telephone: (904) 488-9730

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to S120.52 (9),
Florida Statutes, with the designated Depart-
ment Clerk, receipt of which is hereby acknow-
ledged.

 6/22/82
Clerk Date

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing FINAL ORDER has been furnished by U. S. Mail to Caryl Brinson, Assistant City Attorney, 313 E. University Avenue, P.O. Box 490, Gainesville, Florida 32602, Robert L. Guyer, City of Gainesville, in its own right and as successor to Gainesville-Alachua County Regional Electric, Water and Sewer Utilities Board, P.O. Box 490, 313 East University Avenue, Gainesville, Florida 32601, Art Canaday, General Counsel, Florida Public Service Commission, 101 E. Gaines Street, Tallahassee, Florida 32304, Joan M. Heggen, Secretary, Department of Veterans and Community Affairs, 2571 Executive Center Circle, E., Tallahassee, Florida 32301, I. Henry Dean, General Counsel, Department of Natural Resources, 3900 Commonwealth Building, Tallahassee, Florida 32303, Tom W. Brown, Esquire, Suwannee River Water Management District, Post Office Box 1029, Lake City, Florida 32055, Helen Hood, Chairperson, Parks and Endangered Lands Committee, Florida Defenders of the Environment, Inc., 622 North Main Street, Gainesville, Florida 32604, on this 24th day of June, 1982.


RICHARD P. LEE
Assistant General Counsel

State of Florida Department
of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301
Telephone: (904) 488-9730

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In Re:)
)
The City of Gainesville and)
Gainesville-Alachua County)
Regional Electric, Water and)
Sewer Utilities Board, Deer-)
haven Unit No. 2 Site Certi-)
fication, DER Case No. PA)
74-04.)
)
Permittee.)
_____)

NOTICE OF PROPOSED AGENCY ACTION

The Florida Department of Environmental Regulation proposes to modify the conditions of certification for the Deerhaven Unit No. 2 pursuant to Section 403.516(1), Florida Statutes, and Section 12 of the General Conditions of Certification, which delegated modifications of conditions to the Department, and states:

1. The Department proposes to grant relief to Gainesville Regional Utilities by making the following modifications to the Conditions of Certification:

Condition I.A.2.

The percent maximum allowable sulfur content of coal consumed shall be limited as follows:

% Maximum allowable sulfur content = 6.3×10^{-5} x BTU per lb. of coal. However, the applicant may petition the Department to revise this condition by installing a flue gas desulfurization unit that will insure compliance with Section 17-2.600(5), F.A.C. The boiler shall not be operated unless this condition is complied with.

2. The Department proposes to adopt the preceding modification to the Special Conditions of Certification on May 20, 1982, unless a party to this proceeding should request a hearing on the proposed modifications prior to that date.

Respectfully Submitted,

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


VICTORIA J. TSCHINKEL
Secretary

EXHIBIT A

2600 Blair Stone Road
Tallahassee, Florida 32301
Telephone: (904) 499-8720

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that copies of the foregoing NOTICE OF PROPOSED AGENCY ACTION were furnished by United States Mail, to all counsel of record listed on the attached service list, on this 13th day of May, 1982.

Art Canaday, General Counsel
Florida Public Service Commission
101 E. Gaines Street
Tallahassee, Florida 32304

Lawrence C. Keeseey, Esquire
Department of Veterans and
Community Affairs
2571 Executive Center Circle, E
Tallahassee, Florida 32301
(as successor in interest to
Division of State Planning)

I. Henry Dean, General Counsel
Department of Natural Resources
3900 Commonwealth Building
Tallahassee, Florida 32303

Tom W. Brown, Esquire
Suwannee River Water Management
District
Lake City, Florida 32055

Helen Hood, Chairperson
Parks and Endangered Lands
Committee
Florida Defenders of the
Environment, Inc.
622 North Main, Street
Gainesville, Florida 32604

Ann Carlin, Esquire
City of Gainesville, in its own
right and as successor to
Gainesville-Alachua County
Regional Electric, Water and
Sewer Utilities Board
P.O. Box 490
313 East University Avenue
Gainesville, Florida 32601

Respectfully submitted


RICHARD P. LEE
Assistant General Counsel

State of Florida Department
of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301
Telephone: (904) 488-9730



Gainesville Regional Utilities

Post Office Box 493 • Tallahassee, Florida 32301

SYSTEMS PLANNING DEPARTMENT
(904) 374-2910

August 12, 1981

REC'D
AUG 19 1981

**DIV. ENVIRONMENTAL
PERMITTING**

Mr. Buck Oven
Department of Environmental Regulation
Twin Tower Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

Dear Mr. Oven:

Attached for your review and comment is a draft of the stipulation we intend to submit to the Department as a petition for modification of the Conditions of Certification for Deerhaven Unit 2, DER Case No. PA 74-04. The petition seeks to revise Condition I(A)2 which places an absolute limit of 0.73% on the sulphur content of coal burned in Unit 2 without regard to the BTU content of the coal. However, as the heating value increases the 0.73% limitation becomes increasingly more stringent than the federal and state emission standards. There exists no regulatory requirement for limiting SO₂ emissions in Alachua County beyond that required by NSPS and 17-2 FAC. Further, ratepayers on this system bear costs for reducing sulphur dioxide emissions beyond that required by the Department and such limitation severely restricts our ability to purchase coal at competitive prices.

While digging through the files I came across a memo to the file from Rusty Wooten, formerly Environmental Manager at this utility, about a conference call the Deerhaven Project Team had with you on March 29, 1978 for the purpose of cleaning up the language of the draft Conditions of Certification. The language in the final Conditions of Certification document reflected all the numerous points for language cleanup discussed with the team except the 0.73% S limitation. From speaking to those involved and from reading the record it appears that the failure to add "...at 12000 BTU/lb or equivalent" was a clerical error that was not noticed until much later.

As you see in the stipulation, we seek the opportunity to burn various types of compliance coal meeting the intent of the site certification document and satisfying the requirements of 17-2 FAC and NSPS. Please review the attached petition. We welcome your comments and guidance on this matter.

Respectfully,


Robert L. Guyer
Utility Systems
Environmental Engineer

RLG/kv
Attachment

cc: Lou Heubner, DER

E. L. L. A

PRELIMINARY DRAFT

SUBJECT TO CHANGE

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In Re:

The City of Gainesville and
Gainesville-Alachua County
Regional Electric, Water and
Sewer Utilities Board, Deer-
haven Unit No. 2 Site Certi-
fication, DER Case No. PA
74-04.

Permittee.

STIPULATION OF PARTIES MODIFYING CONDITIONS OF CERTIFICATION

The parties who entered appearances at and/or participated in the certification proceedings hereby STIPULATE AND AGREE as follows:

1. The signatories to this Stipulation include all of the parties to the above-mentioned certification proceedings.

2. On May 16, 1978, the Recommended Order of Division of Administrative Hearings, Case No. 75-467N, granting certification for the construction and operation of Deerhaven Unit No. 2 subject to the general and specific conditions referenced therein was approved and adopted by a vote of the Governor and Cabinet at a duly constituted Cabinet meeting of May 16, 1978.

3. For the reasons stated herein the Permittee wishes to modify Condition I.A.2. of such special conditions which provides as follows:

The permittee shall not burn a fuel containing more than 0.73% sulfur. However, the applicant may petition the Department to revise this condition by (a) demonstrating compliance with Section 17-2.04 (6)(e)1., FAC, or (b) installing a flue gas desulfurization unit that will insure compliance with the above emission limitation. The boiler shall not be operated unless this condition is complied with.

4. Section 17-2.04(6)(e)1., Florida Administrative Code has been recodified as Section 17-2.600(5) which provision contains a sulfur dioxide emission limitation standard for fossil fuel steam generators burning solid fuel. This standard is 1.2 lbs SO₂ per million BTU heat input (two hour average) which tracks the New Source Performance Standard (NSPS) for sulfur dioxide contained in the Clean Air Act. That is, for every million BTUs of heat input into the boiler, no more than 1.2 lbs. of sulfur dioxide may be emitted out the stack.

5. To assure compliance with 17-2 and NSPS for sulfur dioxide the Site Certification document additionally limits the allowable sulfur content of the coal to 0.73%. Such limitations are normally calculated using the following equation:

$$\frac{1.2 \text{ lb. SO}_2 \text{ out of stack}}{\text{million BTU heat input}} \times \frac{\text{BTU}}{\text{lb. of coal}} \times 0.5 \times 100 \times 1.05 = \% \text{ allowable sulfur content of the coal (as received)}$$

WHERE:

$\frac{1.2 \text{ lb. of SO}_2}{\text{million BTU heat input}}$

This constant is the New Source Performance Standard for sulfur dioxide emissions

$\frac{\text{BTU}}{\text{lb. of coal}}$

This variable is the measured heating value of one pound of coal as received.

0.5

This constant is derived from the chemistry of the reaction of sulfur with oxygen to produce sulfur dioxide. Basically, 1 lb. of Sulfur combines with 1 lb. of Oxygen to produce 2 lbs. of SO₂. Thus, the ratio of sulfur is 1/2 or 0.5.

100

This constant is to convert to percent.

1.05

This constant gives a credit for the sulfur that is trapped in the ash and not released as SO₂.

The above equation may be simplified as follows:

$$(6.3 \times 10^{-5}) \times \frac{\text{BTU}}{\text{lb. of coal}} = \frac{\% \text{ allowable sulfur}}{\text{content of the coal}}$$

The existing sulfur limitation was calculated using the above equation assuming 12,000 BTU/lb. coal but without the credit (1.05) for sulfur not leaving the stack. As such, and especially when burning coal of a BTU content higher than 12,000 BTU/lb., the limitation in the Conditions of Certification is significantly more stringent than both state and federal environmental regulations. There is no regulatory requirement for a sulfur limitation beyond what is required by NSPS or 17-2 FAC in this area. Further, this added environmental stringency results in electric rates higher than those that would otherwise be borne by Gainesville ratepayers and such limitation severely restricts the utility's ability to purchase coal at competitive prices.

6. For economic and environmental reasons, the utility wishes to supplement the coal supplies delivered under its current contract with other coal purchases.

7. The following demonstrates that compliance with the standard contained in Section 17-2.600(5) can be met using coal with a sulfur content higher than 0.73% provided the heating value (BTU per lb.) also rises. For example, a coal with a 14,000 BTU/lb. heating value can have a sulfur content of 0.88% and still meet NSPS and 17-2 FAC:

$$\frac{1.2 \text{ lb. SO}_2 \text{ out of stack}}{10^6 \text{ BTU heat input}} \times \frac{14,000 \text{ BTU}}{\text{lb. of coal}} \times 0.5 (100) 1.05 = .88\% \text{ sulfur allowable}$$

8. The use of coal with heating values in excess of 12,000 BTU/lb. will result in less coal being burned. Among the environmental benefits expected by the utility are: a reduction in train traffic, reduced energy requirements for mining, transportation, and coal handling, minimizing ash production resulting in lower particulate emissions and ash for disposal in on-site landfills.

9. The electrostatic precipitator installed at Deerhaven Unit No. 2 is designed so as to achieve a maximum particulate emission not to exceed 0.1 lbs. per million BTU heat input when coal is used within the constituent range specified below:

- ash content 17% or less
- sulfur content in the range of 0.4% to 4.0%

In addition, the precipitator is designed to remove 99.5% (by weight) of the entering particulates from the flue gases.

10. The utility currently has a 35-year contract which provides for coal which will meet the standard of 1.2 lbs. SO_2 per million BTU heat input. The modification of Condition I.A.2. will permit acquisition of additional coal of a higher heating value which will also meet the standard. If the utility is able to augment purchases under its existing contract with other purchases of coal, estimated fuel cost savings in 1982 of between \$600,000 and \$1.6 million would be passed along to the customers of the utility by way of lower fuel adjustments.

11. Wherefore, the parties hereto concur that Condition I.A.2, should be and hereby is amended and modified to read as follows:

The percent maximum allowable sulfur content of coal consumed shall be limited as follows:

$$\% \text{ Maximum allowable sulfur content} = 6.3 \times 10^{-5} \times \frac{\text{BTU}}{\text{lb. of coal}}$$

However, the Applicant may petition the Department to revise this condition by installing a flue gas desulfurization unit that will insure compliance with Section 17-2.600(5), F.A.C. The boiler shall not be operated unless this condition is complied with.

PRELIMINARY DRAFT
SUBJECT TO CHANGE



Gainesville Regional Utilities

Post Office Box 490 • Gainesville, Florida 32602

SYSTEMS PLANNING DEPARTMENT
(904) 374-2910

November 6, 1981

RECEIVED

NOV 11 1981

Mr. Tom W. Brown, Esq.
Suwannee River Water Management District
Post Office Box 1029
Lake City, Florida 32055

RECEIVED
DEC 7 1981

SHANNON BROWN NORRIS
VOCELLE & HALEY

Dear Mr. Brown:

DIV. ENVIRONMENTAL
PERMITTING

Thank you for our telephone discussion regarding my proposed cleanup of the language in the Conditions of Certification for Deerhaven Unit 2. As you recall, the language found in the section to be remedied, section I.A.2, is inconsistent with 17-2 FAC, the Federal New Source Performance Standards (NSPS) and section I.A.1(a) of the Conditions of Certification. Situations arise where this language requires emissions limitations more stringent than required by 17-2, NSPS or §I.A.1(a). In this case, the language causes us difficulty in purchasing coal conforming to I.A.2 because such coal is not standard. The additional costs of this specialized coal is 0.6-1.6 million dollars/year.

As you know, 17-2, NSPS, and §I.A.1(a) all limit the sulphur dioxide emission rate to 1.2 lbs SO₂/million BTU input. Unfortunately, section I.A.2 is not a rate but rather an absolute restriction of the sulphur content of the coal to 0.73% S by weight. I am sure that I.A.2 was also intended to be a rate but through clerical error the words necessary to make it a rate were left out. The key sentence of I.A.2 now reads:

"The permittee shall not burn a fuel containing more than 0.73% sulphur."

I believe the intended wording was to be:

"The permittee shall not burn a fuel containing more than 0.73% sulphur at 12,000 BTU/lb or equivalent."

0.73% sulphur at 12,000 BTU/lb is 1.2 lbs SO₂/million BTU heat input - the same standard as 17-2, NSPS and I.A.1(a). The stipulation I have submitted to you seeks to make this section accord with 17-2, NSPS and I.A.1(a).

In some ways the first sentence of I.A.2 is obsolete. During the original certification process the method of assuring compliance with the SO₂ emission standard had not yet been determined. We could

Exhibit B

WITNESS our hands and seals this _____ day of

_____, A.D., 1981.

Witness _____

Victoria J. Tschinkel, Secretary
Department of Environmental
Regulation

Witness _____

Twin Towers
2600 Blair Stone Road
Tallahassee, Florida 32301

Witness _____

Art Canaday, General Counsel
Florida Public Service Commission
101 E. Gaines Street
Tallahassee, Florida 32304

Witness _____

Witness _____

Joan M. Heggen, Secretary
Department of Veterans and
Community Affairs
2571 Executive Center Circle, E
Tallahassee, Florida 32301
(as successor in interest to
Division of State Planning)

Witness _____

Witness _____

I. Henry Dean, General Counsel
Department of Natural Resources
3900 Commonwealth Building
Tallahassee, Florida 32303

Witness _____

Witness _____

Tom W. Brown, Esq.
Suwannee River Water Management
District
Post Office Box 1029
Lake City, Florida 32055

Witness _____

Witness _____

Helen Hood, Chairperson
Parks and Endangered Lands
Committee
Florida Defenders of the
Environment, Inc.
622 North Main Street
Gainesville, Florida 32604

Witness _____

Witness _____

Ann Carlin, Esq.
City of Gainesville, in its own
right and as successor to
Gainesville-Alachua County
Regional Electric, Water and
Sewer Utilities Board
P. O. Box 490
313 East University Avenue
Gainesville, Florida 32601

Witness _____

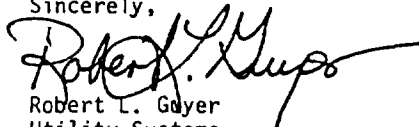
Mr. Tom Brown
November 6, 1981
Page Two

demonstrate compliance by flue gas monitoring of SO₂ or by fuel analyses for sulphur (see section I.B.2 of the Conditions of Certification.) We chose both flue gas monitoring and flue analysis. A Lear Seigler continuous emission monitoring system monitors Unit 2's flue gas for compliance. In addition our coal contracts specify "compliance coal", that is, coal that meets the SO₂ emission standard. The coal is sampled as received to assure the coal is "compliance coal".

The proposed modification will save our ratepayers from 0.6-1.6 million dollars in 1982. Burning higher BTU/lb coal will reduce the total coal burned in 1982 by about 10,000 tons. Finally, no increase in sulphur dioxide emissions over present emissions will occur because both existing - 0.73% S at 12,000 BTU/lb - and proposed coals are compliance coals.

The attached 2 copies of the stipulation have been signed by two of the parties already, Mrs. Helen Hood for the Florida Defenders of the Environment and Mrs. Ann Carlin for the City of Gainesville. Once you have reviewed and signed the stipulation please send it to Mr. Hamilton Owen at the Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32301. If you want to discuss the stipulation feel free to call me.

Sincerely,



Robert L. Goyer
Utility Systems
Environmental Engineer

RLG/kv
Enclosure



**SUWANNEE
RIVER
WATER
MANAGEMENT
DISTRICT**

December 1, 1981

RECEIVED
DEC 7 1981

**ENVIRONMENTAL
PERMITTING**

AULEY ROWELL
Chairman
Shady Grove, Florida

HILDA KRESSMAN
Vice Chairman
Trenton, Florida

NATHAN WERSHOW
Secretary/Treasurer
Alachua, Florida

JOHN M. FINLAYSON
Asheville, Florida

TERRY KELLY
Lake City, Florida

JR. "BOB" MILLER
Jasper, Florida

JO PARKER
Mayo, Florida

SEYMOUR CHOTINER
Live Oak, Florida

DONALD O. MORGAN
Executive Director
Lake City, Florida

Mr. Hamilton Owen
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

CHANGE IN CERTIFICATION CONDITIONS - DEERHAVEN UNIT 2

Mr. Owen, enclosed are two copies of a petition to change technical language in the RUB Deerhaven Unit 2 Certification Conditions. Mr. Tom Brown signed the petition for the District as an indication that the SRWMD has no opinion or opposition to the substance of the change. However, the District does not want to create an obstacle to purely administrative clarification. Please accept Mr. Brown's signature on the petition in this light.

A handwritten signature in cursive script, likely belonging to David W. Fisk.

DAVID W. FISK - DIRECTOR
DEPARTMENT OF WATER RESOURCES

DWF/cn

xc

Exhibit C

December 7, 1981

Mr. I. Henry Dean
General Counsel
Florida Department of
Natural Resources
3900 Commonwealth Building
Tallahassee, Florida 32303

Dear Mr. Dean.:

Attached are two copies of a stipulation to modify the conditions of certification for the Gainesville Regional Utilities, Deerhaven Power Plant Unit No. 2, PA 74-04. If your agency approves the stipulation, please sign the copies and forward them to the next party on the list. If your agency declines to approve the stipulation please return them to me.

Sincerely,

Hamilton S. Oven, Jr., P.E.
Administrator
Power Plant Siting Section

HSOJr:my

cc: Bob Guyer
Richard Lee