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GANNON

FEDERAL ENERGY ADMINISTRATION
WASHINGTON, D.C. 20461

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Joseph N. Landers, Jr., Secretary
Florida Department of Environmental
Regulation
2562 Executive Center Circle East
Montomery Building
Tallahassee, Florida 32301 Re: Case Number FEE-1939

Dear Mr. Landers:

The Federal Energy Administration has considered the Application for Exception filed by Tampa Electric Company from the provisions of 10 CFR 215.3 pursuant to the provisions of 10 CFR 215.6(b).

Since your agency has indicated that it has an interest in the outcome of this exception request, we enclose a copy of the Decision and Order for your information. If you have any questions regarding this Decision and Order, please contact Mr. Steven Rabin, telephone number (202) 254-8480.

Sincerely,

Thomas L. Wieker
Assistant Director
Office of Exceptions and Appeals

Enclosure

FEDERAL ENERGY ADMINISTRATION
WASHINGTON, D.C. 20461

FEB 18 1976

DECISION AND ORDER

OF THE FEDERAL ENERGY ADMINISTRATION

Application for Exception

Name of Petitioner: Tampa Electric Company

Date of Filing: October 14, 1975

Case Number: FEE-1939

On April 30, 1975, the Federal Energy Administration issued a Decision and Order to the Tampa Electric Company (TECO) which granted the firm exception relief from the provisions of 10 CFR 215.3. Tampa Electric Co., 2 FEA Par. 83,138 (April 30, 1975). The April 30 Decision and Order permitted TECO to accept residual fuel oil for use in the electric power generating units 1 through 4 of its F. J. Gannon Station (hereinafter "Gannon units 1-4"). The Order provided that the exception relief would be effective for a period of six months and that TECO could apply for an extension of the relief granted.

On October 14, 1975, TECO filed an Application for Exception in which it requests that the exception relief granted in the April 30 Decision and Order be extended indefinitely.

TECO is an electric utility company which has a generating capacity of 2165 megawatts of electric power and which serves customers in West Central Florida. TECO's F. J. Gannon Station consists of six electric power generating units, each of which used coal as its fuel until 1975. On September 19, 1973, the U.S. Environmental Protection Agency (EPA), in accordance with the Clean Air Act, as amended (42 USC 1857 et seq.), approved a schedule for compliance by TECO with the State of Florida's air pollution emission regulations. Interim State Air Pollution Regulations limiting sulfur dioxide and particulate emissions from the Gannon units are as follows:

TABLE A

Interim State Air Pollution Emission Regulations
As Applied to F.J. Gannon Generating Station

Gannon Unit Number	Maximum SO_2 Emissions (pounds per million BTU heat input)	Maximum Particulate Emissions (pounds per million BTU heat input)
1-4	1.1	.1
5, 6	2.4	.1

The September 19, 1973 compliance schedule required TECO to convert the Gannon units 1-4 to oil burning by April 30, 1975 and the Gannon units 5 and 6 to the burning of washed low sulfur coal by July 1, 1975 in order to meet the emissions limitations specified in Table A above. On August 23, 1975, the EPA determined that TECO would not be able to meet the September 19, 1973 compliance schedule. As a result, on May 12, 1975, the EPA issued an Order to TECO citing the firm for violations of that compliance schedule and ordering TECO to meet the following revised compliance schedule:

TABLE B

Required TECO Compliance with State
Air Pollution Regulations at
F. J. Gannon Generating Station

Unit Number	Date of Compliance
1	December 21, 1975
2	August 8, 1976
3	June 27, 1976
4	May 15, 1975
5	November 1, 1976
6	November 1, 1976

In its initial exception application, TECO contended that in the absence of exception relief from the requirements of Section 215.3, the firm would be in violation of State Air Pollution Control Regulations. Section 215.3 provides that:

> No petroleum product shall be sold or otherwise provided to or accepted by any firm for burning under power generators which were not using a petroleum product on December 7, 1973.

In considering the exception request, the FEA reviewed the criteria set forth in Commonwealth Edison Co., 1 FEA Par. 20,709 (November 22, 1974) for the approval of exception relief based on a claim of hardship where a State requires the attainment of air quality standards which are higher than the applicable Primary Ambient Air Quality Standards. In the Commonwealth Decision the FEA stated:

> [E]xception relief from the FEA Regulations set forth in Part 215 is appropriate to permit a firm to use petroleum products if an applicant establishes that:
>
> (i) It has made all diligent efforts to obtain a variance from the appropriate state officials which, if granted, would permit it to continue to use fuels which are in conformity with the provisions of 10 CFR Part 215, and the state authorities have denied its request for such a variance;
>
> (ii) The alternative means available to the firm which would permit it to continue to adhere to the requirements of Part 215 and still meet the state's air quality standards would result in an undue economic hardship to either the firm or the customers which it serves. These alternative means include, but are not limited to, the use of low sulfur coal and the installation of scrubbers, precipitators or other devices which would permit the firm to continue to use the fuel required by Part 215 and still meet the applicable state air quality standards. See, Detroit Public Lighting Commission, 1 FEA Par. 20,682 (October 22, 1974);
>
> (iii) Shutting down the plant involved would result in an undue economic hardship to the firm or the consumers served by the firm. Commonwealth Edison Co., supra, at 20,861-2.

With respect to TECO's exception application, the FEA determined that: (i) TECO could not obtain a variance from the State which would permit it to comply with the State air

pollution emission regulations and Section 215.3 of the FEA Regulations; (ii) the installation of pollution control equipment at the Gannon Station could not be accomplished in less than three years; (iii) low sulfur coal which is suitable for the Gannon units 1-4 Babcock & Wilcox cyclone furnaces is not available; and (iv) if TECO were required to shut down Gannon units 1-4, both the firm and its customers would experience serious adverse consequences. The FEA therefore concluded that TECO had satisfied the criteria set forth in Commonwealth Edison Co., supra, and had demonstrated that the requirements of Section 215.3 result in an undue economic hardship to the firm "at the present time." However, the FEA also determined that TECO had failed to demonstrate that it could not comply with the requirements of Section 215.3 and the State air pollution emission regulations at some time in the future by installing pollution control equipment which would enable the Gannon units 1-4 to burn coal. The FEA therefore granted the firm exception relief which permits it to burn residual fuel oil in units 1-4 for a period of six months from the date of the Order. Paragraph (4) of the April 30 Order provides that:

> In the event TECO seeks an extension of the exception relief approved herein, it shall at the time it applies for such an extension, set forth in detail the steps it has taken or will take to install flue gas desulfurization equipment at the Gannon Station which would permit TECO to meet all State air pollution emission regulations without using petroleum products. At that time, TECO may also submit documentation of its claim that the installation of such flue gas desulfurization equipment at the Gannon Station will result in an undue economic hardship to the firm.

In its present application, TECO claims that there is inadequate space available at the Gannon Station for the installation of pollution control equipment on units 1-4 which would permit TECO to burn coal and meet all State air pollution emission regulations. TECO advanced this same argument in its previous exception application but failed to provide sufficient information to substantiate its assertion. In connection with its present application, TECO has provided a report prepared by Arthur D. Little, Inc. (ADL), regarding

the feasibility of installing flue gas desulfurization equipment on Gannon units 1-4. ADL concluded in its report, dated April 9, 1975, that a minimum of 28,000 square feet of space would be required to install the necessary equipment on all four units. Of these 28,000 square feet of ground space, ADL estimated that a minimum of 15,000 square feet of space would be required in the immediate area of units 1-4 and the remaining 13,000 square feet of space could be located at a peripheral location. The ADL report indicates that only 12,000 square feet of space is available for the construction of flue gas desulfurization equipment in the immediate area of Gannon units 1-4 and that, as a consequence, desulfurization equipment for those units could not be installed in the available space. The report further indicates that even if the pollution control equipment could be installed in the area available, there would be no crane access to units 3 and 4 for maintenance of those units' precipitators and air preheaters and, as a result, continued operation of those units would no longer be practical.

The FEA has evaluated TECO's submissions and has determined that those submissions support the firm's claim that insufficient space exists at the Gannon Station for the installation of pollution control equipment on Gannon units 1-4 which would permit all four of those units to operate in compliance with both FEA Regulations and State air pollution emission regulations. The FEA, through H. Zinder & Associates, Inc. (Zinder), has also conducted an independent study of the feasibility of installing pollution control equipment at the Gannon Station. This study indicates that the installation of pollution control equipment on units 1-4 which would permit all four of those units to operate in compliance with both FEA and State regulations is not feasible due to space limitations.

As indicated above, the FEA previously determined that TECO could not obtain a variance from State air pollution regulations and could not, without experiencing hardship, meet State air pollution regulations at the Gannon Station either by using low sulfur coal to fuel units 1-4 or by closing down the units. On the basis of the ADL and Zinder studies referred to above, the FEA has concluded that the installation of air pollution control equipment which would permit the firm to burn coal is not a feasible alternative for meeting the requirements of Part 215 and State air pollution regulations

for all four of the Gannon units 1-4. However, TECO has nevertheless failed to demonstrate that it could not burn coal in Gannon units 1 and 2 and still meet State air pollution regulations by installing flue gas desulfurization equipment. As indicated above, TECO's consultant, ADL, has stated in its report that 12,000 square feet of space for the installation of pollution control equipment is available in the immediate vicinity of Gannon units 1-4. In concluding that a minimum of 15,000 square feet of space would be required to install adequate flue gas desulfurization equipment for units 1-4, ADL relied upon a report prepared for the Environmental Protection Agency by the Radian Corporation entitled "Factors Affecting Ability to Retrofit Flue Gas Desulfurization Systems."1/ That report indicated that as a general rule the ground space needed for a flue gas desulfurization unit is directly proportional to the rated generating capacity of the plant and that a minimum of 45 square feet is required for each megawatt of generating capacity. Gannon units 1 and 2 have generating capacities of 115 megawatts and 125 megawatts respectively for a combined capacity of 240 megawatts. Assuming that 45 square feet of space is required for the installation of flue gas desulfurization equipment, then 45 times 240 or 10,800 square feet of ground space would be required to install that equipment on Gannon units 1 and 2. Furthermore, as indicated by TECO in its submission and also by the EPA report referred to above, only approximately 24 square feet of ground space must be in the immediate vicinity of the power plant boilers for the installation of the flue gas scrubbing equipment. The remainder of the equipment may be located at a peripheral location. Consequently, only 24 times 240 or 5,760 feet of ground space in the immediate vicinity of Gannon units 1 and 2 would be required. Since TECO has indicated that 12,000 square feet would be available, it would appear that TECO could install appropriate air pollution control equipment on Gannon units 1 and 2 to permit those units to operate on coal and still meet State air pollution regulations. This conclusion is consistent

1/ EPA Report No. EPA-45013-74-015, "Factors Affecting Ability to Retrofit Flue Gas Desulfurization Systems," Radian Corporation, Austin, Texas (December 1973).

with the findings of the Zinder report. Zinder determined that adequate space exists on the Gannon site for the installation of flue gas desulfurization equipment which would permit Gannon units 1 and 2 to burn coal and still meet applicable State air pollution regulations.

On the other hand, the ground space in the immediate vicinity of units 3 and 4 does not appear to be adequate for the installation of flue gas desulfurization equipment on those units. Units 3 and 4 have a combined generating capacity of 385 megawatts. According to the EPA-report referred to above, at least 9,240 square feet of space in the immediate vicinity of the units would be required to permit the installation of flue gas desulfurization equipment on such a generating capacity. Based upon a study of the plot plans of the Gannon Station, Zinder determined that only approximately 6,950 square feet of ground space is available for the installation of flue gas desulfurization equipment in the immediate vicinity of Gannon units 3 and 4. Therefore, it does not appear that there is adequate space for the installation of pollution control equipment on units 3 and 4.

TECO has therefore made a convincing showing that pollution control equipment which would permit the burning of coal in compliance with State air pollution regulations cannot be installed on Gannon units 3 and 4. In addition, the firm has demonstrated that it cannot shut down the two units in order to meet the State air pollution emission regulations. Units 3 and 4 represent over one-sixth of TECO's generating capacity and the firm would encounter serious difficulties in providing electric power to its customers if it were required to close down those two units. Since TECO is unable to obtain a variance which would permit it to continue to burn coal in units 3 and 4, and cannot feasibly install pollution control equipment or shut down the units, it has satisfied the criteria set forth in Commonwealth Edison Co., supra, and is entitled to exception relief from the provisions of Section 215.3 which permits the firm to burn residual fuel oil in Gannon units 3 and 4 on a permanent basis. This determination is based upon the FEA's judgment that coal of a sufficiently low sulfur content to enable Tampa to comply with state regulations is not currently available. However, coal of a sufficiently low sulfur content to meet those requirements might well become available in the near future. Consequently the FEA will review the relief granted in this Decision within one year . In its review the FEA will weigh among other factors TECO's continuing efforts and ability to obtain coal which would meet state pollution requirements.

As the above analysis indicates, no showing has been made that the installation of pollution control equipment on units 1 and 2 will result in a serious hardship to the firm

or its customers. Nevertheless, the installation of such equipment would require several years to be completed and it is therefore appropriate that TECO be granted a further six month extension of exception relief with respect to Gannon units 1 and 2 in order to permit the firm to take further steps to install pollution control devices on those units. This exception relief, with respect to units 1 and 2, is intended only to permit the plant to operate in compliance with State air pollution regulations while pollution control equipment is being installed and will not be extended further if diligent efforts are not made to do so.

IT IS THEREFORE ORDERED THAT:

(1) The Application for Exception filed by the Tampa Electric Company (TECO) on October 14, 1975 be and hereby is denied in the form submitted.

(2) TECO is hereby granted an exception from the provisions of 10 CFR 215.3 as set forth below.

(3) Notwithstanding any contrary provisions of Section 215.3 of the Low Sulfur Petroleum Product Regulations, residual fuel oil may be sold to and accepted by TECO for use in units 1-4 of the Gannon Station in the amount necessary to ensure compliance with the air pollution emission regulations of the State of Florida provided, however, that:

(a) TECO shall immediately begin to take all necessary steps to install the pollution control equipment on units 1 and 2 which will permit those units to burn coal in a manner which is in compliance with all applicable State air pollution emission regulations and the Florida State Implementation Plan for meeting the Primary Ambient Air Quality Standards provided for in the Clean Air Act, as amended (42 USC 1857 et seq.);

(b) On or before May 31, 1976, TECO shall submit to the FEA Office of Exceptions and Appeals for its approval a detailed plan and schedule for installation of the air pollution control equipment specified in subparagraph (a) above; and

(c) With respect to units 1 and 2, this exception shall automatically terminate on July 31, 1976 unless renewed by the FEA on the basis of its review of the material which TECO is required to submit pursuant to subparagraph (b) above and its conclusion based on that review that TECO is complying with the terms of this Decision and Order.

(4) This decision is based upon the presumed validity of statements, allegations and documentary material submitted by the applicant. It may be revoked or modified at any time upon a determination that the factual basis underlying the application is incorrect or on the basis of general regulatory provisions which the FEA may adopt. The FEA plans to reexamine the relief granted in paragraph (3) above within one year of the date of issuance of this Order. As a part of that reconsideration the FEA will consider, among other factors, TECO's efforts and ability to obtain coal which when used in the Gannon Station boilers, would permit TECO to meet State sulfur dioxide emission standards.

(5) In accordance with the provisions of 10 CFR, Part 205, any aggrieved party may file an appeal from this Decision and Order with the Federal Energy Administration. The provisions of 10 CFR, Part 205, Subpart H, set forth the procedures and criteria which govern the filing and determination of any such appeal.

Melvin Goldstein
Director
Office of Exceptions and Appeals

Date: FEB 18 1976