

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460 AUG 23 1977

Henry V. Nickel, Esquire Hunton & Williams 1730 Pennsylvania Avenue, N. W. Suite 1060 Washington, D. C. 20006 THE ADMINISTRATOR

Dear Mr. Nickel;

You have petitioned me on behalf of the Cincinnati Gas and Electric Company (CG&E) to review three conditions of a permit which EPA's Region IV (Atlanta) office issued to CG&E. The permit was issued pursuant to EPA's regulations for the prevention of significant air quality deterioration (PSD) under the Clean Air Act. As explained below, I am granting your petition in part and denying it in part.

Background

The PSD regulations (40 CFR 52.21) require that large fossil-fuel electric power plants and other significant sources of sulfur dioxide and particulate matter obtain a permit prior to commencement of construction. The purpose of the permit requirement is essentially two-fold:

- (1) To assure, prior to construction, that the new pollution source will not cause air quality concentrations to exceed legal limits (frequently referred to as "increments") for the area (40 CFR 52.21(d)(2)(i)); and
- (2) To assure, prior to construction, that the new source's contribution to increased pollution concentrations will be minimized through application of an emission limitation which represents best available control technology (BACT) (40 CFR 52.21(d)(2)(ii)).

CG&E is planning to construct and operate two new coal-fired power units near Rabbit Hash, Kentucky. The PSD permit was issued by EPA's Region IV Office because the State of Kentucky had not sought delegation of authority to issue PSD permits at the time CG&E applied for the permit. (Kentucky has since been delegated such authority.)

In seeking PSD permit approval from EPA, CG&E indicated that it would meet the applicable BACT emission limits* with electrostatic precipitators for particulate matter, and with either wet scrubbers, low sulfur coal, or a combination of the two for sulfur dioxide. CG&E did not provide information relating to specific pollution control devices because CG&E had not yet selected the devices.

In issuing its permit to CG&E on November 24, 1976, Region IV found that if the plant were to meet the BACT emission limitations, the applicable air quality increments would not be violated. Region IV could make no finding on the BACT issue, however, due to the lack of specific information on control devices. Region IV therefore conditioned the permit to require CG&E to submit the control information as it becomes available. The conditions allow Region IV to disapprove the permit if it finds the devices inadequate to meet BACT.

The permit conditions also require CG&E to provide EPA written assurances that a legally binding coal purchase contract has been executed and to specify certain details about the contract and the type of coal contracted for. The permit provides that EPA will not approve the control devices until CG&E provides such information.

CG&E objects to certain elements of these permit conditions (basically those portions which are underscored below) and has filed several pleadings arguing that I should modify the permit. The three permit conditions at issue here are as follows:

- "A. For Particulate Emissions from the Boiler:
 - 1. The applicant must submit to EPA, within twenty working days after it becomes available, copies of all technical data pertaining to the selected control device . . . EPA must review the final selected device in order to verify

^{*} Under 40 CFR 52.01(f), BACT is deemed to be the emission limitation specified in the New Source Performance Standard (NSPS) set under Section 111 of the Clean Air Act, if an NSPS for sulfur dioxide or particulate matter has been issued for the relevant source. Since there is an NSPS for both sulfur dioxide and particulate matter for power plants (40 CFR 60.42, 60.43), the NSPS limitations are the BACT limitations required by the PSD regulations in this case.

the emission limit stated in the application. EPA may, upon review of these data, disapprove the application if EPA determines the selected control device to be inadequate to meet the emission limit specified in this conditional approval. [Emphasis added.]

- "B. For Sulfur Dioxide Emissions from the Boiler:
 - 1. The applicant must submit to EPA within twenty working days after it becomes available, copies of all technical data pertaining to the selected control system . . . EPA may, upon review of these data, disapprove the application if EPA determines the selected control device or devices to be inadequate to meet the emission limits specified in this conditional approval. [Emphasis added.]

"C. Coal Characteristics:

[T]he applicant must submit to EPA <u>before approval</u> is granted to purchase control devices under A.1 and <u>B.1 above</u>, the following information.

- 1. Copies of contracts to purchase coal including expected sulfur content, ash content, and heat content of the coal, or
- 2. Other information* showing that coal of the specified quality, or better, will be available to the applicant upon start-up of the boiler." [Emphasis added.]

It should be noted that my authority to issue PSD permits has been delegated to the Regional Administrators and that a permit issued by the Region may be considered final agency action. A dissatisfied party need not take any further steps to exhaust its administrative remedies prior to judicial review (assuming that issues the party seeks to raise in Court were raised at the proper time before the Regional Office). Nevertheless, I have the inherent

^{*} By letter of January 28, 1977, Region IV informed CG&E that this condition could be complied with by submitting an opinion of counsel stating that a legally binding coal purchase contract had been entered into, and stating certain relevant facts about the terms of the contract and the type of coal purchased.

authority as Administrator to review actions of the Regional Offices. I have decided in this case that the issues are sufficiently important to warrant my addressing them.

I should also note that this type of review is governed neither by formal Agency procedures* nor by rulemaking or adjudication requirements under the Administrative Procedure Act (5 U.S.C. §551 et seq.). Accordingly, no rules relating to ex parte contacts, briefing, etc., apply. My Headquarters staff has held meetings and had telephone conversations with CG&E representatives and with Region IV personnel in order to assess more fully the arguments which CG&E has presented in its various pleadings.

Discussion and Disposition of CC&E's Arguments

I will divide my discussion and disposition of CG&E's arguments into two basic categories: (1) the conditions requiring approval of data relating to control devices (conditions A.1..and B.1. quoted above); and (2) the condition requiring details relating to coal purchase contracts (condition C quoted above).

Control Devices

a. <u>Authority Under Regulation</u>.

The PSD regulations clearly authorize Region IV to include these conditions. The regulations basically constitute a preconstruction review procedure. They provide in 40 CFR 52.21(d)(2) that an owner may not "commence" construction unless EPA determines, among other things, that source "will meet" the BACT emission limit (40 CFR 52.21(d)(2)(ii)). The regulations also specifically provide:

In making the determinations required by paragraph (d)(2) of this section [which includes BACT], the Administrator shall, as a minimum, require the owner or operator of the source . . . to submit [several items] and any other information necessary to determine that best available control technology will be applied. 40 CFR 52.21(d)(3) (emphasis added).

The basic purpose of preconstruction review is to prevent potential environmental problems before they occur in order to obviate the need for difficult and expensive

^{*} In contrast To National Pollution Discharge Elimination System (NPDES) permits issued by Regional offices under the Federal Water Pollution Control Act. See 40 CFR 125.36(n).

"after-the-fact" corrective action. The provision of the PSD regulations requiring EPA to find that BACT will be complied with at the permitting stage is entirely consistent with this basic purpose.

b. Compatibility With Congressional Intent.

CG&E cites legislative history which indicates (1) that EPA is not to make a preconstruction certification for compliance with Section 111 of the Clean Air Act, and (2) that the responsibility for selecting methods of meeting emission limits rests with the source, not EPA. These arguments are inapposite here.

First, the cited legislative history has no bearing on the preconstruction review requirements of the PSD regulations. Whatever Congress may have intended with respect to the narrow issue of determining compliance with Section 111 standards, the PSD regulations, which have been upheld by the U.S. Court of Appeals under other sections of the Act,* clearly require a BACT determination at the preconstruction review stage.

To the extent CG&E's arguments are construed as an attack on the PSD regulations for failing to comply with Congressional intent, such an argument could only have been brought in a Court of Appeals under Section 307(b) of the Clean Air Act within thirty days after the regulations were promulgated. While numerous challenges were brought which resulted in the <u>Sierra Club</u> decision cited above, this aspect of the regulations was not challenged.

Second, the permit condition is fully consistent with the principle that the source, not EPA, should select the method of compliance with an emission limitation. CG&E's assertions that EPA is "dictating" specific pollution control equipment and systems are plainly incorrect.

CG&E is expected to select, from any number of conceivable options, the control equipment and systems it desires to meet the BACT limits. EPA's role is simply to review the relevant data and information and to reject any equipment or system which EPA determines inadequate to meet the BACT limits. The fact that EPA may reject one proposal does not mean that it is "dictating" specifications. It means that CG&E will be required to select other systems or devices (or make adjustments to those already selected) and submit the new information to EPA. While EPA staff will be available

^{*} Sierra Club v. EPA, 540 F.2d 1114 (D.C. Cir., 1976).

<u>Certiorari</u> was granted by the Supreme Court on April 4,
1977.

to discuss these matters with CG&E, and to provide advice and assistance at CG&E's request, EPA will leave to CG&E the right and responsibility to make the selections.

C. <u>Wisdom of Approach</u>.

CG&E also argues that EPA's approach here is unwise, because once Region IV has approved certain control devices or systems, the Region would either be precluded from enforcing violations of the BACT emission limitation or would be impeded from vigorous enforcement.

The argument is incorrect on at least two grounds. First, the permit states as an independent condition, both for sulfur dioxide and particulate matter, that specified emission limitations must be met. (Permit Conditions A.3. and B.3.) The fact that EPA might not object to CG&E's plans at the permit stage will not absolve CG&E from meeting the specified emission limitations.

Second, this argument reflects a misunderstanding of the basic purpose and effect of such a condition. The condition is not intended to serve as a substitute for the source's obligation to meet specified emission limitations. Nor is it intended to constitute a certification by the Agency that the use of certain equipment will in all events meet such limitations. Rather, the condition is basically a screening device through which EPA may determine whether certain proposals will be <u>inadequate</u> to meet the limitations:

EPA may, upon review of these data, disapprove the application if EPA determines the selected control device or devices to be <u>inadequate</u> to meet the emission limits specified in this conditional approval. (Emphasis added).

Thus, EPA's failure to disapprove selected devices merely means that EPA has found nothing at the design stage which would warrant rejecting the source's plans. It is still the source's responsibility to comply with the law, and EPA will stand ready to enforce against all violations.

d. "Vagueness" of Conditions.

I am also unpersuaded by CG&E's argument that these conditions are "impermissibly vague." The determination to be made is whether a device or system is "inadequate to meet the emission limits specified in this conditional approval." The emission limits set in Conditions A.3. and B.3. are quite precise, and these are what adequacy will be judged against. I do agree, however, with CG&E that the permit should be modified to require the Region to set forth the reasons for any disapproval (see Conclusion below).

I should note that Region IV is not the only EPA Region which has imposed PSD conditions requiring EPA approval prior to the purchase of pollution control equipment. The attached permit issued by EPA's Region VIII (Denver) office contains virtually the same language relating to control equipment approval as the permit at issue in this matter.*

2. Coal Characteristics and Contracts.

CG&E objects to the requirement that it enter into legally binding coal purchase contracts <u>before</u> it may submit its information and data on control devices for the Region's approval. CG&E argues that such a condition would require a firm coal purchase contract several years before the coal is needed and would disrupt its normal planning and construction process. CG&E also argues that such a condition is unnecessary, in that a wide range of coal will be available which will meet the control equipment bid specifications which the Region will review.

My staff has discussed this issue with Region IV personnel. We are in agreement with CG&E's points. It will be sufficient to obtain such information as it becomes available in the normal course of CG&E's planning process.

Conclusion

Consistent with the foregoing discussion, it will be necessary to amend CG&E's permit in certain respects. By copy of this letter, I hereby direct the Regional Administrator to amend the fourth sentence of Condition "C" by

Regional Offices which have not in the past taken necessary steps to review sources' selections of methods to meet BACT limits under the PSD regulation will begin doing so in processing future permits. If there is anything improper with the approach taken by Regions IV and VIII on this issue, it is that the PSD regulation seems to contemplate that no permit should be issued at all until the Region obtains the information necessary to determine that BACT will be applied. I have asked my staff to consider whether the Regional Offices should be provided more explicit Headquarters direction or whether adjustments in the PSD regulation are needed. I understand that because of long lead times for constructing electric power plants, the type of conditional permit being utilized by Regions IV and VIII may be the appropriate approach. Therefore, this approach may continue to be used unless and until we inform the Regional Offices to the contrary.

deleting the phrase "before approval is granted to purchase control devices under A.1 and B.1 above," and by substituting therefor the phrase "within twenty working days after it becomes available."

CG&E has also made certain other suggestions with which I agree. Therefore, I direct the Regional Administrator to amend Conditions A.1. and B.1. by adding the following new sentences to the end of each condition: "EPA shall notify the applicant of EPA's determination under this Condition within twenty working days after receipt of all necessary information from the applicant. In the event EPA disapproves the application pursuant to this Condition, EPA will state its reasons in writing, identifying the criteria applied and the factors considered."

I should note that the twenty-working-day period for the Region to make its determination should be considered an outside deadline. The Region should make every effort to inform the applicant of its decision well before this period has expired.

CG&E has also requested that the permit be amended to provide that any disapproval shall be appealable to me. I do not agree with this suggestion. As noted earlier, my authority to issue PSD permits has been delegated to my Regional Administrators and their actions may be deemed final Agency actions. While an adversely affected party always has the right to petition me to review a Regional decision, and I have the authority to consider such petitions (as I have here) where important issues are presented, it would be improper to provide for an automatic right of appeal when any dispute arises under a permit.

If the Region were to disapprove a proposal by CG&E, I would hope that the Region could provide CG&E with technical advice and assistance so that CG&E's proposal could "be modified to be approvable. If this cannot be done, CG&E will have a final Agency action for purposes of judicial review. CG&E could petition me to review the matter; but I would want to reserve judgment on agreeing to such a review until I could assess the importance of the issues.

Douglas M. Costle

CONDITIONAL PERMIT TO COMMENCE CONSTRUCTION AND OPERATE

40 CFR 52.21(d)
(Significant Deterioration of Air Quality-Review of New Sources)

MISSOURI BASIN POWER PROJECT/ LARAMIE RIVER STATION

1. INTRODUCTION

The Missouri Basin Power Project (hereinafter "MBPP"), consisting of Basin Electric Power Cooperative (project manager), Heartland Consumer Power District, Lincoln Electric System, Missouri Basin Public Power Financing Corporation, Tri-State Generation and Transmission Association, Inc., and the Wyoming Municipal Power Agency, plan to construct a coal-fired steam electric generating plant approximately five miles northeast of Wheatland, Wyoming (hereinafter "the Source"). The Source will consist of three 570 megawatt boilers (600 megawatt gross capacity), together with on-site support facilities.

On June 23, 1976, the United States Environmental Protection Agency, Region VIII (hereinafter "EPA"), determined that the Source was subject to the requirements of 40 CFR 52.21(d) (Significant deterioration of air quality--Review of new sources). This determination was made on the basis of the information listed at Appendix 1.

On July 12, 1976, MBPP, pursuant to this determination, requested from EPA permission to construct the Source. After requesting and receiving additional information, MBPP was notified that its application was complete as of July 24, 1976.

On September 24, 1976, EPA published its preliminary determination to conditionally approve MBPP's request. EPA has thoroughly considered public comments received in response to this notice. All information considered by EPA in its review of MBPP's request is listed at Appendix 2.

II. FINDINGS

On the basis of the information listed at Appendix 2, EPA has determined that:

- 1) MBPP, through application of best available control technology as defined at 40 CFR 52.01(f), can limit emissions from the Source as set forth at III(2) below.
- 2) Such emission limitations, if met, will insure that applicable air quality increments are met.

These findings are based upon the analyses listed at Appendix 3. They are further predicated on the assumption that the only additional sources of air pollution from the Source will be those listed in para-

graph 7 of MBPP's permit application filed on November 19, 1975, with the Wyoming Department of Environmental Quality, and that emissions from these additional sources will be controlled at least to the extent set forth in Attachment D of that application.

On the basis of currently available engineering, design, and operating data, EPA has no substantial reason to doubt MBPP's representation that emissions from the Source will remain within these allowable limits. However, in light of the tentative nature of this data, this permit to construct (III below) is expressly conditioned upon the continuing validity of this representation. By accepting MBPP's claims at this time, EPA does not endorse the methods chosen by MBPP to reduce air emissions.

III. CONDITIONAL PERMIT TO CONSTRUCT AND OPERATE

On the basis of the findings set forth at II above, and pursuant to the authority (as delegated by the Administrator) of 40 CFR 52.21 (d)(2), EPA hereby grants approval to MBPP to commence construction and operate its proposed coal-fired steam electric generating plant near Wheatland, Wyoming (the Source). This approval is expressly conditioned as follows:

1) MBPP shall submit to EPA all information and data it may subsequently receive, including final plans, which relate to the design, engineering, or operation of the Source's sulfur dioxide control system. Such information shall be submitted within five days after MBPP's receipt thereof.

Final plans shall include, at a minimum, a description of the system's operation, major design parameters, and efficiency or emission rate guarantees. Such plans should, in addition, be accompanied by at least one complete copy of all contracts, bids or proposals MBPP plans to accept for the purchase or construction of the system.

Should EPA, in its discretion, determine that MBPP's final plans contain insufficient information to permit an independent evaluation of this system, it shall so notify MBPP within thirty days after receiving the plans. MBPP shall have thirty days thereafter to submit further design, engineering, and operating data. If, after reviewing this further data, EPA determines that there is still insufficient information, or determines that the system will not enable MBPP to meet the emission limits set forth at III(2) below, then this permit to construct and operate shall, upon notification of MBPP, be deemed denied <u>ab initio</u>. Failure by EPA to take such action shall not, however, constitute an endorsement of the methods chosen by MBPP to reduce air emissions; nor shall such failure guarantee that these methods will, in fact, enable MBPP to meet the conditions of this permit.

2) MBPP shall limit emissions from the Source as follows—
a) None of the boilers shall cause to be discharged into the atmosphere any gases which contain particulate matter in excess of 66

grams per second or 0.18 gram per million calories heat input (0.1 pound per million BTU), whichever is less, as measured by the procedures set forth at 40 CFR 60.46.

- b) None of the boilers shall cause to be discharged into the atmosphere sulfur dioxide at a rate exceeding 132 grams per second or 0.37 gram per million calories heat input (0.2 pound per million BTU), whichever is less, as measured by the procedures set forth at 40 CFR 60.46.
- c) The only additional sources of air pollution from the Source will be those listed in paragraph 7 of MBPP's permit application filed with the Wyoming Department of Environmental Quality on November 19, 1975. Emissions from these additional sources shall be controlled at least to the extent set forth in Attachment D of that application.
- 3) Performance tests of the boilers shall be conducted pursuant to the provisions of 40 CFR 60.8 and 60.46. Should MBPP fail to perform these tests, or should the tests indicate that the Source cannot meet the emission limits set forth at III(2) above, then this permit to construct and operate shall, upon notification of MBPP, be deemed denied <u>ab initio</u>. Performance test results which exceed the emission limits of III(2) shall constitute, in any proceeding to enforce the terms of this permit, <u>prima facie</u> evidence that emissions from the Source exceed these limits.
- 4) MBPP shall install, calibrate, maintain, and operate emission and fuel monitoring devises as required by 40 CFR 60.13 and 60.45, except that the following definitions of "excess emissions" supercede the provisions of 40 CFR 60.45(g)-
 - (1) Opacity. Excess emissions are defined as any 6-minute period during which the average opacity of emissions exceeds 20 per cent opacity, except that one 6-minute period per hour of not more than 27 per cent opacity need not be reported.
 - (2) Sulfur dioxide. Excess emissions are defined as any three hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the emission level of 0.37 gram of sulfur dioxide per million calories heat input (0.2 pound per million BTU).
- 5) MBPP shall comply with all notification and record keeping requirements of 40 CFR 60.7, except that (1) the definitions of "excess emissions" set forth at III(4) above supercede those at 40 CFR 60.45(g), (2) written reports of excess sulfur dioxide emissions shall include, in addition to the requirements of 40 CFR 60.7, average hourly coal feed rates and average daily fuel analyses (as fired) at the time or times the excess emissions were measured, and (3) during the first year of operation of the Source, excess emission reports shall be-submitted monthly, not later than 10 days following the end of each calendar month.

Fuel analyses shall be conducted at least once per day, and shall be performed in accordance with the following methods of the American Society for Testing and Materials-

- a) Mechanical Sampling by Method D2234065.
- b) Sample Preparation by Method D2013-65.
- c) Sample Analysis by Method D271-68.

MBPP shall maintain records of fuel analyses for a period of at least two years. Average hourly feed rates for each boiler shall be recorded and maintained for a period of at least two years.

6) MBPP shall develop coal blending techniques and operating procedures, prior to start-up of the Source, which shall be used by Source personnel to ensure that the emission limitations of III(2) are not exceeded. These procedures shall include, at a minimum, special blending procedures to be followed in the event that high sulfur coal is received over an extended period of time, specific criteria which shall trigger the use of these procedures, and procedures to be used in stockpiling (and ensuring an adequate supply of) low sulfur coal.

An up-to-date copy of all such procedures shall be maintained at the Source headquarters for inspection by EPA employees or contractors during normal business hours. These procedures may be modified from time to time, as may be necessary. EPA shall, however, be notified in writing of all such changes.

MBPP shall maintain records of the sulfur content of all coal delivered to dead storage piles for a period of at least two years.

7) Reports of excess sulfur dioxide emissions submitted pursuant to III(5) above or 40 CFR 60.7 shall constitute, in any proceeding to enforce the terms of this permit, <u>prima facie</u> evidence that emissions from the Source exceed the limits set forth at III(2)(b) above.

MBPP shall conduct a performance test of the Source to measure particulate emissions, as specified at 40 CFR 60.8 and 60.46, within 60 days after recording any period of excess opacity emissions as defined at III(4) above. Failure by MBPP to conduct such test, or test results which exceed the emission limits of III(2) above, shall constitute, in any proceeding to enforce the terms of this permit, prima facie evidence that emissions from the Source exceed the limits set forth at III(2) above. The Regional Administrator of EPA may, at his discretion, waive such performance test.

8) No condition herein shall excuse the Source from complying with all provisions of the Wyoming State Implementation Plan. No action of EPA taken pursuant to the terms of this permit shall be deemed a waiver of any of the conditions herein.

IV. GENERAL

This permit is issued in reliance upon the accuracy and completeness of the information set forth in MBPP's application to EPA for permission to commence construction. Notwithstanding the tentative nature of this information, the conditions herein become, upon the effective date of this permit, enforceable by EPA pursuant to any remedies it now has, or may in the future have, under the Clean Air Act. Each and every condition of this permit is a material part hereof, and is not severable.

MBPP has reviewed the terms of this permit and find them to be reasonable in light of the information and representations that have been made available to EPA.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION VIII

By: Mell Regional Administrator
Dated: DEC 2 4 1976
MISSOURI BASIN POWER PROJECT By: Kineral Manage
Dated: Manuary 5, 1977