

ILLINOIS POLLUTION CONTROL BOARD  
July 20, 1978

COMMONWEALTH EDISON COMPANY, )  
 )  
 ) Petitioner, )  
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 )  
 ) v. ) PCB 77-316  
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 )  
 ) ENVIRONMENTAL PROTECTION )  
 ) AGENCY, )  
 )  
 ) Respondent. )

MESSRS. RICHARD E. POWELL and EUGENE H. BERNSTEIN, ISHAM, LINCOLN & BEALE, APPEARED ON BEHALF OF PETITIONER;  
MESSRS. STEPHEN T. GROSSMARK and PATRICK J. CHESLEY, ASSISTANT ATTORNEYS GENERAL, APPEARED ON BEHALF OF RESPONDENT.

OPINION AND ORDER OF THE BOARD (by Mr. Goodman):

On December 1, 1977 Commonwealth Edison Company (Edison) filed its petition for variance from the emission limit for particulate matter applicable to the Kincaid Station until such time as Edison can complete construction of new control equipment. Variance is requested from Rule 203(g)(1)(B) of the Board's Air Pollution Control Regulations (Regulations). Hearing was held in this matter on June 1, 1978; no citizens appeared at the hearing and the Board has received no public comment in this matter.

Kincaid Station is a coal-fired power plant located in Christian County adjacent to Peabody Coal Company's Mine 10, which is the sole supplier of the coal used at Kincaid. In March of 1977 a coal washer was completed at Mine 10 and thereafter only washed coal has been supplied to the Kincaid Station. In addition, all flue gases from the boilers at Kincaid are exhausted through Research-Cottrell electrostatic precipitators into 500 foot stacks. Recent tests have indicated that precipitator efficiency has dropped from the previous 98% removal to no better than 92% removal efficiency. A sulfur dioxide supplemental control system (SCS) at Kincaid has provided extensive ambient monitoring data for particulates.

After exerting extensive efforts to improve the collection efficiency of the existing control equipment, Edison has concluded that the installation of new control equipment is necessary to meet the 0.1 lbs./MBTU limit of Rule 203(g)(1)(B). The new facilities proposed include two new electrostatic precipitators to be operated in tandem with the existing precipitators, and a single new stack through which all the Kincaid flue gases will be vented after treatment by the precipitators. Edison estimates that the construction of the new precipitators and the new stack will cost in excess of \$60 million. Engineering estimates indicate that the new precipitators should be ready for service by October, 1981 and that the new stack should be completed in mid 1979.

Although only washed coal has been received by Edison since March of 1977 an indeterminate amount of unwashed coal is in the storage piles and must be disposed of. Edison estimates that there are approximately 400,000 tons of mixed washed and unwashed coal in storage which they propose to burn on a 50-50 basis with known washed coal until all of the unwashed coal in storage has been utilized. The combination of washed and unwashed coal will yield a maximum particulate emission of 0.4 lbs./MBTU. The washed coal under existing precipitator and stack conditions will yield 0.3 lbs./MBTU and the washed coal utilizing the new precipitator equipment and taller stack will result in an emission of no more than 0.1 lbs./MBTU. Edison therefore requests interim limits of 0.4 lbs./MBTU until the unwashed coal is completely utilized, estimated by Edison to be no later than July 1, 1979. Edison further requests a limitation of 0.3 lbs./MBTU's until October 31, 1981, the target date for operation of the new equipment. Subsequent to November 1, 1981, Edison will be in compliance with the regulations.

Edison alleges that the operation of the Kincaid Station has no adverse impact on total suspended particulate ambient air quality in the area. Consultants retained by Edison to evaluate the impact of particulate emission from Kincaid on ambient air quality reported their conclusions in Exhibits No. 6 and 7. The Consultants concluded that the contribution of the Kincaid Station to existing air quality levels of plant vicinity was very small and that operation of the Station should not threaten or prevent the attainment of the ambient total suspended particulate standards in the plant vicinity (Exhibit 6, p.4). Testimony at the hearing indicated that there would be no problem regardless of the use of 50% unwashed coal (R.72).

Edison alleges that denial of this variance would impose substantial hardships upon Edison and its customers in the form of increased costs or power outages. In order to make up for the loss or derating of the Kincaid units, Edison would have to reserve the right to ask for power from neighboring electric utilities at substantial cost or run the risk of being unable to supply the power requirements of its customers at certain times. In addition, Edison would be faced with replacing Kincaid's output with extended use of higher cost units.

The Agency recommends that Edison be granted variance for Kincaid under certain conditions. As finally constituted, the only condition recommended by the Agency with which Edison differs is that which conditions the variance upon Edison's meeting various interim construction milestones. Edison proposes that it provide reports to the Agency with respect to these milestones and its overall progress toward completion of the required facilities. The Agency, however, recommends a formal compliance program with specific dates for the completion of certain intermediate steps in the installation procedure due to the length and nature of the total compliance program. In addition, the Agency recommends a performance bond in the amount of \$5 million to assure installation of the new particulate control equipment in a timely manner.

The Board finds that under the conditions of the proposed variance the emissions from Kincaid will not prevent attainment or maintenance of air quality standards. The Board further finds that denial of this variance petition would cause arbitrary and unreasonable hardship upon Edison and its customers. The Board will therefore grant Edison variance from Rule 203(g)(1)(B) of the Pollution Control Board Rules and Regulations Chapter 2: Air Pollution as applicable to the Kincaid Station until October 31, 1981 subject to certain conditions. Petitioner is reminded that failure to achieve final compliance with the requirements of the State Implementation Plan or any revision thereto may subject Petitioner to a noncompliance penalty under Section 120 of the Clean Air Act (42 USC Section 7420).

This Opinion constitutes the findings of fact and conclusions of law of the Board in this matter.

ORDER

It is the Order of the Pollution Control Board that:

1. Commonwealth Edison Company be granted variance from Rule 203(g)(1)(B) of the Board's Air Pollution Regulations for its Kincaid facility until

October 31, 1981 subject to the following conditions:

- A. Until March 1, 1979 particulate emissions shall be limited to a rate of no more than 0.4 lbs./MBTU of actual heat input.
- B. From March 1, 1979 until March 1, 1981 emissions of particulate matter from Kincaid Unit No. 1 shall not exceed the rate of 0.3 lbs./MBTU of actual input.
- C. From March 1, 1979 until October 15, 1981 emissions of particulate matter from Kincaid Unit No. 2 shall not exceed 0.3 lbs./MBTU of actual heat input.
- D. Edison shall construct, install and begin operation of new particulate removal control equipment and a new chimney at its Kincaid Station during the term of this variance and shall report its progress to the Agency every three months starting September 1, 1978.
- E. Within 45 days of the adoption of this Order, the Commonwealth Edison Company shall execute and forward to the Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706 a Certification of Acceptance and Agreement to be bound to all terms and conditions of this Order. The 45 day period shall be held in abeyance during any period this matter is being appealed. The form of said certification shall be as follows:

CERTIFICATION

I (We), \_\_\_\_\_ having read and fully understanding the Order of the Illinois Pollution Control Board in PCB 77-316 hereby accept said Order and agree to be bound by all of the terms and conditions thereof.

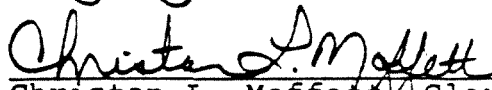
SIGNED \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

2. This variance shall terminate July 1, 1979 if its terms have not previously become part of the Illinois State Implementation Plan under the Federal Clean Air Act.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 20<sup>th</sup> day of July, 1978 by a vote of 5-0.

  
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Christan L. Moffett, Clerk  
Illinois Pollution Control Board