

ILLINOIS POLLUTION CONTROL BOARD
November 6, 1975

SOUTHERN ILLINOIS POWER COOPERATIVE,)
)
 Petitioner,)
)
 v.) PCB 75-352
)
)
 ENVIRONMENTAL PROTECTION AGENCY,)
)
 Respondent.)

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

This case comes before the Board on a Petition for Variance filed by Southern Illinois Power Cooperative ("SIPCO") on September 9, 1975. Variance is sought from Rule 207(a)(4-5), Chapter 2, Pollution Control Board Rules and Regulations, which limits the amount of NO_x from new fuel combustion sources to 0.70 lbs/10⁶ BTU when solid fuel is utilized. An Agency Recommendation to grant the variance was filed on October 30, 1975. No hearing was held.

SIPCO owns and operates an electric power generating facility on The Lake of Egypt in Williamson County, Illinois. Electricity is produced with a 100 MW steam-turbine plant consisting of three 33 MW units with cyclone fired boilers and mechanical collectors with electrostatic precipitators to control particulates. Construction of a fourth unit, with a rated capacity of 175 MW, is planned for the fall of 1975, with completion scheduled for June, 1978. The new facility plans to burn Illinois coal and coal refuse (gob) at not less than 25% by weight of total fuel, in cyclone boilers. As a result of using gob as fuel in the new boilers, SIPCO claims it will be unable to comply with Rule 207(a)(4-5) and is unable to obtain a construction permit from the Agency.

SIPCO has proposed a regulatory modification in Rule 207 as it applies to new sources which would permit the utilization of gob refuse. This proposal, published in Environmental Register No. 110, September 25, 1975, has been designated R75-10. Variance is now sought from the substantive rule to allow initiation of on-site construction after a construction permit is issued.

The Agency Recommendation points out the Illinois new source standard for NO_x tracks the Federal standard. In January, 1975, however, the Federal standard was revised to exempt new sources from the 0.70 lb/10⁶ BTU requirement when such source is burning at least 25% by weight coal refuse (40 FR No. 11, p. 2803). The proposed regulation would adopt this newly promulgated exemption.

SIPCO alleges that to burn gob effectively a cyclone type furnace must be utilized, but that such furnace will not comply with the new source standard. Agency calculations (utilizing AP-42) estimate NO_x emissions from the new unit at 2.75 lbs/10⁶ BUT of NO₂. The difference is attributed to the low level of volatile material in the gob, and abnormally low temperature for a cyclone boiler. An Agency monitor at Marion, eight miles north of the plant, and dispersion modeling indicate no ambient air quality problems. The NO_x annual arithmetic mean at Marion was 0.013 ppm, compared to the standard of 0.05 ppm (100 ug/m³). The combined effect of Units 1-4 is estimated to contribute only 5 ug/m³ to the annual standard. An environmental analysis prepared for SIPCO revealed similarly low concentrations.

The Agency points out that the economic benefit to SIPCO and its instances by burning gob will result in lower electric rates in rural southern Illinois. The Petitioner alleges that numerous deposits of refuse coal materials situated in Southern Illinois are a health and safety hazard, and that the burning of such refuse at SIPCO's facility eliminates these dangers, improves the landscape and enables utilization of the energy contained therein.

On the basis of the facts presented here we find that SIPCO has made out a sufficient case of unreasonable and unnecessary hardship to warrant a variance from Rule 207(a)(4-5). The grant of such a variance will have little detrimental effect on the air quality in Williamson County, will help ease the nation's energy shortage, and help eliminate the hazards associated with gob piles, slush ponds and other coal mining refuse deposits. In granting this variance, however, it is not our intent to indicate a prejudgment of the merits of the regulatory proposal in R75-10. A disposition of that proceeding must wait until after hearings have been held and public comment received.

This Opinion constitutes the Board's findings of fact and conclusions of law.

ORDER

Variance is granted Southern Illinois Power Cooperative from Rule 207(a)(4-5) Chapter 2, Pollution Control Board Rules and Regulations. The length of this variance shall be for one year from the date of this Order, or until the Board acts on R75-10, whichever is sooner. Southern Illinois Power Cooperative shall obtain all necessary permits.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 6th day of November, 1975 by a vote of 4-0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board