ILLINOIS POLLUTION CONTROL BOARD
April 14, 1971

Mt. Carmel Public Utility Company	)	
	)	
v.	)	PCB 71-15
	)	
Environmental Protection Agency	)	

Opinion of the Board (by Mr. Kissel):

On February 1, 1971, the Mt. Carmel Public Utility Company ("Utility") filed a petition for variance with this Board in which it asked the Board to allow it to operate its coal fired boilers in violation of the stack emission standards until the boilers were no longer used for the generation of electricity. Its program for phasing out the boilers was to take 10 years during which time the utility would progressively increase its purchases of power from a neighboring utility to make up for its loss of generated capacity. It was further alleged in the petition that to require the Utility to install any control devices for the particulate emissions, or to install gas conversion units in place of the existing coal fired units, would impose an arbitrary or unreasonable hardship on the utility and the community at large.

In order to properly evaluate the petition for variance a description of the operations of the utility is necessary. The Mt. Carmel Public Utility Company is a private corporation which purchases and produces electrical energy for distribution to some 4600 and purchases natural gas for distribution to some 3600 customers. In addition, it furnishes steam to the Flintkote Company (30,000 pounds per hour). Its service area includes that area in and around Mt. Carmel, Illinois. The utility owns and operates a steam-electric power plant on the Wabash River in the City of Mt. Carmel. It presently has the rated capacity to produce approximately 20 MWe and has the right to purchase an additional 20MWe from the Central Illinois Public Service Company (CIPCo). This firm purchase power is available through a recently installed 69KV interconnection line with CIPCo. While its generating capacity is 20 MWe, in the past few years it has not produced up to this capacity. The greatest production at any one time to date has been 18.2MWe, but in the last two years it has only produced 14.5 MWe at peak times. In order to produce the electricity, the generating station has five coal burning boilers. Two of the boilers, however, are low pressure ones and have not been used for a number of years. The three boilers in normal service have an aggregate maximum capacity for burning 25,130 pounds per hour of coal. Actually, the three boilers burn about 60,000 tons of coal per year. Each of the boilers is equipped with a primitive settling chamber, but not other control devices are present on the stacks.

Financially, the Utility seems rather successful. Its operating revenues are about $2.5 million and in the calendar year of 1970 its net profit was $206,832.44. Of the net profit 65% of it has been paid to the stockholders of the utility and the remainder is used for capital improvements. Approximately 75% of the net income is obtained from the sale of electric power and the balance is realized from the sale of natural gas and steam.

The utility expressed some doubt as to whether this petition for variance should be filed at all. In the words of its attorney, the utility did "not intend to admit that we are committing any pollution." Previously, the Utility did have dealings with the Air Pollution Control Board (Air Board) and the Environmental Protection Agency ("Agency") on this subject. In July, 1967, the Utility filed a Letter of Intent with the Air Board which, according to the testimony of Mr. Baldwin, the Executive Vice-President, indicated that the plant was being operated within permissible stack emission rates. In February of 1970 the utility was advised by the Technical Secretary of the Air Board that the weighted collection efficiency used by the utility in computing its stack emissions should have been 40% instead of the 60% used by the utility. The utility was asked to recalculate the emissions using the 40% weighted collection efficiency, and when this was done, it demonstrated a particulate emission rate of .95 pounds per million BTU input.[1] The regulation applicable to this utility is Section 2-2.53 of the Rules and Regulations Governing Air Pollution which state in part:

> "...However, irrespective of stack height or number of stacks, the maximum allowable emissions for each stack or plant shall be 0.8 pounds of particulate per million BTU input."

On March 25, 1970, the Air Pollution Control Board approved an extension of time for the Utility to September 1, 1970, in which the Utility could file an Air Contaminant Emission Reduction Program (ACERP). This program is provided for in Section 2-2.41 in the Rules and Regulations Governing the Control of Air Pollution and provides for the filing of a specific program of installation of gas cleaning devices, the replacement or alteration of specified facilities "such that emissions of air contaminants are reduced to the levels required by these Regulations." Again on August 11, 1970, the Utility advised the Technical Secretary of the Air Board that it was unable to meet the date for filing an emission control program. Since the Environmental Protection Act had gone into effect on July 1, 1970, the Technical Secretary advised the Utility to file a Petition for Variance. On August 14, 1970, an alleged request for variance was filed with the Agency. The petition was not filed in accordance with the Act, according to the Chief Enforcement Officer of the Agency. Subsequently this Petition

1. A stack test done by the Utility confirmed that the computed .95 lbs/million BTU was accurate.

was filed on February 1, 1970, and that petition forms the basis for this hearing.

A hearing on the petition was held on March 19, 1971, in Mount Carmel, Illinois.

Before discussing the merits of the case, several motions must be considered.

1. The Agency's motion to dismiss--Instead of filing a recommendation with the Board, as is required by the Rules of the Board, the Agency filed a motion to dismiss the petition for variance on the grounds that the Utility did not propose any abatement program which was designed to bring its boilers and stack emissions into compliance with the regulations. The Agency alleged that the petition for variance was merely an "open-ended request to continue air pollution" and that this request was "outrageous". While it is true that the Utility did request in the hearing that controls not be required, it did in its petition state that alternative methods had been considered. The Board assumed that the Utility would, as they did to a slight degree, introduce testimony as to alternative control systems (other than reduced the generating capacity) which could be incorporated on the existing facilities to reduce the emissions from the stack. Since the petition did contain such alternatives, the motion to dismiss was properly denied.

2. The Utility's motion for a continuance--The Utility asked the hearing officer to continue the case because it had not received the recommendations of the Agency regarding what disposition should be made of the Utility's petition. The hearing officer properly denied the motion. It is hard to believe that in this case the petitioner was prejudiced in any way in not having received a formal recommendation from the Agency. In essence the Agency did make a recommendation in its motion to dismiss, that is, the Utility should have detailed control programs other than just reducing its generating capacity. Essentially then, the Utility really knew what the Agency's position was much before the day of the hearing and in this case were not prejudiced by not having received the specific formal recommendation of the Agency called for in the Rules.

3. The Utility's motion upon conclusion of the hearing--On March 26, 1971, the Utility filed a motion challenging the reasonableness of Section 2-2.53 of the Air Pollution Regulations, challenging the constitutionality of Section 9(a) of the Act and challenging the power of the Board under the Act to regulate the conduct of public utilities. All three contentions are without merit and the motion is hereby denied. A discussion as to each contention is necessary. As to the first contention, the Utility stated that section 2-2.53 is unreasonable as applied to this Utility because emission standards, which that section imposes, does not take into account the "rural character" of the area

in which the Utility is located and because emission standards generally are but a "vestigial remain of early attempts by large metropolitan areas containing enormous and compacted populations to control the quality of the air." Section 2-2.53, along with the other parts of the Rules and Regulations for the Control of Air Pollution, were enacted by the Air Pollution Control Board in 1965. Those regulations contain a comprehensive set of emission standards which are applicable throughout the State of Illinois. They distinguish between the urban areas of the State and other areas, in that more stringent rules are made applicable to those areas in the state which are not in Standard Metropolitan Statistical Areas (SMSAs). The very regulation which the Utility questions specifically refers to emissions outside of the SMSAs and therefore on its face recognizes a difference between the large concentrated area and those areas of the State which are not so concentrated. Further, the Utility states that it is located in a rural area. By its own admission, however, it is located in a concentrated population area which has 8096 people according to the 1970 census. The definition of "rural" as used by the Census Bureau belies calling the City of Mt. Carmel a rural area. To be a rural area, under the census definition, the population of the area to be so designated must have less than 2500 people per square mile. Indeed, the City of Mt. Carmel has over 8000 people within its bounds. Finally, as to this point, the Utility makes the point that emission standards do not take into account the air quality in and around the emissions source. Emission standards are not new tools used in fighting air pollution, but they are effective tools. The particular standard found in Section 2-2.53 is based on an ASME publication which takes into account what emission rates can be allowed from one source in order to meet the air quality standard at ground level which would not cause health effects from that source. True, it does not take into account more than one source, but then it shouldn't if it is to adequately protect the public from air pollution hazards. In addition, emission standards are really the fairest standard to apply to any discharger or emitter since they advise him in advance as to the exact amount which he is allowed to discharge in order to comply with the law. If all dischargers meet the emission standards, the air quality needed to protect the public health may be reached and the public will have clean air to breath. In summary then on this point, we find that the emission regulations are in fact reasonable and do apply to the Utility. As to the second contention, the Utility states that Section 9(a) of the Act is "arbitrary, unreasonable and capricious and violates petitioner's rights under the 14th Amendment to the Constitution of the United States and Section 2 of Article II of the Constitution of the State of Illinois." This issue was raised by Granite City Steel Company in a case now pending before the Board. The Board held in a recent opinion denying Granite City's motion to dismiss that Section 9(a) does not violate any constitutional right. EPA v. Granite City Steel Company, PCB 70-34. In that opinion the Board cited the recent ruling of the Illinois Supreme Court which upheld a statute which prohibited pollution and didn't even define the word as it is explicitly defined in the Act. Metropolitan Sanitary District v. U.S. Steel Corp., 41 Ill. 2d 440, 1968. As to the third contention, the Utility

stated that the Illinois Commerce Commission has "exclusive jurisdiction" over the Utility, and therefore, the Utility is not subject to the prohibitions of the Environmental Protection Act. This contention is totally absurd and has not been raised by any other utility which has come before the Board. One need only look to the language of the Environmental Protection Act in its definition of the word "person", which includes any corporation. There are no exemptions in the Act. In fact, Title VI-A of the Act specifically applies to public utilities who wish to build or operate nuclear power generating facilities. If the legislature had intended to exclude utilities from the Act, it would have said so--it didn't.

We can now turn to the merits of the case. In order to sustain its burden of proof the Utility must prove to the Board that compliance with existing regulations would impose an arbitrary or unreasonable hardship. The Board has consistently held that in determining whether there is an arbitrary or unreasonable hardship, it will balance the detriment to the public in allowing the emission source to operate against the benefit to community in allowing the source to continue and the detriment to the petitioner in not allowing it to operate. The balancing will be much in favor of the public interest and will be an equal balance. After reviewing the evidence presented in this case within the parameters of the doctrine of "arbitrary and unreasonable hardship" as defined bythis Board in previous rulings, the petition in this case must be denied.

What the petitioner seeks in this case isreally a license to pollute. It proposes no program for the control of its emissions other than a reduction of the use of its facilities over a period of ten (maybe five) years. It states that it does not have the funds to install control devices which are now technically feasible to control the particulate emissions. Yet, it admits to having a net profit of over $200,000 per year. Even the scanty search by the Utility evidenced that control devices are available at a cost of about $20,000 per year. This seems to be a small cost to bring the Utility's facilities into compliance with what is a reasonable regulation to free the air of dirty pollutants. The Utility argues that if itis required to spend the money it will be required to charge higher rates and therefore will be taken over by the larger utilities. This argument does not take into account the fact that the Utility is now making a substantial profit from its operations--$200,000 with operating revenues of $2.5 million. Perhaps the shareholders of the Utility should share in the supposed burden of paying for the additional facilities, and perhaps the cost will not be transferred directly to the consumers. The money is there, and it should be used to clean up the air.

The Utility argues that it's not polluting the air "very much." It says that it is "only" emitting 0.95 pounds of particulates per BTU of thermal input, and the regulation (Section 2-2.53) requires not more than 0.8 pounds. Actually, the Utility is putting about 300 pounds of particulates into the air each hour it operates its boilers. This is not a minor source of pollution.[1] The Utility is

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1. The Utility had certain air quality tests done in and about its plant. At a sampling station located at the Utility's office building, the average concentration of particulate matter was 82.5 ug/m^3 , and at Mr. Baldwin's home, it was 69.5 ug/m^3, and at the coal pile, concentration was 105.11 ug/m^3. Referring to the Air Quality Criteria for Particulate Matter, the publication of the U.S. Department of Health, Education and Welfare, dated January 1969, the following appears on page 189:

   "g. WHERE CONCENTRATIONS RANGE FROM 80 ug/m^3 to 100 ug/m^3 for particulates (annual geometric mean) with sulfation levels of about 30 mg/cm^2-mo., increased death rates for persons over 50 years of age may occur. (American data; see Chapter 11, Section C-2)

   . . . . . .

   "4. Effects on Materials
   AT CONCENTRATIONS RANGING FROM 60 ug/m^3 (annual geometric mean), to 180 ug/m^3 for particulates (annual geometric mean), in the presence of sulfur dioxide and moisture, corrosion of steel and zinc panels occurs at an accelerated rate. (American data; see Chapter 4, Section B)"

   Based upon this comprehensive work, it has been demonstrated that health effects could occur as a result of the concentrations of particulate matter for those people exposed in and about the office building of the Utility. In addition, there could be, as demonstrated by the document, effects on materials such as corrosion with concentrations about 60 ug/m^3 since the Utility has admitted that there is present in the atmosphere sulfur dioxide.

located on the edge of an urbanized area--an area with over 8000 people. The particulates fall on those 8000 people in the area and should be controlled sooner than 5 or 10 years from now. One group of citizens complained that the particulates from the Utility's operation was bothersome to them. True, there was a letter introduced that these persons at the Mt. Carmel Sand and Gravel Company would not object to the 5-10 year phase out program of the Utility. However, the fact that the people were complaining is clear evidence that the Utility's emissions are affecting people in the area. They are not minor. Yes, the affected people were willing to wait to get control of the emissions, but we are not. The Utility has the money and the technology is available to control the emissions.

As a matter of policy, this Board does not favor the granting of any variances without some definite assurance that the emissions will be controlled by available pollution control devices as soon as possible. Except for cases of "no technology available," this Board must require that those who seek a "shield against enforcement cases" (which is what a variance is) must have a definite program to control the emissions with existing control technology. Phasing a plant out over a 5 to 10 year period does not meet the policy of this Board, especia where the emission source is located in a metropolitan area of the state, where the emission source has been shown to have an effect o people in the area, where control technology is available and where the Utility has the money to buy the control technology.

The Utility argued that if the variance were not granted that employees would lose their jobs and the Flintkote Company would not be able to purchase steam from the facility (because the Utility would have to shut down its boilers). It must be pointed out in this opinion that this Board is not ordering that the Utility close down its operations. We are merely saying that the Utility will not be granted a "shield against an enforcement case" for 5 to 10 years while it phases out the boiler operation. Presumably, if an adequate control program were presented, the Utility could continue its operation as long as it wished. It would be the Utility's choice if it closed down its operation because of the Board's decision in this case. Its choice, if made to close down the facility, would be that the shareholders are not willing to accept the obligation that the facilities should comply with pollution control laws of the state.

The Utility argued that it should be allowed to control pollution by using its "phase out program" because other utilities in the state have been allowed to do this. The utility cited a few examples, over the Agency's objection, where phase out programs may have been allowed by the Illinois Commerce Commission and Air Board. What the Illinois Commerce Commission and Air Board have allowed, or not allowed,

is not relevant to this proceeding. In addition, those proceedings are irrelevant and immaterial to this case since if allowed as ordered here, they would raise all of the collateral issues germane to each of those cases, but not important here. This Board has considered the facts of this case, and finds that the "phase out program" cannot be the basis for the granting of a variance under the Act.

The Petition for variance filed by the Mt. Carmel Public Utility Company is hereby denied.

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

I, Regina E. Ryan, Clerk of the Pollution Control Board, certify that the Board adopted the above opinion this 14th day of April, 1971.