

ILLINOIS POLLUTION CONTROL BOARD

June 13, 1974

CITY OF MASCOUTAH, )  
 )  
 Petitioner, )  
 )  
 vs. ) PCB 74-53  
 )  
 ENVIRONMENTAL PROTECTION AGENCY, )  
 )  
 Respondent. )

William Poston, Attorney for Petitioner  
John Palincsar, Attorney for EPA

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

City of Mascoutah seeks variance from Section 9(a) (air pollution) of the Environmental Protection Act, Rules 103(b)(2) (operating permits) and 104 (compliance programs) of the Air Pollution Control Regulations and Rule 3-3.112 (particulate emissions) of the Rules and Regulations Governing the Control of Air Pollution for two coal fired boilers at its municipal power plant. Petitioner also seeks relief from the Board Order in EPA vs. City of Mascoutah, PCB 72-219 entered on January 16, 1973. In PCB 72-219 Petitioner's two coal fired boilers were the subject of an enforcement action by the Agency. In that action Mascoutah agreed to an order which included the following language:

"2(a) Fuel oil burners for the No. 2 boiler shall be in compliance with all relevant regulations by July 1, 1973 and shall be used prior to said date only for emergency operations when its failure to be in use would curtail electrical services to the City of Mascoutah. In the event such emergency does exist, the City shall notify the Agency within 24 hours after operation as to the extent and nature of the emergency and the circumstances of operation.

(b) Boiler No. 1 shall be in compliance with all relevant regulations by April 1, 1973 and shall

operate prior to said date only when emergency conditions exist as set forth in sub-paragraph (a) above; and subject to the same terms and conditions of notification to the Agency.

(c) Performance bond in the amount of \$40,000 in form satisfactory to the Agency to guarantee performance of the foregoing provisions of this Order shall be filed with the Fiscal Services Division, Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706."

The City now petitions for variance from paragraphs 2(a), 2(b), and 2(c) of the Order.

City of Mascoutah owns and operates an electric power generating station known as the Mascoutah Municipal Power Plant. Electric power generated by this station is the sole source of electricity for the residents, schools and industry of Mascoutah and for a small unincorporated area adjacent to the City. Generating capacity at the power plant is supplied by two coal fired boilers, two steam turbine generators, four diesel engines, and two dual fuel engines as shown in the following table:

| Unit No. | Type             | Nameplate Rating (KW) | Installed | Capability (KW) | Condition                 |
|----------|------------------|-----------------------|-----------|-----------------|---------------------------|
| 1        | Steam Turbine    | 1,500                 | 1967      | 1,500           | Good                      |
| 2        | Steam Turbine    | 2,000                 | 1967      | 2,000           | Good                      |
| 1        | Diesel Engine    | 556                   | 1950      | 556             | Good                      |
| 2        | Diesel Engine    | 556                   | 1950      | 556             | Good                      |
| 3        | Diesel Engine    | 1,136                 | 1958      | 1,136           | Good                      |
| 4        | Dual Fuel Engine | 2,070                 | 1968      | 2,070           | Good                      |
| 5        | Diesel Engine    | 986                   | 1965      | -0-             | Being rebuilt due to fire |
| 6        | Dual Fuel Engine | 2,277                 | 1972      | 2,277           | New                       |

Boilers No. 1 and 2, the subject of this variance are both coal fired boilers. Boiler No. 1 utilizes a baffled settling chamber for controlling particulate emissions while Boiler No. 2 is equipped with a Buell 5-10 Multiclone collector. On February 1, 1973 Boiler No. 1 was subjected to a stack test by an independent testing service. Results of the stack test showed the boiler to be in compliance with applicable Rules and Regulations. Fred Smith, employed by the EPA as Source Emission Expert, recommended acceptance of the results. An operating permit was issued for Boiler No. 1 on June 28, 1973. Boiler No. 2 was issued an operating permit on June 21, 1973 with the condition, however, that coal consumption not exceed 609 lbs./hr.

As required by Part 2(a) of the Order in PCB 72-219 Mascoutah purchased the oil burners for Boiler No. 2. Although it had not been ordered to do so, Mascoutah decided to purchase and install oil burners for Boiler No. 1 at the same time in order to meet the 1975 sulfur emission standards. The coal currently used by the power plant contains 3.44% sulfur.

During an inspection of the power plant in February 1974, an Agency investigator discussed operations of the two boilers with T. W. St. Cyn, power plant superintendent. According to the EPA investigator, St. Cyn said conversion of Boiler No. 1 was about 75% complete but the conversion of Boiler No. 2 had not yet commenced. This information is in conflict with Petitioner's statement made in January 1974 on page 4 of its Petition for Variance that a new fuel oil burner has been installed on Boiler No. 2. St. Cyn told the Agency investigator that all work on the oil conversion had been halted. Petitioner had not informed the Agency in advance of the cessation of conversion efforts.

Petitioner states that in the time between the purchase date and installation of the oil burners, "the availability of fuel oil to the City of Mascoutah became limited as experienced throughout the United States in 1973". Therefore, the City, of its own volition and without notification to the Agency or this Board, decided to postpone the installation of oil burners which had been ordered by the Board.

No reason is given for ignoring the Order to complete the oil conversion of Boiler No. 2 by July 1, 1973 except that Petitioner questions the "practicality" of the installation. This decision by Petitioner is perplexing since Petitioner had previously agreed to the posting of a \$40,000 compliance bond as ordered in Part C of our Order and the City did voluntarily undertake the conversion of Boiler No. 1.

Petitioner was advised by its fuel oil supplier in July 1973 that the supplier would be "unable to supply any additional product for your consumption after the 31st day of July, 1973" (Petitioner Exhibit A). We are not told how much oil will be supplied or what it means not to receive "additional" product. Mascoutah delayed six months after hearing from its supplier before filing for variance.

The Board is well aware of the problems involved in attempts to secure adequate supplies of fuel oil. However, the fuel oil picture has changed considerably since Petitioner received the notification from its fuel oil supplier almost a year ago. At

Paragraph 18 of its Recommendation, the Agency cites a section of the Energy Users Report (No. 39, May 9, 1974) indicating that Petitioner is entitled to 100% of its current requirements pursuant to Federal Energy Office Regulations No. RF-31: 0101.

Peak loading on the utility's distribution system was 6100 KW in 1971, 6900 KW in 1972 and 7050 KW in 1973. A peak load of between 7350 KW and 7500 KW is projected to occur during the summer of 1974. Petitioner states that the total generating capability of the power plant excluding Boiler No. 2 is 8095 KW, only 600 KW greater than the expected peak load for 1974. The City claims that the "firm power" available should be 5818 KW (about 72% of the limited plant capability). Petitioner does not define what it means by "firm power". Diesel Engine No. 5 which experienced an explosion and fire on August 8, 1973 is tentatively projected by Petitioner to be back in operation by June 1, 1974.

In computing the plant capability at 8095 KW Petitioner apparently used the aggregate power capability of Boiler No. 1, both dual fuel engines, and three of the four diesel engines (omitted Diesel No. 5). This 8095 KW figure can be questioned, since Petitioner projects the renewed operations of Diesel Engine No. 5 (thereby adding 986 KW) by June 1, 1974 and states that Boiler No. 1 (1500 KW) "is not in operating condition because of the partially installed fuel oil burner" (Amendment No. 2, page 3).

Further clouding the issue is the Agency calculation that Petitioner's total generating capability absent Boiler No. 2 is 9581 KW (Agency Recommendation, p. 9). This is 500 KW higher than the capability that can be determined by adding the name-plate rating of all units except Boiler No. 2.

Mascoutah is attempting to negotiate a 138 KW electrical interconnect with Illinois Power Company for the purchase of off-peak power "sufficient to carry Mascoutah's peak load (10 MW)". Under this arrangement Petitioner claims that it would be able to economize on normal fuel oil usage and divert the oil thus saved to fuel oil burners on Boilers No. 1 and 2.

The proposed interconnect plan was initiated in December 1965 upon the filing of a complaint by Petitioner with the Federal Power Commission. Petitioner advises that the Federal Power Commission has not yet ruled on the proposed interconnect. Negotiations with Illinois Power have allegedly reached the point of preparation of final contract. Although the Federal Power Commission has not ruled on the proposed interconnect, Petitioner believes such contracts could possibly be executed within 12 months.

Several questions arise on consideration of the proposed interconnect based on information supplied by Petitioner and the Agency. Petitioner contends that the purchase of 138 KWs of off-peak power would be "sufficient to carry Mascoutah's peak load". This peak load is now said to be 10 MW (10,000 KW) whereas Petitioner previously represented the estimated peak load for the summer of 1974 to be 7500 KW. Even if Petitioner could substantiate 2500 KW increase over that previously projected, it is difficult to conceive how a 138 KW additional supply (1.38%) could possibly be construed as "sufficient to carry Mascoutah's peak". Even more confusing is the Agency's figure of 138,000 KW which is 13.8 times the apparently inflated 10,000 KW peak load.

Obviously the Board must deny this variance. There is simply not enough consistent evidence provided from which the Board can determine even the basic facts and issues of this case. Petitioner apparently disregarded our Order in PCB 72-219 and, in so doing, might have created a "self imposed" hardship. There **is no** way to determine whether or not Petitioner has installed the oil burners on Boiler No. 2 since the petition makes one claim and the Agency makes a completely different claim based upon its investigation. If, Petitioner began installing the oil burners on Boiler No. 1 which was already in compliance, rather than on Boiler No. 2 as ordered, then Petitioner has created its own hardship by having Boiler No. 1 out of service for work that should have been performed on Boiler No. 2 by July 1, 1973. Such a course may ultimately jeopardize the \$40,000 performance bond. However, we believe that forfeiture of bond should not be attempted until Mascoutah has had opportunity to review this Opinion and address the questions raised herein.

In the event Petitioner desires to request a variance for Boilers No. 1 and 2 at some time in the future it should carefully note the issues discussed in this Opinion. In particular, Petitioner should prove: a) why it needs a variance for Boiler No. 1 when that boiler is in compliance with the particulate standard and already has an unconditional operating permit until May 1975; b) why Petitioner chose to ignore Part 2(a) of our Order in PCB 72-219 if in fact it has not installed the oil burner on Boiler No. 2; c) whether or not Diesel Engine No. 5 is now operative; d) progress on the power line interconnect negotiations with Illinois Power and how a 138 KW supply would be "sufficient to carry Mascoutah's power load"; e) details of actual quantities of fuel oil received since January 1, 1973 relative to plant requirements; f) Petitioner's attempts to secure additional quantities of fuel oil from sources other than Sun Oil Company; and g) why Petitioner's hardship should not be regarded

as "self imposed" justifying the denial of variance and forfeiture of compliance bond.

If a new variance petition is filed it should be subjected to public hearing. Citizens in the area of the power plant have complained of ash, soot, dirt, grit and fumes emitted from Petitioner's facility. Laundry, automobiles and homes have been affected. These people have the right under Section 9(a) of the Act to be protected from air pollution and this right cannot be ignored. Perhaps a public hearing will assist the parties in developing a better record. The record in the current proceeding is entirely inadequate for the grant of a variance. We find that Petitioner has failed to sustain its burden of proof that compliance with the Act, the Regulations and the Board Order will impose an arbitrary or unreasonable hardship.

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

ORDER

It is the order of the Pollution Control Board that the Petition for Variance filed by City of Mascoutah be denied without prejudice.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order was adopted this 15<sup>th</sup> day of June, 1974 by a vote of 4 to 0.

Christan L. Moffett