

ILLINOIS POLLUTION CONTROL BOARD  
December 20, 1973

VILLAGE OF WINNETKA )  
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 )  
 v. ) PCB 73-338  
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 )  
 ENVIRONMENTAL PROTECTION AGENCY )  
 )

MR. DEAN C. CAMERON and MR. SHELDON A. ZABEL, SCHIFF, HARDIN & WHITE, appeared on behalf of the Village of Winnetka  
MR. KENNETH J. GUMBINER, ASSISTANT ATTORNEY GENERAL, appeared on behalf of the Environmental Protection Agency

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

The Village of Winnetka (Village) filed a Petition for Variance from Rule 3-3.112 of the Rules and Regulations for the Control of Air Pollution (Air Rules) on August 13, 1973 and filed an Amendment to the Variance Petition on October 15, 1973. The Agency filed a Recommendation on December 12, 1973. On September 25, 1973, the Agency filed an Enforcement Action against the Village alleging that the Village had operated its electric generating plant in violation of Rule 3-3.112 of the Air Rules; operated the electric power generation station without an operating permit, in violation of Rule 103(b) of the Air Pollution Control Regulations (Air Regulations); and operated its generating plant in violation of Section 9(a) and 9(b) of the Environmental Protection Act. The Village of Winnetka has filed a waiver of the 90-day decision period until December 20, 1973.

The Village and the Agency filed a joint motion to consolidate the variance petition with the enforcement action on November 7, 1973. The Board denied the motion in an Order entered on November 15, 1973, because the hearing in the variance petition was proceeding on that day. The parties filed a Stipulation for Settlement and an additional motion to consolidate the two actions of November 15, 1973 at the hearing held pursuant to the variance petition. A hearing in the enforcement action was held on November 12, 1973, at which time the parties again submitted the Stipulation for Settlement and filed a motion to consolidate. The Board again denies the motion to consolidate the two cases.

The Village owns and operates an electric generating station known as the Winnetka Electric Plant located at Tower Road and Lake Michigan in Winnetka, Cook County, Illinois. The plant consists of five boilers and four turbines used to generate electricity. All boilers exhaust through a single stack 250 ft. tall. Boiler number 8 is equipped with a multicone type collector, and boilers 4 through 7 are equipped with baffled settling chambers. Boilers 5 through 7 are exclusively coal-fired; boiler 4 may alternately be fired by coal or natural gas; and boiler 8 may be fired by coal or natural gas together or separately. All coal used as a fuel in the Plant, at least since 1971, has been Eastern Kentucky coal, with a sulfur content of less than 1%. Operating data for 1971 and 1972 show that approximately 30% of the power sold by the utility is produced by burning natural gas in the boilers, 30% of the power is provided by an interconnection with the Edison system, and approximately 40% is produced by burning coal. The 17.5 megawatt of gas generating capacity, when combined with the 20 mw of interconnection capacity, should under normal conditions be sufficient to meet the peak demand of 32.25 mw of electricity reached in August, 1972. The Village problem is that natural gas is not always available nor is interconnection power from Edison always available. Therefore, the Village must occasionally burn coal to meet the demand for electricity.

The Village on March 12, 1973, filed an application with the Agency for an operating permit. Following this filing, Agency personnel suggested to the Village that a variance might be needed with respect to boilers 4 through 7, if such boilers were to use coal as a fuel, before an operating permit could be granted. On April 12, 1973, the Village filed a petition with the Board (PCB 73-148) asking for a variance in the event that the boilers 4 through 7 were shown to fail to comply with the applicable emissions standards in a stack emission test program to be conducted by the Village. This petition was dismissed by the Board's Order dated April 17, 1973, as premature because the test had not been conducted and no violation had been established.

On April 25, 1973, the Agency issued a letter denying an operating permit to the Village on the grounds that the Village had failed to prove that the plant had been constructed or modified so as not to cause a violation of the applicable regulations or had been granted a variance. During May and June, 1973, the Village conducted stack emission tests of the boilers while burning coal. These tests indicated that all of the boilers, under certain operating conditions, failed to meet the particulate emission standards of the Air Rules. After the stack emission tests were presented to the City Council, the Village again

applied for a variance on August 13, 1973. On September 25, 1973, the Agency filed a formal complaint alleging that the Village was operating the plant in violation of Air Rule 3-3.112 and operating without an operating permit in violation of Rule 103(b)(2) of the Air Regulations, and Section 9(a) and 9(b) of the Environmental Protection Act.

Emission stack tests conducted by the Village from May 30, through June 8, 1973 showed that while operating each boiler at an extreme energy input rate, the particulate emission rates ranged from 0.5 to 1.75 lb/MBtu input. While the Village has stated that 0.2 lb/MBtu is the appropriate emission limit; the Agency stated in its recommendation that emission rate allowed by Air Rule 3-3.112 is 0.6 lb/MBtu. The allowable emission rate to become effective on January 1, 1974 is 0.2 lb/MBtu. (Rule 203(g), Air Regulation). A citizen appeared at the November 15, 1973 variance petition hearing to read a prepared statement objecting to particulate emissions from the plant. The Board has received one other complaint from a neighboring citizen objecting to particulate emissions.

Paragraph six of the Stipulation states that stack emission tests indicate that all of the boilers, at least under certain operating conditions, fail to meet the particulate emission standards of the Air Rules. These certain conditions are operating each boilers individually while burning coal at the maximum allowable energy input rate. Paragraph eleven of the Stipulation states that the Village has agreed to select an engineering consultant to prepare plans and specifications for the installation of emission control equipment; and at its public meeting on November 6, 1973 adopted the recommendation of its utility committee to maintain its electric generating plant in full operating condition through the installation of control equipment. Paragraph eleven also contains a tentative compliance schedule showing November 3, 1975 as the completion date for the installation of control equipment.

The Village is therefore seeking a variance to burn coal in its existing coal-fired boilers during the times when the supply of natural gas is interrupted and sufficient power is not available by the interconnection system with Commonwealth Edison. The Board will grant the Village a six month variance to operate its plant according to the limitations found in paragraph 12 of the Stipulation as set out in the Order below. The short period for the variance is because the Village did not present modelling data as to particulate levels which will be inflicted upon residents. We do not know if a health hazard is being created or maintained by this grant.

This opinion constitutes the Board's findings of facts and conclusions of law.

ORDER

The Pollution Control Board, hereby grants the Village of Winnetka a variance to exceed the current particulate emission standards found in Rule 3-3.112 of the Air Rules, until May 20, 1974, under the following conditions:

(a) Petitioner shall file a compliance schedule with the Agency before March 15, 1974;

(b) That Petitioner shall apply to the Agency for all necessary permits;

(c) That by January 15, 1974, Petitioner shall submit a performance bond in the amount of \$25,000 in a form approved by the Agency. Said bond shall ensure completion of Petitioner's control program and compliance with Rules 3-3.112 and 203(g) by installing the necessary control or interconnection equipment.

(d) That Petitioner be allowed to burn coal as a fuel only during the following situations:

1. When neither purchase power from the interconnection with Commonwealth Edison nor gas fuel for boilers #4 and #8 is available in sufficient quantity to supply needs of the community.
2. When purchase power from the interconnection, on an interruptible or demand basis, is available, but gas fuel for boilers #4 and #8 is not available, and Village requirements exceed the 20,000 KW of maximum demand available in the contract with Commonwealth Edison (Exhibit A of Variance Petition) and exceed any additional power available from Edison.
3. When gas, as a fuel, is not available, and it is necessary to bank boilers and/or to heat the generating plant. Coal usage, under these circumstances, must not exceed 3% of rated fuel input.
4. When, as the result of an emergency, as defined in Petitioner's contract with Edison (Exhibit A of Variance Petition), in the Commonwealth interconnection system, a contribution of power to the interconnect system from

the Village system is required, and gas fuel is not available for boilers #4 and #8 to the extent required and necessary Village requirements plus system requirements exceed the capacity of boilers #4 and #8.

5. When total capacity tests are required by the inter-connecting utility pursuant to Petitioner's contract with CECO (Exhibit A of Variance Petition).

6. When there is an equipment or system failure which results in a requirement for power generation by the city.

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 20<sup>th</sup> day of December, 1973 by a vote of 5-0.

  
Christan L. Moffett, Clerk  
Illinois Pollution Control Board