

ILLINOIS POLLUTION CONTROL BOARD  
February 2, 1978

ILLINOIS POWER COMPANY, (Baldwin Station)	)	
	)	
	)	
Petitioner,	)	
	)	
	)	
v.	)	PCB 75-109
	)	
	)	
ENVIRONMENTAL PROTECTION AGENCY,	)	
	)	
	)	
Respondent.	)	

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

The original Petition for Variance in this matter was filed with the Board on March 7, 1975 by Illinois Power Company (IPC) for its Baldwin Station located near the town of Baldwin, Randolph County, Illinois. The latest amendment to the petition for variance was filed on October 12, 1977 and supersedes all prior pleadings herein. No hearing was held in this matter, and no public comment has been received by the Board.

Baldwin Station consists of three coal-fired boilers. Two boilers have a rated heat input of 5,788 million btu and are fired with cyclone burners; the other boiler has a rated heat input of 6,050 million btu and is fired with pulverized coal. Each boiler discharges through a separate 605 foot stack. Coal analysis indicates a heat content of 10,477 btu/lb. with an ash content of 11.26% and a sulfur content of 2.97%. Boilers No. 1 and No. 2, which were on-line in late 1974, have hourly emission rates of about 30,000 pounds per hour at full load. Total sulfur dioxide emission expected from the three boilers is about 96,000 pounds per hour. The allowable sulfur dioxide emission rate pursuant to Rule 204(e) for Baldwin is 81,340 pounds per hour. Review of air quality data supplied to the Illinois Environmental Protection Agency (Agency) by IPC and the Agency's own monitoring data from stations near the plant have not shown any violation of air quality standards. No resident complaints have been received by the Agency with respect to Baldwin.

Baldwin is presently installing an intermittent control system (ICS) consisting of eleven monitors installed in a ring around the plant to monitor sulfur dioxide emissions, and a 100 foot meteorological tower erected at the plant. The data from the monitors in the tower are to be transmitted to Environmental Research and Technology, Incorporated (ERT) at Lombard, Illinois, consultants for IPC. The purpose of the ICS system is to predict if and when Baldwin station emissions threaten to breach ambient air quality standards, at which time Baldwin would lower emissions by shifting part of the load to other stations or substituting a lower sulfur content coal at the boilers at Baldwin.

IPC has investigated permanent methods of control of sulfur dioxide emissions, including installation of a flue gas desulfurization system (scrubber) on one of the units in order to bring the complex within the limits of Rule 204(e), use of washed Illinois coal to achieve a total sulfur content low enough to meet the emission regulations, and the use of enough low sulfur western coal to enable the plant to meet the emission limitations. IPC alleges that, since all three of the methods investigated entail considerable expenditures of money and energy to meet the emission limitations of Rule 204(e) and since a regulation currently before the Board, R75-5, may affect Baldwin station if enacted, it would be an arbitrary and unreasonable hardship to force Baldwin to make a decision concerning sulfur control at this time.

The Board notes that a decision in R75-5 is imminent. There does not appear to be a serious environmental problem in the area surrounding the Baldwin plant due to the emission of sulfur dioxide. Baldwin requests a temporary emission level roughly 25% above the current limitation of 204(e), and should be in a position to predict and head-off any excursions above ambient air quality standards for SO<sub>2</sub> at the station using its ICS system. Under the conditions in this case, the Board finds that everyone concerned would be best served if Baldwin's compliance program was delayed until resolution of R75-5. The Board will therefore grant variance from May 30, 1975 until resolution of R75-5 or until June 1, 1979 whichever first occurs, under certain conditions. The Board notes that the granting of this variance does not signify approval of an ICS system as such but rather indicates the interest of the Board in results generated by such an experimental procedure.

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

ORDER

It is the Order of the Pollution Control Board that Illinois Power Company be granted variance from Rule 204(e) of the Board's Air Pollution Control Regulations from May 30, 1975 until the resolution of R75-5 or June 1, 1979 whichever first occurs, under the following conditions:

1. The aggregate emissions from Baldwin Power Plant shall at no time exceed 101,966 pounds of sulfur dioxide per hour.
2. The rate of emissions from Baldwin Power Plant shall not exceed 6 pounds of sulfur dioxide per million btu's of heat input in accordance with methods outlined in Rule 204 (g) (3) of the Board's Air Pollution Control Regulations.
3. Illinois Power Company shall install an intermittent control system at the Baldwin plant to be completed no later than April 1, 1978.
4. Following installation of its intermittent control system, Illinois Power Company shall submit its monitoring data in monthly reports to the Environmental Protection Agency.
5. Within 45 days of the adoption of this Order, the Illinois Power Company shall execute and forward to both the Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706 and the Pollution Control Board 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 75-109 hereby accept said Order and agree to be bound by all of the terms and conditions thereof.

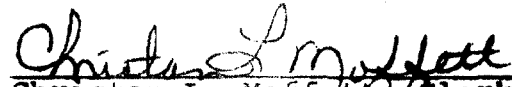
SIGNED \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

Mr. Dumelle concurs.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 2<sup>nd</sup> day of February, 1978 by a vote of 5-0.

  
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Christan L. Moffett, Clerk  
Illinois Pollution Control Board