ILLINOIS POLLUTION CONTROL BOARD April 19, 1984

CENTRAL ILLINOIS LIGHT COMPANY)
(Edwards Station),)

Petitioner,)

v.) PCB 83-100

ILLINOIS ENVIRONMENTAL PROTECTION)
AGENCY,)

Respondent.)

MR. SHELDON A. ZABEL OF SCHIFF, HARDIN & WAITE APPEARED FOR PETITIONER;

MS. BOBELLA GLATZ, ATTORNEY AT LAW, APPEARED FOR RESPONDENT;
OPINION AND ORDER OF THE BOARD (by B. Forcade):

This matter comes to the Board upon a Petition filed July 28, 1983, by Central Illinois Light Company ("CILCO") concerning the E.D. Edwards ("Edwards") electric generating station. That petition seeks, pursuant to 35 Ill. Adm. Code 106.302(a), to have the sulfur dioxide ("SO2") emission limitations applicable to Edwards relaxed. Hearing was held October 19, 1983 at the Peoria County Courthouse. On October 25, 1983 the Environmental Protection Agency ("Agency") filed its recommendation opposing relaxation of Edwards SO2 limitation. Post hearing briefs were filed by CILCO on December 27, 1983 and by the Agency on January 27, 1984. Six public comments were received by the Board. On March 19, 1984, the Agency filed a motion for leave to file a reply brief. On March 27, 1984, CILCO filed a response in opposition. The Agency's motion is granted, the brief is accepted.

CILCO seeks relief from the SO₂ emission limitations of Old Board Rule 204(g) of Chapter 2 (Air²Pollution) which, since codification, is now 35 Ill. Adm. Code 214.201. The regulations of concern in this proceeding are as follows:

| 35 Ill. Adm. Code Section | Former Rule No. | Substance |
|---------------------------|------------------------------|---|
| 106.301 et seq. | Procedural Rules Rule 621 | Procedures for obtaining relaxed SO ₂ emission limitations |
| 214.141 | Chapter 2 Rule 204(c) | 1.8 lbs. SO ₂ /MM Btu emission limitation |

214.201 Chapter 2 Standards for obtaining relaxed SO₂ emission limitations

243.122 Chapter 2 Ambient SO₂ standards Rule 308

The Facility

The Edwards Station is located on the Illinois River in the Peoria Major Metropolitan area. It consists of three boilers and attendant electric generating units. Units 1, 2 and 3 have, respectively, name plate ratings of 136 megawatts (MW) 280 MW and 363 MW. The maximum heat input of each of the units, in millions of Btus per hour (MMBtus/hr.) is, respectively, 1258 MMBtus/hr., 2605 MMBtus/hr. and 3276 MMBtus/hr. Units 1 and 2 dicharge through a common stack 503 feet in height. Unit 3 discharges through a separate stack also 503 feet in height. All three units are coal-fired and currently use exclusively non-Illinois coal in order to meet the Board's applicable sulfur dioxide emission limitation of 1.8 pounds/MMBtu (Pet. ¶ 1).

CILCO proposes to replace approximately 850,000 tons of non-Illinois coal (approximately 0.79% sulfur) with Illinois coal (approximately 3.5% sulfur) (Pet. ¶ 10). To accomplish this CILCO requests an SO₂ emission limitation of 6.6 pounds/MMBtu for Units 1 and 3, leaving the existing 1.8 pounds/MMBtu limitation for Unit 2 unchanged. CILCO also proposes the use of a 30 day rolling average for determining coal variability.

To evaluate the environmental impact of the requested change, CILCO accomplished the necessary modeling and analytical work. The results of that study (Ex. 3) show that with the relaxed limitations the Edwards Station SO₂ emissions would contribute from 3.3% to 8.6% to 12 predicted violations of the 24 hour National Ambient Air Quality Standard which the Board has adopted in Section 243.122(a)(2) (Ex. 3, p. ii).

Discussion

In Section 9.2 of the Environmental Protection Act ("Act") the General Assembly provided for the review, and where necessary the revision, of SO₂ emission limitations, "to enhance the use of Illinois coal, consistent with the need to attain and maintain", ambient SO₂ standards. In Section 214.201 the Board provided for alternative SO₂ emission limitations where the applicant demonstrates that, "the proposed emission rate will not, under predictable worst case conditions, cause or contribute to a violation of any applicable primary or secondary sulfur dioxide ambient air quality standard or of any applicable prevention of significant deterioration increment." Since the emission rate requested by CILCO (6.6 pounds SO₂/MMBtu) is below the maximum authorized in the rule (6.8), the Board must focus on the impact of the requested emissions.

CILCO's modeling of the impact of emissions from Edwards at the requested emission levels showed no violations of the 3-hour SO₂ ambient standards. However, that modeling showed a total of 17 violations of the 24-hour SO₂ ambient standard (Ex. 3, p. ii). Edwards made no contribution to five of the violations (R. 27). Edward's contribution to the remaining 12 violations ranged from 3.3 to 8.6% of the predicted concentration (R. 28). CILCO asserts that: (1) Edwards is a minor contributor to the 12 violations, WABCO Construction and Bemis Company are the primary contributors, (2) predicted violations will occur even if Edwards remains at existing emission levels, and (3) four predicted violations would occur even if Edwards did not exist (R. 28).

While the Agency generally concurs that the requested emissions would cause or contribute to violations, they claim the Specifically modeling inadequately assesses the impact (R. 160). the model used the lower emission limits set in new permits for two Caterpillar facilities, but Caterpillar has appealed those permits (R. 159), also, the model used an incorrect emission limitation for CILCO's Wallace Station, one substantially lower than currently allowable (R. 102 b). CILCO agrees this could produce additional predicted violations if factored into the modeling (R. 198). Based on these undisputed facts, the Board finds that the emission limitation requested by CILCO would cause or contribute to violations of the 24-hour ambient air quality standard for SO, and would prevent the attainment and maintenance of the National Ambient Air Quality Standards for SOg.

CILCO argues that the proposed Edwards contribution to the predicted violations is so small it should be ignored and that the failure of the State of Illinois to correct the air quality problems in the Peoria area is an inadequate justification for denying CILCO relief to which it would otherwise be entitled (Post Hearing Brief, p. 12-13, 19). Both arguments must be rejected. The Board holds that a contribution of from 3.3% to 8.6% to 12 predicted violations is not de minimus. Any other holding could jeopardize correcting a problem caused by many minor contributors. Secondly, the violation of ambient air quality standards in the Peoria area is a complex problem with major economic overtones. The fact that a problem is complex and solutions are expensive is very poor justification for actions that will exacerbate that problem. Having decided that CILCO's request fails the statutory and regulatory standard, the Board need not reach the averaging issue.

The Board is aware that granting this petition would likely result in increased Illinois coal usage of about 850,000 tons annually, creating direct benefits to the State of 200 to 300 new jobs and additional revenues of over \$20 million (Illinois Coal Assn. Comment, p. 3). However, these facts do not remove the undisputed predictions of violations of ambient air quality. The statute and regulations forbid such violations. This proceeding

has clearly raised problems associated with the Peoria area SO₂ situation that cannot be resolved in this case. Both sides made assertions concerning existing or potential inequities and problems of future growth resulting from the permit process, Board regulations, air allocations, attainment vs. non-attainment, etc. The Board, even if it accepted the merits of these assertions, would not solve the problems by exacerbating existing air violations. Proposals for solutions from industry and the Agency, singly or together, would be welcomed by the Board.

As the facts found by the Board are not consistent with the statutory or regulatory requirements, CILCO's request for a site-specific regulation of SO₂ emissions under Sections 106.301 and 214.201 will be denied.

ORDER

Central Illinois Light Company's request for site-specific sulfur dioxide emission limitation of 6.6 pounds of SO /MMBtu for the E.D. Edwards Station is hereby denied.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 19 day of April , 1984 by a vote of

Christan L. Moffett//Clerk

Illinois Pollution Control Board