

ILLINOIS POLLUTION CONTROL BOARD
January 23, 2003

IN THE MATTER OF:)
)
PETITION OF CENTRAL ILLINOIS LIGHT) R02-21
COMPANY (E.D. EDWARDS) (Site-Specific
GENERATING STATION) FOR A) Rulemaking – Air
SITE-SPECIFIC AIR REGULATION:)
35 ILL. ADM. CODE 214.561)

Proposed Rule. First Notice.

OPINION AND ORDER OF THE BOARD (by T.E. Johnson):

This matter comes before the Board upon a proposal for site-specific rulemaking filed by Central Illinois Light Company (E.D. Edwards Generating Station) (CILCO) pursuant to Section 27 of the Illinois Environmental Protection Act (Act). 415 ILCS 5/27 (2000). CILCO operates the E.D. Edwards Generating Station (facility) located near Peoria in Peoria County. Specifically, CILCO requests a site-specific sulfur dioxide emissions limit Boiler #2 at its facility. A hearing in this matter was held on October 11, 2002.

By today's action the Board adopts the proposed amendments for the purpose of first notice, pursuant to the Illinois Administrative Procedure Act (5 ILCS 100/1-1). The proposal will be published in the Illinois Register whereupon a 45-day public comment period will begin during which interested persons may file additional public comments with the Board.

BACKGROUND

CILCO's facility consists of three coal-fired boilers. Boilers 1 and 3 are subject to a sulfur dioxide (SO₂) emissions limit of 6.6 pounds per million British thermal units (lb/mmBtu) under a site-specific rule at 35 Ill. Adm. Code 214.561. Boiler 2 is subject to a SO₂ emissions limit of 1.8 lb/mmBtu under 35 Ill. Adm. Code 214.141. CILCO received a variance from 35 Ill. Adm. Code 214.141 in a Board order issued on April 15, 1999. *See Central Illinois Light Company v. IEPA*, PCB 99-80 (Apr. 15, 1999). Under the conditions of the variance, CILCO was granted an average station-wide SO₂ emission limit of 4.71 lbs/mmBtu over all three boilers with a maximum SO₂ limit of 6.6 lbs/mmBtu for each boiler. The variance further provides that boiler 2 is not required to meet the 1.8 lb/mmBtu SO₂ limit, and is effective through July 31, 2003.

CILCO seeks to make permanent the relief it was granted in PCB 99-80 by amending 35 Ill. Adm. Code 214.561 with respect to the requirements for the operation of Boiler 2. CILCO requests that the Board repeal the text of 35 Ill. Adm. Code 214.561 and replace it verbatim with text from the variance order of April 15, 1999. *See CILCO*, PCB 99-80 slip op. at 8-9. The Board has previously incorporated by reference the record of PCB 99-80.

Specifically, CILCO requests that Section 214.561 read as follows:

Sulfur dioxide emissions from Boiler Nos. 1, 2, and 3 at the Edwards Station may not exceed the limits listed below. CILCO must determine compliance with these limits on a daily basis using the sulfur dioxide methodology of the Phase II Acid Rain Program set forth in 40 C.F.R. Part 75.

- a. The average sulfur dioxide emissions from Boiler Nos. 1, 2, and 3, as a group may not exceed 4.71 pounds per million British thermal units (lb/mmBtu) of actual heat input;
- b. The average sulfur dioxide emissions from any one boiler may not exceed 6.6 lb/mmBtu of actual heat input; and
- c. Sulfur dioxide emissions for all three boilers, as a group, may not exceed 34,613 pounds per hour, on a 24-hour average basis.

PRELIMINARY MATTERS

On November 8, 2002, CILCO filed a motion for leave to file a comment *instanter*, accompanied by the comment by Sandy Isbell. In the motion, CILCO represents that it did not receive the transcript from the hearing in order to timely file its written comment, and that the Illinois Environmental Protection Agency (Agency) had no objection to the late filing.

The motion for leave to file the comment *instanter* is granted, and the comment of Sandy Isbell is accepted.

HEARING

A hearing in this matter was held on October 11, 2002, at 202 N.E. Madison in Peoria. Both CILCO and the Agency appeared and participated. No members of the public attended the hearing. At the hearing, Mark Davis and Sandy Isbell submitted written and oral testimony for CILCO. Robert J. Kaleel presented written and oral testimony for the Agency. The aforementioned comment by Sandy Isbell, was the only public comment received.

CILCO Testimony

Sandy Isbell

Isbell is responsible for fuel analysis and safety at the facility. Isbell at 2.¹ Her primary responsibilities are to procure all energy-producing fuels (excluding natural gas) and the

¹ The written testimony of Sandy Isbell will be cited as "Isbell at ___."; the written testimony of Mark Davis will be cited as "Davis at ___."; the written testimony of Robert Kaleel will be cited as "Kaleel at ___."; the transcript will be cited as "Tr. at ___."

transportation of these fuels for the facility. *Id.* She has worked in the fuels area for over 17 years. *Id.*

Isbell testified that CILCO's fuel costs have been significantly lower as a result of the variance relief, and will continue to be significantly lower if permanent relief is granted. Isbell at 2. Isbell testified that, based on actual coal prices CILCO has negotiated in the past, the actual cost savings will be between \$1,298,111 and \$3 million. Isbell at 8. She testified that having relief on boiler number 2 allows CILCO to utilize their lowest cost coal. Tr. at 20.

Mark Davis

Davis is employed by CILCO, and is responsible for environmental science and compliance at the facility. Davis at 1. He testified that boilers 1 and 3 have historically been subject to a SO₂ emission limit of 6.6 lb/mmBtu pursuant to 35 Ill. Adm. Code 214.561, and that boiler 2 has been subject to a SO₂ emission limit of 1.8 lb/mmBtu pursuant to 35 Ill. Adm. Code 214.141. Davis at 2. He testified that emissions from all three boilers collectively are subject to an overall plant-wide SO₂ emission limit of 34,613 lbs/hr established to ensure protection of the National Ambient Air Quality Standards (NAAQS) for SO₂ under 35 Ill. Adm. Code 214.561. *Id.*

Davis testified that the 1.8 lb/mmBtu limit on SO₂ emissions from boiler 2 put CILCO at a competitive disadvantage, and that without permanent relief, CILCO will once again be at a competitive disadvantage. Davis at 4. Davis testified that the purpose of the variance relief was to provide CILCO with operational flexibility, and did not result in any significant adverse effects on air quality. Davis at 5. He testified that there was no increase in allowable SO₂ emissions from the facility as a result of the variance, and that SO₂ emissions actually decreased by approximately 20 percent. *Id.* Further, he testified that under the proposed site-specific rulemaking, the 34,613 lbs/hr plant-wide limit remains unchanged. *Id.*

Davis testified that he has reviewed the potentially applicable federal regulations and provisions of the Clean Air Act and has determined that the requested relief, the use of higher sulfur coal in boiler 2, would not be inconsistent with any federal law or regulation. Davis at 8. He testified that compliance through the installation of desulfurization equipment such as a scrubber would exceed 40 million dollars, and would be economically infeasible. Tr. at 25. He testified that it would also be technically infeasible due to space limitations at the facility. Tr. at 25.

Agency Testimony

At hearing, the Agency recommended that the Board adopt CILCO's proposal. Tr. at 15. Kaleel is the manager of the Air Quality Modeling Unit in the Division of Air Pollution Control, Bureau of Air at the Agency. Kaleel at 1. He is responsible for overseeing the development of dispersion modeling analyses to support various regulatory proposals, and has supervised the Agency's review of the technical information submitted in support of CILCO's proposal. *Id.*

Kaleel testified that the facility is also subject to a plant-wide SO₂ emissions limit of 34,613 lb/hr, and that CILCO will continue to comply with the emissions limit so the proposed rule change will not result in an increase in plant-wide emissions. Kaleel at 2. Kaleel testified that the Agency has concluded that the air quality demonstration provided by CILCO in support of the original variance request is still adequate to demonstrate that the air quality standards for SO₂ will not be exceeded as a result of the proposed emissions change at the facility. Kaleel at 3-4.

Kaleel testified that there have been no violations of the SO₂ NAAQA in the Peoria area in more than 20 years. Kaleel at 4. He concluded by testifying that the Agency agrees the proposed site-specific rule change is appropriated. *Id.*

DISCUSSION

The Board may adopt regulations specific to individual persons or sites. In promulgating regulations under the Act, the Board shall take into consideration the physical conditions and character of the surrounding areas, the nature of existing air quality as well as the technical feasibility and economic reasonableness of reducing the pollution. *See* 415 ILCS 5/27 (2000).

Both CILCO and the Agency testified that no violations of the SO₂ NAAQA in the Peoria area have occurred in over 20 years, and that CILCO's facility will remain subject to the same plant-wide emissions limit it currently must meet if the Board adopts the proposal. CILCO has testified that compliance with the existing standard would not be technically feasible or economically reasonable, and that the proposal is consistent with federal regulations.

The Board finds that CILCO has presented information indicating that its compliance with 35 Ill. Adm. Code 214.141 for boiler 2 is not economically reasonable or technically feasible. In addition, CILCO has presented evidence regarding the nature of existing air quality and consistency with federal regulations. Therefore, the Board will proceed with the language for a site-specific rule proposed by CILCO.

CONCLUSION

Based on the record developed to date in this matter, the Board finds that adoption of CILCO's proposed site-specific rule for the purposes of first notice is warranted.

ORDER

The Board directs the Clerk to cause the filing of the following with the Secretary of State for first-notice publication in the *Illinois Register*.

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS
FOR STATIONARY SOURCES

PART 214
SULFUR LIMITATIONS

SUBPART A: GENERAL PROVISIONS

Section	
214.100	Scope and Organization
214.101	Measurement Methods
214.102	Abbreviations and Units
214.103	Definitions
214.104	Incorporations by Reference

SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES

Section	
214.120	Scope
214.121	Large Sources
214.122	Small Sources

SUBPART C: EXISTING SOLID FUEL COMBUSTION EMISSION SOURCES

Section	
214.140	Scope
214.141	Sources Located in Metropolitan Areas
214.142	Small Sources Located Outside Metropolitan Areas
214.143	Large Sources Located Outside Metropolitan Areas

SUBPART D: EXISTING LIQUID OR MIXED FUEL COMBUSTION EMISSION SOURCES

Section	
214.161	Liquid Fuel Burned Exclusively
214.162	Combination of Fuels

SUBPART E: AGGREGATION OF SOURCES OUTSIDE METROPOLITAN AREAS

Section	
214.181	Dispersion Enhancement Techniques
214.182	Prohibition
214.183	General Formula
214.184	Special Formula
214.185	Alternative Emission Rate
214.186	New Operating Permits

SUBPART F: ALTERNATIVE STANDARDS FOR SOURCES INSIDE METROPOLITAN
AREAS

Section	
214.201	Alternative Standards for Sources in Metropolitan Areas
214.202	Dispersion Enhancement Techniques

SUBPART K: PROCESS EMISSION SOURCES

Section	
214.300	Scope
214.301	General Limitation
214.302	Exception for Air Pollution Control Equipment
214.303	Use of Sulfuric Acid
214.304	Fuel Burning Process Emission Source

SUBPART O: PETROLEUM REFINING, PETROCHEMICAL AND CHEMICAL MANUFACTURING

Section	
214.380	Scope
214.381	Sulfuric Acid Manufacturing
214.382	Petroleum and Petrochemical Processes
214.383	Chemical Manufacturing
214.384	Sulfate and Sulfite Manufacturing

SUBPART P: STONE, CLAY, GLASS AND CONCRETE PRODUCTS

Section	
214.400	Scope
214.401	Glass Melting and Heat Treating
214.402	Lime Kilns

SUBPART Q: PRIMARY AND SECONDARY METAL MANUFACTURING

Section	
214.420	Scope
214.421	Combination of Fuels at Steel Mills in Metropolitan Areas
214.422	Secondary Lead Smelting in Metropolitan Areas
214.423	Slab Reheat Furnaces in St. Louis Area

SUBPART V: ELECTRIC POWER PLANTS

Section	
214.521	Winnetka Power Plant

SUBPART X: UTILITIES

Section	
214.560	Scope
214.561	E. D. Edwards Electric Generating Station
214.562	Coffeen Generating Station
Appendix A	Rule into Section Table
Appendix B	Section into Rule Table
Appendix C	Method used to Determine Average Actual Stack Height and Effective Height of Effluent Release
Appendix D	Past Compliance Dates

AUTHORITY: Implementing Section 10 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111 1/2, pars. 1010 and 1027)

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 204: Sulfur Emission Standards and Limitations, R71-23, 4 PCB 191, filed and effective April 14, 1972; amended in R74-2 and R75-5, 32 PCB 295, at 3 Ill. Reg. 5, p. 777, effective February 3, 1979; amended in R74-2, R75-5, 38 PCB 129, at 4 Ill. Reg. 28, p. 417, effective June 26, 1980; amended in R78-17, 40 PCB 291, at 5 Ill. Reg. 1892, effective February 17, 1981; amended in R77-15, 44 PCB 267, at 6 Ill. Reg. 2146, effective January 28, 1982; amended and renumbered in R80-22(A), at 7 Ill. Reg. 4219, effective March 28, 1983; codified 7 Ill. Reg. 13597; amended in R80-22(B), at 8 Ill. Reg. 6172, effective April 24, 1984; amended in R84-28, at 10 Ill. Reg. 9806, effective May 20, 1986; amended in R86-31, at 12 Ill. Reg. 17387, effective October 14, 1988; amended in R86-30, at 12 Ill. Reg. 20778, effective December 5, 1988; amended in R87-31 at 15 Ill. Reg. 1017, effective January 15, 1991; amended in R02-21 at 27 Ill. Reg. _____, effective _____.

Section 214.561 E. D. Edwards Electric Generating Station

~~Units 1 and 3 at the E. D. Edwards Electric Generating Station shall not exceed 6.6 pounds of sulfur dioxide per mmBtu of actual heat input (2,838 nanograms per joule). Aggregate emissions from the E. D. Edwards Electric Generating Station on a 24-hour average basis shall not exceed 34,613 pounds of sulfur dioxide per hour.~~

~~(Source: Added at 10 Ill. Reg. 9806, effective May 20, 1986)~~

Sulfur dioxide emissions from Boiler Nos. 1, 2, and 3 at the Edwards Station may not exceed the limits listed below. CILCO must determine compliance with these limits on a daily basis using the sulfur dioxide methodology of the Phase II Acid Rain Program set forth in 40 C.F.R. Part 75.

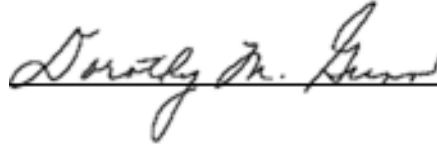
- a The average sulfur dioxide emissions from Boiler Nos. 1, 2, and 3, as a group may not exceed 4.71 pounds per million British thermal units (lb/mmBtu) of actual heat input;
- b The average sulfur dioxide emissions from any one boiler may not exceed 6.6 lb/mmBtu of actual heat input; and

- c Sulfur dioxide emissions for all three boilers, as a group, may not exceed 34,613 pounds per hour, on a 24-hour average basis.

(Source: Amended at _____, effective _____)

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on January 23, 2003, by a vote of 5-0.

A handwritten signature in cursive script, reading "Dorothy M. Gunn", written over a horizontal line.

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board