ILLINOIS POLLUTION CONTROL BOARD
September 22, 1988

IN THE MATTER OF:	)	
	)	
PETITION TO AMEND 35 ILL.	)	
ADM. CODE PART 214, SULFUR	)	R86-31
LIMITATIONS (CIPS Coffeen	)	
Generating Station)	)	
	)	

ADOPTED RULE. FINAL ORDER.

OPINION AND ORDER OF THE BOARD (by J. Marlin):

This matter comes before the Board on a regulatory proposal filed by Central Illinois Public Service Company (CIPS) on July 21, 1986. Through its proposal, CIPS is seeking relief for its Coffeen Generating Station (Coffeen) from the requirement of 35 Ill. Adm. Code 214.184, which establishes an emission limitation for sulfur dioxide (SO_2) in any one hour. Section 214.184 imposes an emission limit on Coffeen of 55,555 pounds (lbs.) of SO_2 in any one hour. CIPS is proposing that Coffeen be exempt from that standard and instead be subject to emission standards of 65,194 lbs. of SO_2 in any one hour and 7.29 lbs. of SO_2 per million British Thermal Units (mmbtu) of heat input. The Illinois Environmental Protection Agency (Agency) neither opposes nor supports CIPS's proposal. (R. 85).

On May 19, 1988, the Board proposed, for a second time, a rule for First Notice in this matter. The proposed rule was published in the Illinois register on June 3, 1988. 12 Ill. Reg. 9337.

After the June 3rd publication date, the Board received only one public comment. The Department of Commerce and Community Affairs filed a comment on July 1, 1988 which stated that the proposed rule would have no effect on small businesses regulated by the rule. The Board notes that the proposed rule only regulates Central Illinois Public Service company's Coffeen Generating Station.

By its Order of August 4, 1988, the Board proposed a rule for Second Notice which was unchanged from the May 14th version. On September 20, 1988, the Joint Committee on Administrative Rules filed its Certificaiton of No Objection to Proposed Rulemaking The rule that the board adopts today is unchanged from the version which was proposed by the Board's May 19, 1988 Order.

Due to an illness of counsel for CIPS, a hearing in this matter could not be held until February 23, 1987. On that date, a hearing was held in Hillsboro; members of the public were

present. At hearing, the Board requested that CIPS submit additional information, marked as Exhibits #4 and #5, within two weeks of the hearing. By his Order of March 18, 1987, the Hearing Officer held the record open until April 6, for comments, since CIPS had informed the Hearing Officer that it could not submit Exhibits #4 and #5 until March 20. However, the Board did not receive those exhibits until April 2. As a result, the Hearing Officer ordered that the record remain open until April 20, 1987 to give the public a chance to comment upon the late CIPS filings.

On June 12, 1987, the Department of Energy and Natural Resources (DENR) filed its finding that an economic impact study was not necessary in this matter. The Economic and Technical Advisory Committee filed its concurrence with DENR's finding on June 26, 1987.

On August 6, 1987, the Board issued an Interim Order requesting that CIPS and the Agency further address several issues concerning CIPS's proposal. Responses to the Order were filed by CIPS and the Agency filed on August 25 and September 15 respectively (hereafter cited as CIPS Response and Agency Response).

Coffeen utilizes two coal fired Babcock and Wilcox cyclone boilers, Units 1 and 2. Unit 1, which came on line in 1965, has a net generating capacity of 325 megawatts (MW). Unit 2 has a net generating capacity of 550 MW and came on line in 1972. (R. 11). There is presently no SO_2 control equipment used at Coffeen. (R. 14). However, both boilers are fitted with electrostatic precipitators to remove fly ash from the flue gas. (R. 11). Although Coffeen's total net generating capacity equates to 875 MW, Coffeen is currently operating under a load limit of 765 net MW in order to achieve compliance with the 55,555 lbs. standard. (R. 15).

Based on stack tests conducted in October of 1974, Coffeen was expected to emit a maximum of 55,555 lb. of SO_2 per hour. A subsequent test conducted at the insistence of the USEPA in June, 1986, showed that the actual emissions were about 65,194 lb. per hour (R. 14-16 p. 70). Since 1985, CIPS has been involved in a dispute with USEPA over SO_2 emissions. (R. 14). On December 19, 1986, the USEPA filed a complaint against CIPS in the United States District Court, Central District of Illinois. The complaint alleges that from at least October 11, 1985 CIPS has allowed emissions from Units 1 and 2 at Coffeen to exceed the SO_2 emission limitation of 55,555 pounds per hour in violation of the federally approved State Implementation Plan (SIP) for Illinois. (CIPS' Response, p. 6; Exhibit 1 of CIPS' Response). Subsequently, CIPS and USEPA agreed to a settlement of the controversy. CIPS pursued a site-specific rule change rather than an Alternative Emission Rate under 35 Ill. Adm. Code 214.185 partially because it believed that this route would lead to a more timely resolution of the dispute. (R. 22-23).

CIPS asserts that the coal used during the 1986 test was actually lower in sulfur content than the coal used in the 1974 test. CIPS cannot explain the discrepancy in the test results other than stating that less sulfur in the 1974 coal was converted to SO_2 when compared with the 1986 coal. (CIPS Response, p. 1). The Agency states that "the 1974 test results were anomalous in that it appeared to show much less of the sulfur in the coal was converted to sulfur dioxide and emitted than theoretical calculations would indicate." It is the Agency's position that the 1986 results were "more in line with rates expected based on the sulfur content of the coal used." (Agency Response, p. 1). The Agency concludes that although the 1974 and 1986 test results indicated an increase in emissions, there has been no real increase in SO_2 emissions over those years. (Agency Response, p. 2).

In 1981, CIPS entered into a long term contract with Monterey Coal Company (Monterey) for the purchase of coal. The contract, which is effective until the year 2003, calls for CIPS to purchase a minimum of 1,980,000 tons of coal per year from the Monterey's No. 1 Mine. (R. 12, 17). That mine produces approximately 8,500 tons per day. (R. 17). According to a public comment submitted by Monterey, over 99 percent of Monterey's No. 1 Mine shipments for the years 1985 and 1986 went to Coffeen. (P.C. #2).

In its Interim Order of August 6, 1987, the Board requested that CIPS and the Agency address the issue of whether there has been a change at Coffeen, resulting in the higher emission levels, which could be considered "modification" or a "major modification" under the Clean Air Act and federal regulations promulgated thereunder. CIPS responded by stating that there has been no physical or operational change at Coffeen. CIPS asserts that its 1981 switch to a lower sulfur coal would not constitute a modification. (CIPS' Response, p. 2-4).

As stated above, the Agency believes that no real increase in emission has occurred. The Agency concurs with CIPS in its conclusion that the switch to Monterey coal would not be considered a modification under federal law. (Agency Response, p. 2).

The Board also inquired whether CIPS's proposal would trigger the prevention of significant deterioration (PSD) provision of Part C of the Clean Air Act. CIPS contends that the PSD provisions are not applicable in this instance even though the proposed rule would result in an increase in the allowable emissions which is a relaxation of the Illinois SIP. According to CIPS, under 40 CFR 51.24(a)(2), a SIP relaxation must be evaluated against a concentration baseline in order to demonstrate that no allowable increment of ambient air quality is exceeded. CIPS states that no baseline has been established and concludes that no PSD analysis is necessary. (CIPS Response, p.

5). The Agency also concludes that a PSD analysis in this instance is not triggered due to the definitions and exemptions of 40 CFR 51.24. The Agency claims that this would hold true for CIPS even if there had been an actual increase in emissions. (Agency Response, p. 2).

Economic Effect of Compliance Alternatives

At hearing, CIPS presented three alternatives that would enable CIPS to comply with the existing 55,555 lbs. per hour standard: permanent load reduction; blending of coal; and use of scrubbers. Essentially, CIPS asserts that these three alternatives are economically unreasonable when considering the extent of the environmental impact.

As stated above, CIPS is able to achieve compliance with the existing regulation by limiting its load to 765 net MW, as it is presently doing. However, CIPS claims that such a load limit, if adopted on a permanent basis, would cost CIPS up to $10,000 per day due to the purchase of energy during a capacity shortage or due to lost sales opportunities. CIPS also asserts that since energy costs are quite variable, the actual cost of such a load limit could be much higher if emergency replacement energy had to be purchased. CIPS also expresses concerns that the Illinois Commerce Commission might remove Coffeen from the rate base. (R. 15-16).

According to CIPS, in order to maintain the compliant load limit on a permanent basis, CIPS would reduce its coal take from Monterey by 12 percent. (R. 25). CIPS states that using 1,980,000 tons per year as the base take, a 12 percent permanent reduction would result in the lay-off of thirty Monterey employees and the scheduling of production operations on a five day per week basis. CIPS claims that Monterey would likely not find additional customers to offset the 12 percent reduction in CIPS's take. (R. 17-18). According to Monterey, a permanent load limit, to ensure compliance, would reduce CIPS's take by only six percent. However, Monterey concurs with CIPS's position that it would not be able to find replacement customers due to the flat demand for coal. Monterey concludes that a permanent load limit would reduce the production which in turn would result in four-day work weeks as well as unused capacity at Monterey's No. 1 Mine (P.C. #2).

The second alternative to achieve compliance is for CIPS to burn a blended mixture of low sulfur, non-Illinois coal with Illinois coal, which has a higher sulfur content. CIPS states that neither Coffeen nor Monterey currently have the facilities to blend coal. In addition, CIPS claims that higher transportation costs for the non-local, low sulfur coal would increase the overall expense of this option. CIPS also takes the position that blending would reduce Monterey's production by 20 percent. According to CIPS, such a reduction in production would "reduce employment at the mine and might even jeopardize its continued viability." (R. 18-19).

Based on information supplied by Exxon Corporation (a parent corporation to Monterey), CIPS claims that additional annual costs for Monterey to provide a Wyoming-Illinois coal blend would amount to $10.5 million per year. This figure includes the costs for the acquisition and transportation of Wyoming coal, unloading, blending, as well as an annualized capital charge to recover and provide a return on the amount invested in a new blending facility and related equipment. The facility and additional equipment would cost approximately $9 million. (Exh. #4). CIPS further asserts that blending could have the impact of reducing Monterey's No. 1 Mine workforce by 30 people. (Exh. #4). Monterey presents the same conclusions. (P.C. #2).

Utilizing figures from a 1977 Study that CIPS conducted on blending coal, CIPS estimates that if the coal were blended at Coffeen, capital costs would total approximately $10 million. (Exh. #4).

The third compliance alternative discussed was the use of flue gas desulfurization controls, commonly referred to as scrubbers. At hearing, CIPS expressed its reservations concerning the use of scrubbers. CIPS claims that based on its experience with scrubbers at its Newton generating facility it expects significant capital and operating costs to be associated with this control option. In particular, CIPS stresses that the use of scrubbers would result in reduced unit availability due to scrubber malfunctions and that derating of the plant would occur because of auxillary electrical use by the scrubbers. (R. 19-20). However when questioned about Newton, the CIPS witness stated, "There were many problems during the first year or so of operation. Basically most of the bugs have been worked out. It has a high availability". He went on to say that the Newton scrubbers malfunction between 250 and 300 hours per year (R. 26).

CIPS estimates that a retrofit of a forced oxidation scrubber at Coffeen, capable of removing 90 percent of the SO_2 from 20 percent of the plant's total emissions would entail a capital expenditure of $196 million dollars. (Exh. #4). The Board notes that Attachment #2 of Exhibit #4 sets "total investment" figure for such a scrubber at $110,492,951. CIPS informed the Board, in its January 4, 1988 comments, that the estimate of Attachment 2 is the correct estimate.

Each of the above alternatives, if implemented, would impose significant economic costs upon either CIPS or Monterey. At hearing, CIPS acknowledged that it believed the proposed regulatory change was the most feasible alternative since it is a no cost alternative. (R. 25).

Environmental Impact

CIPS has conducted modeling studies in order to assess the proposed emission standard's effect upon the ambient air quality for SO_2. An initial study was completed in January, 1986 (Exh. #3). In response to concerns of the Agency and the U.S. Environmental Protection Agency (USEPA) relating to the methodology of the modeling study, a revised modeling analysis was drafted in June, 1986. (Exh. #1). In an effort to address further questions by the USEPA, a supplement to the June report was issued in November, 1986 (Exh. #2). (R. 35-36).

The proposed standard of 65,194 lbs. of SO_2 in any one hour is approximately equivalent to the rate of emissions that was determined by a stack test conducted at Coffeen in June 1986. (R. 70). There is no evidence in the record to suggest that this emission rate was initially selected by CIPS on the basis of environmental impact. However, CIPS asserts that if Coffeen were subject to that standard, its emissions would not cause any violations of the National Ambient Air Quality Standards (NAAQS) for SO_2. CIPS relies on its modeling studies as support for this conclusion. (R. 14, 37).

The June study was a revised analysis of the January study utilizing procedures suggested by the Agency and USEPA. The study concludes that maximum ambient air SO_2 concentrations, resulting from Coffeen's operation at the proposed emission standard, would still be in compliance with the NAAQS. (R. 42-43). The November supplemental report also confirms this conclusion. (R. 48).

The Agency states that CIPS's showing of compliance with the NAAQS is consistent with USEPA modeling guidelines. In addition, the Agency takes the position that the modeling performed by CIPS "sufficiently demonstrates" that the proposed emission limits of 65,194 lbs. of SO_2 in any one hour and 7.29 lbs. per million BTU's "will not endanger the air quality." (R. 74-75).

The Board notes that Coffeen operated above 764 MW an average of 104 days per year between 1982 and 1986 (Exh. 5). If this trend continues the plant will be in compliance with the current regulation during a substantial portion of each year.

On October 29, 1987, the Board proposed a rule for First Notice which would give relief to CIPS. That proposed rule was published in the Illinois Register on November 20, 1987. 11 Ill. Reg. 18925. That proposal conditioned relief upon the exclusive use of coal from the Monterey coal Mine No. 1, certain ambient air monitoring and modeling, and stack tests. On January 4, 1988, CIPS filed comments on that version of the proposed rule. The Board notes that the Illinois Environmental Protection Agency (Agency) filed no comment.

CIPS' January 4, 1988 Comments

In its comments, CIPS first expresses concern over the wording of the proposed rule which conditions the applicability of the rule to the exclusive use of coal from Monterey's No. 1 Mine. CIPS states that there are circumstances in which CIPS might be unable to use Monterey coal exclusively but would still wish to be subject to the proposed rule's emission limitations. For example, CIPS points to a strike or natural disaster at the mine which may temporarily interrupt the mine's productivity, thereby not allowing CIPS to utilize its coal. Similarly, an anomoly in Monterey coal seam might temporarily force Monterey to blend the Monterey coal with lower sulfur coal in order to meet the proposed rule's emission limitations. Finally, CIPS claims that when nearing the end of contract with Monterey, it may need to perform test burns with coal from a different source. According to CIPS, the proposed rule is written to preclude such test burns.

CIPS also would like the Board to clarify its position with regard to the period of applicability of the proposed rule. CIPS is concerned that if it has to use some coal which is not from the Monterey mine, the proposed rule will terminate permanently.

CIPS has proposed the following change for subsection (a), which it believes resolves all of these issues. (The underlined portion is the proposed addition):

> The emission standards of this subsection shall apply only if the requirements of subsections (b), (c), and (d) are fulfilled. Notwithstanding any other limitation contained in this Part, <u>whenever, except if necessitated by force majeure</u>, the coal burned is mined exclusively from the mine that is presently known as Monterey Coal Company's No. 1 Mine located south of Carlinville, emission of sulfur dioxide from Units 1 and 2 at the Central Illinois Public Service Company's (CIPS) Coffeen Generating Station (Coffeen), located in Montgomery County, shall not exceed either of the following emission standards:
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> (P.C. #11, p. 4-5)

According to CIPS these changes are necessary:

> The addition of the <u>force majeure</u> clause will address those situations that prevent 100% use of Monterey coal for reasons beyond CIPS' control. The addition of the word "whenever" will address situations, such as a test burn, not covered by the <u>force majeure</u>--in this

> situation the applicable limit would revert to the general, more restrictive standard when the exclusivity requirement was not being met but once compliance with the exclusivity standard can be restored the site-specific limit again would be applicable.
>
> (P.C. #11, p. 5)

It was the intention of the Board to draft the rule so that CIPS would be subject to a less stringent emission standard only when it used Monterey coal exclusively. It is not the Board's position that the less stringent emission standards would be lost forever if CIPS failed to utilize Monterey coal in a continuous and exclusive manner. That is, during any time that CIPS does not exclusively use Monterey Coal, the general emission limitation will once again be applicable. However, once Monterey does resume an exclusive use of Monterey coal, the site-specific limitation of proposed Section 214.562 will once again apply. Consequently, the Board agrees with CIPS that the word "whenever" further clarifies the rule.

The Board is not convinced, though, that it should allow CIPS to be subject to the less stringent emission standards if CIPS must utilize non-Monterey coal due to circumstances beyond CIPS's control. CIPS states that "the record demonstrates that the site-specific emission limit will not cause a violation of any applicable ambient standard so, for that purpose the source of the coal is irrelevant." (P.C. #11, p. 5). CIPS seems to imply that the only relevant consideration in granting site-specific emission relief is the resulting impact on ambient air quality. The Board is not granting relief for CIPS merely because CIPS' modeling studies concluded that the ambient air standard would not be violated if CIPS were granted relief. Rather, the Board is granting CIPS relief due to the totality of the circumstances encountered here. Much of the justification for the rule concerns the negative economic impacts which would result if CIPS could no longer utilize Monterey coal. Throughout this proceeding, CIPS has discussed the hardships which Monterey would incur if CIPS were denied relief. In short, CIPS has tied its own request for regulatory relief to the viability of the Monterey mine. CIPS should not be allowed to break that connection during circumstances which are "beyond CIPS' control."

According to Black's Law Dictionary, Fifth Edition, the term force majeure is "common in construction contracts to protect the parties in the event that a part of the contract cannot be performed due to causes which are outside the control of the parties and could not be avoided by exercise of due care." However, unlike a contract, the rule only binds one person, CIPS. Given that fact, the use of the term force majeure would only describe circumstances which are beyond CIPS' control. It would not describe circumstances that are beyond Monterey's control.

Monterey is not owned by CIPS. To the extent of the Board's knowledge, CIPS does not have any legal influence over Monterey beyond present contractual arrangements. It seems to the Board that the fate of Monterey's mining operations would always be beyond CIPS' control.

The Board can envision various circumstances which would halt the supply of coal to CIPS and which would also be beyond CIPS's control. Monterey could breach its contract to supply coal to CIPS. Monterey could sell the mine to another company which would refuse to honor the CIPS coal supply contract. A strike could cease production, indefinitely, at Monterey. The owners of Monterey could shut down the mine due to failing profits. Although these scenarios are merely hypothetical, they illustrate circumstances in which CIPS would continue to be subject to the less stringent emission standards if the force majeure language were included in the proposed rule.

Since the intent of the Board is to have the less stringent emissions limitations apply only when CIPS is using Monterey coal exclusively, the Board will not include the term force majeure in the rule.

CIPS' next major objection in the January 4, 1988 comments involved the proposed rule's requirement that CIPS conduct an ambient air monitoring and modeling study in order to verify that the increased emissions do not violate any primary or secondary sulfur dioxide ambient air quality standard.

CIPS claims that this requirement, set-forth in the First Notice version of the proposed rule, could create an impossible dilemma for CIPS. That version of the rule requires that CIPS begin an ambient air monitoring and modeling program six months after the effective date of the rule. CIPS' concerns stem from the federal enforcement case currently being litigated against CIPS. CIPS anticipates "that any order entered by the District Court will require CIPS to comply with the 55,555 pound per hour limitation probably for a fixed period of two years or, possibly, until a SIP revision is approved by USEPA authorizing a higher limitation." Therefore, CIPS concludes that its operations at higher levels during the monitoring period, would likely be in violation of a District Court order. Also, CIPS claims that if a settlement agreement were not reached with the USEPA, a District Court decision will likely not be issued within six months of the effective date of the rule. Consequently, CIPS claims that if it is going to "comply" with the Board's Order, by emitting at higher emission levels, it will violate the SIP. CIPS also asserts that if it complies with the SIP, it will lose the site-specific rule. CIPS states, and the Board generally agrees, that a SIP revision approval concerning the proposed rule will likely not be granted within six months of the effective date of the rule. (P.C. #11, p. 7-10).

Also, CIPS claims that the ambient air monitoring and modeling will likely make the new standard "conditional" in the eyes of the USEPA. According to CIPS, USEPA's reaction to such a requirement is unclear. However, CIPS does blame an ambient air monitoring and modeling requirement for the delay in USEPA's SIP revision approval for Illinois Power Company's Baldwin Station SO_2 emission standards. According to CIPS, this delay influenced CIPS in choosing to pursue an alternative SO_2 emission standard via a site-specific rulemaking rather than determination pursuant to Section 214.185. (P.C. #11, p. 9-10).

Finally, CIPS argues in its January 4, 1988 comments that the ambient air monitoring and modeling is unnecessary. CIPS states that the modeling results already presented to the Board are far more conservative than what would be generated from a monitoring study. According to CIPS, the Board should consider this conservatism when viewing the fact that CIPS' models showed a concentration level close to the three-hour ambient air standard. (P.C. #10-11). CIPS asserts that the inherent limitations on monitoring studies, including the determination on where to locate the monitors, are reasons why monitoring is rarely done for isolated sources. (P.C. #11, p. 12).

It is the Board's position that the ambient air monitoring and modeling requirement of the proposed rule has value irrespective of the fact that CIPS' Coffeen Generating Station is located in a rural area. Such a requirement is consistent with the procedures for determining alternative emission standards pursuant to Section 214.185. The Board does not view the emission standards of subsection (a) of the proposed rule as being contingent upon the results of the ambient air monitoring and modeling. Like the stack tests, the purpose of the monitoring and modeling requirement is to provide more information which can be utilized in evaluating the actual impact of CIPS' emissions on the environment. This is especially important since the proposed rule will allow CIPS to emit 17% more SO_2 than what is presently allowed. The Board has substituted the word "demonstrate" for the word "verify" in an effort to clarify the Board's position.

Much of CIPS' arguments against the ambient air monitoring and modeling program merely involve the timing of program not its utility. Essentially, CIPS is concerned that it will be required by the rule to conduct the monitoring and modeling program at a time when CIPS might not be able to emit SO_2 at the elevated levels allowed by the proposed rule. That is, the situation could exist when CIPS may be permitted by the Agency to emit 65,194 pounds of SO_2 in any one hour but it will in fact only be emitting 55,555 lbs. per hour due to the constraints of a federal court decision.

On March 10, 1988 the Board proposed a rule for Second Notice which attempted to resolve CIPS' difficulties with the timing of the ambient air monitoring and modeling. However, on

April 21, 1988, after JCAR had already filed its Certification of No Objection for the March 10th rule, CIPS filed a Motion for Reconsideration (hereafter cited as "CIPS' Motion").

April 21, 1988 Motion by CIPS

On May 4, 1988, the Hearing Officer entered a Hearing Officer Statement stating that he had been in contact with representatives of the Agency and Monterey. According to the Hearing Officer, neither the Agency nor Monterey objected to CIPS' April 21st motion. Monterey filed a statement to this effect on May 11, 1988.

The Hearing Officer also issued an Order on May 9, 1988 in which he ordered CIPS to file by May 13, 1988, proposed language which would, if adopted, remedy CIPS' problem concerning the triggering of the monitoring actions imposed by the rule. Also, CIPS was given the opportunity to address the general issue of whether it is appropriate for the Board to grant motions for reconsideration subsequent to the Board's proposing a rule for Second Notice. The Hearing Officer ordered interested persons to file comments upon CIPS' filing by May 18, 1988. Monterey filed a comment with the Hearing Officer on May 18, 1988. The Board accepted this filing. Although Monterey agrees with CIPS' proposed change, it believes that the Board should not have to go back to First Notice in order to make that change. The Agency filed no comment.

In its motion, CIPS requests that the Board alter its proposed rule so that the ambient air monitoring and stack testing will be triggered by the U.S. Environmental Protection Agency's approval of a State Implementation Plan revision which allows CIPS to emit a level in excess of 55,555 pounds per any hour. The March 10th version of the rule triggers the monitoring actions upon CIPS' operating at a level in excess of 765 net megawatts.

As its motion recounts, CIPS had expressed concern regarding the timing of the monitoring requirements in its January 4, 1988 comments:

> CIPS pointed out in the Comments that it could not undertake the monitoring program the Board was requiring until the United States Environmental Protection Agency (USEPA) had approved the higher emission limit because the current State Implementation Plan (SIP), at least in USEPA's view, contains a lower emission limit and the Board's monitoring program is required to be conducted while CIPS is operating, or at least able to operate, at the new, higher limitation. In explaining this problem, CIPS pointed out that in its

> pending litigation with USEPA it anticipated being constrained by a Federal District Court order not to exceed the current SIP limit of 55,555 pounds of sulfur dioxide per hour. CIPS had calculated that this limit equated to a maximum load on the Coffeen Station of approximately 765 net megawatts. In November, 1987, CIPS recalculated this and determined that the emission limit equated to a load limit of 759 megawatts based on the worst case coal.
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> CIPS may have erred in not making clearer to the Board exactly what that means....
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> (CIPS' Motion, p. 2)

In its March 10th decision, the Board had sought to remedy the timing problem as follows:

> CIPS is currently operating under a load limitation of 765 net megawatts (MW) in order to achieve compliance with 55,555 lbs. standard. The Board will require CIPS to begin its ambient air monitoring and modeling program 6 months after it begins operating at a level in excess of 765 net MW. By linking the timing of the monitoring and modeling program to an event within CIPS' control, CIPS will not be forced into non-compliance with either a Board rule or a federal court order.
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> (Proposed Opinion and Order, March 10, 1988, p. 5)

CIPS now asserts that when utilizing "normal quality of coal from Monterey, CIPS would be able to exceed 765 megawatts without ever exceeding the 55,555 pound limitation." (CIPS' Motion, p. 5). In its motion, CIPS also informs the Board of the status of the federal enforcement action brought against CIPS.

> CIPS now has reached agreement on a Consent Order with USEPA which was noticed for 30 days for comment in the March 23, 1988 Federal Register and will be entered sometime thereafter by the District Court. A copy of the Consent Decree is attached for the Board's information as Exhibit A. For a period of two years after the Court enters the Consent Decree, it will limit emissions from the Coffeen Station to 55,555 pounds per hour. Of course, if during that two years,

> USEPA approves the revised emission limit, CIPS would request that the Court modify the Consent Decree and CIPS would expect USEPA to concur.
>
> (CIPS' Motion, p. 2)

In response to the Hearing Officer's Order, CIPS filed proposed language which would resolve its concerns regarding the timing of the monitoring and stack test. In addition, CIPS asserted that nothing in the Act or Board regulations precludes the Board from considering a motion for reconsideration subsequent to a Board's Second Notice proposal. In fact, CIPS states that there is even a policy need to allow such motions at this juncture in light of the procedures enunciated in the Board's Resolution 88-1. At the time of the filing of CIPS' Motion, the regulatory scheme set forth by Res. 88-1 provided that the Board would take a substantive position with regard to a rulemaking, for the first time, when it proposed a rule for Second Notice. Resolution 88-1 has since been amended by the Board's Order of Septemnber 22, 1988. The amended Res. 88-1 now provides for a pre-hearing First Notice only when it is practicable.

In proposing the March 10, 1988 version of the rule, it was the intention of the Board to cause CIPS to conduct ambient air monitoring after it began emitting SO_2 at levels in excess of currently allowed limits. This would provide data to illustrate the impact of the higher emissions level upon the ambient air quality. Given the record, the Board believed that an operation level of 765 net MW was equivalent to an emission level of 55,555 pounds per hour, which is the current emission limitation. Since an operating level is generally more readily determinable than an emission level, the Board triggered the monitoring upon CIPS' operating in excess of 765 net MW. Now, it is apparent from CIPS' motion that the 765 net MW trigger is not appropriate.

CIPS proposed change is consistent with the Board's intention concerning this rulemaking. The Board notes that the draft consent decree if entered by the Federal District Court, would impose a requirement that CIPS install, by September 30, 1988, a continuous emission monitor (CEM) which would measure CIPS' SO_2 emissions. After installation of a CEM, CIPS would be able to determine, with relative ease, Coffeen's exact level of emissions at any point in time.

Since JCAR had already issued Certificate of No Objection for the Board's March 10, 1988 version of the rule it was necessary to go back to First Notice with a proposal that would resolve CIPS' concerns as set forth in its April 21, 1988 motion. Consequently, the version of the rule proposed for First Notice on May 19, 1988, contained the language requested by CIPS on the issue of the timing of the stock test and the ambient and monitoring and modeling requirements. Specifically the Board is

utilizing the phrase "no later than six months after Coffeen is legally able and begins to operate at an emission rate greater than 55,555 pounds of sulfur dioxide per hour.

Conclusions

There are three paths by which a source may seek to be subject to an SO_2 emission limitation standard other than the one provided in the general rule. A source may petition for short term relief (five years or less) through a variance proceeding. See Central Illinois Light Company v. Illinois Environmental Protection Agency, 57 PCB 417 (1984). Secondly, a source may choose to seek an alternative standard utilizing the Alternative Emission procedures set forth in 35 Ill. Adm. Code 214.185. The alternative emission rate determined by the Board under this provision is imposed as an operating permit condition. In addition, further monitoring and modeling of ambient air quality is also required as a condition to the permit. See Illinois Power Company v. Environmental Protection Agency, 32 PCB 563 (1979) (The Board designated this matter as a proceeding under Rule 204(e)(3) which was in substance the same as the current Section 214.185). Finally, a source may seek an actual rule change in order to be relieved from the general requirement. See In re. Sulfur Dioxide Emission Limitations; Village of Winnetka, R80-22(B) (April 19, 1984) and In re. Amendments to 35 Ill. Adm. Code 214, Sulfur Limitations, R84-28, (April 24, 1986). (As a part of a general rulemaking, Central Illinois Light Company's E.D. Edward's Electric Generating Station was granted a site specific rule).

The Board notes that the Illinois Environmental Protection Act (Act) specifically addresses instances when the Board is making a determination regarding an alternative SO_2 emission standard. Section 9.2(b) of the Act states:

> In granting any alternative emission standard or variance relating to sulfur dioxide emissions from a coal-burning stationary source, the Board may require the use of Illinois coal as a condition of such alternative standard or variance, provided that the Board determines that Illinois coal of the proper quality is available and competitive in price; such determination shall include consideration of the cost of pollution control equipment and the economic impact on the Illinois coal mining industry.
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> Ill. Rev. Stat. 1985, ch. 111 ½, par. 1009.2(b)

Several different compliance methods available to CIPS have been discussed in the record. A permanent load limitation, blending of coal, and the exclusive use of low sulfur western

coal, although providing compliance, are all options which would have a significant adverse impact on the Illinois coal mining operation at Monterey Coal Company's No. 1 Mine. The only compliance option that would preserve the present level of Coffeen's Illinois coal consumption is the implementation of scrubbers.

CIPS has provided the Board with an estimate as to the capital cost for installing a scrubber which would control 20 percent of Coffeen's total SO_2 emissions. Attachment #2 to that Exhibit 4, which is an item by item cost estimate, provides a "total investment" figure of $110,492,951. The Board must view this cost in light of the expected environmental impact that would result if CIPS's proposed standard was adopted. After considering the environmental and economic information presented in the record, the Board finds that it would be economically unreasonable to require CIPS to comply with the general standard at this time. The Board finds that granting relief will have a favorable economic impact on the State due to the savings to CIPS and the retention of coal mining jobs. The Board will grant CIPS relief as requested.

In the record CIPS made clear its intent to use Illinois coal from the Monterey Mine. Indeed the support for the rule change is largely based on the favorable economic impact of continued use of coal from this specific mine. Accordingly, the Board will condition the rule change on continued use of coal from the Monterey mine. That is, whenever CIPS is using coal from this mine exclusively, the less stringent emission limits will apply.

The Board further notes that the relief it is granting today is based upon regulations and data which do not address the long range transport problems associated with SO_2 emissions. The Board's decision in this matter is based on the local impact of SO_2 emissions. The modeling studies presented by CIPS only evaluated ambient air quality to a distance of 20 kilometers (12.4 miles) from Coffeen. (R. 28,65-66). The Board is aware of the controversy surrounding the impact of SO_2 transported over long distances and anticipates that this topic will be the subject of future rules. The rule adopted today may be modified or repealed in response to future state or federal regulations in this area. The Board specifically does not intend that this rule be used to allow Coffeen to circumvent any future regulation by "grandfathering in" the 65,194 lb. per hour limitation.

The Board will require as part of this rule that a stack test be performed. The disparity of the 1974 and 1986 stack tests demonstrate the advisability of testing to determine whether the plant is operating as expected. This provision shall in no way be interpreted as preventing the Agency from ordering such additional monitoring or testing as it determines are necessary to carry out its statutory functions.

Permanent relief from the requirements of the general regulations limiting SO_2 emissions may be achieved by way of a site-specific rule change or an alternative standard set pursuant to 35 Ill. Adm. Code 214.185. Section 214.185 requires ambient air sulfur dioxide monitoring and modeling studies subsequent to the imposition of an alternative standard. The additional monitoring and modeling are required in order to verify that emissions under the new standard will not cause or contribute to violations of the NAAQS. The Board believes that such monitoring and modeling requirements are extremely useful in ensuring that areas currently attaining NAAQS remain in attainment even after the allowable emissions for that area are increased.

The Board is in no position to require any person to seek an alternative standard under Section 214.185 rather than a site-specific rule change. In this instance, CIPS rejected the Section 214.185 procedure due to perceived time advantages of a site-specific rule change. (R. 22-23). However, the Board believes it should act consistently in its determination of SO_2 emissions relief irrespective of whether relief is sought via Section 214.185 or a site-specific rulemaking. The additional monitoring and modeling requirements as required by Section 214.185 do not lose their value or become unnecessary merely because the person seeking relief chooses to pursue a site-specific rulemaking. This is especially true in situations where modeling studies predict ambient air quality values that approach the NAAQS. At hearing, a witness for CIPS stated that one of CIPS's modeling studies predicted a 3-hour SO_2 concentration of 1291 micrograms per cubic meter; the NAAQS standard is 1,300 micrograms per cubic meter. (R. 44). Given these considerations, the Board will grant relief conditioned on additional monitoring and modeling. These requirements are consistent with the requirements that would have been imposed had CIPS pursued relief pursuant to Section 214.185.

Additionally the Board notes that CIPS' Newton facility is equipped with scrubbers. This rule change is not intended to enable CIPS to use Coffeen to reduce generation at Newton in order to avoid the cost of scrubber operation at that facility.

The Board proposes granting this rule change based on the combination of circumstances which exist in this instance. A favorable monitoring study alone is not sufficient reason for granting a rule change.

The Board will add the proposed rule to Subpart X which concerns site-specific SO_2 emissions limitations for utilities. Such placement is logically consistent with the structure of the existing Part 214.

ORDER

The Board hereby adopts, as final, the following amendments to be filed with the Secretary of State.

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 X: UTILITIES

Section 214.562 Coffeen Generating Station

a) The emission standards of this subsection shall apply only if the requirements of subsections (b), (c), and (d) are fulfilled. Notwithstanding any other limitation contained in this Part, whenever the coal burned is mined exclusively from the mine that is presently known as Monterey Coal Company's No. 1 Mine located south of Carlinville, emission of sulfur dioxide from Units 1 and 2 at the Central Illinois Public Service Company's (CIPS) Coffeen Generating Station (Coffeen), located in Montgomery County, shall not exceed either of the following emission standards:

1) 29,572 kilograms of sulfur dioxide in any one hour (65,194 lbs/hr); and

2) 11.29 kilograms of sulfur dioxide per megawatt-hour of heat input (7.29 lbs/mmbtu).

b) CIPS shall conduct an ambient sulfur dioxide monitoring and dispersion modeling program designed to demonstrate that the emission standards of subsection (a) will not cause or contribute to violations of any applicable primary or secondary sulfur dioxide ambient air quality standard as set forth in Section 243.122. Such ambient monitoring and dispersion modeling program shall be operated for at least one year commencing no later than 6 months after Coffeen is legally able and begins to operate at an emission rate greater than 55,555 pounds of sulfur dioxide per hour.

c) No more than 15 months after the commencement of the ambient monitoring and dispersion modeling program of subsection (b), CIPS shall apply for a new operating permit. CIPS shall submit to the Environmental Protection Agency (Agency), at the time of the application, a report containing the results of the ambient monitoring and dispersion modeling program of subsection (b) and the results of all relevant stack tests conducted prior to the report's submission.

d) No later than six months after Coffeen is legally able

and begins to operate at an emission rate greater than 55,555 pounds of sulfur dioxide per hour, a stack test shall be conducted in accordance with Section 214.101(a), in order to determine compliance with emission standards set forth in subsection (a). After the stack test is conducted, the results shall be submitted to the Agency within 90 days. The requirements of this subsection do not preclude the Agency from requiring additional stack tests.

(Source: Added at Ill. Reg. , effective)

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1985 ch. 111 1/2 par. 1041, provides for appeal of final Orders of the Board within 35 days. The Rules of the Supreme Court of Illinois establish filing requirements.

IT IS SO ORDERED.

J.D. Dumelle concurred.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 22nd day of September, 1988, by a vote of 7-0.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board