

ILLINOIS POLLUTION CONTROL BOARD

In The Matter of:)	
)	
Proposed New Clean Air Interstate Rule)	No. R06-26
(CAIR) SO ₂ , NO _x Annual and NO _x Ozone)	(Rulemaking – Air)
Season Trading Programs, 35 Ill. Adm. Code)	
225. Subparts A, C, D and E)	

NOTICE OF FILING

TO: See attached Service List

PLEASE TAKE NOTICE that on November 13, 2006, I caused to be filed electronically with the Office of the Clerk of the Pollution Control Board, on behalf of KINCAID GENERATION, L.L.C., the attached APPEARANCE OF BILL S. FORCADE, APPEARANCE OF KATHERINE M. RAHILL, and KINCAID GENERATION LLC'S PREPARED TESTIMONY OF C. J. SALADINO, a copies of which are hereby served upon you.

By: /s/ *Katherine M. Rahill*
 Katherine M. Rahill

Bill S. Forcade
 Katherine M. Rahill
 JENNER & BLOCK LLP
 Attorneys for Kincaid Generation, LLC
 One IBM Plaza
 Chicago, IL 60611
 (312) 222-9350

CERTIFICATE OF SERVICE

I, Katherine M. Rahill, an attorney, hereby certify that I served copies of the foregoing documents upon the parties on the attached Service List this 13th day of November, 2006.

By: /s/ *Katherine M. Rahill*
Katherine M. Rahill

SERVICE LIST:

Dorothy Gunn, Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 W. Randolph St., Suite 11-500
Chicago, IL 60601-3218

John Knittle
Hearing Officer
Illinois Pollution Control Board
James R. Thompson Center
100 W. Randolph, Suite 11-500
Chicago, Illinois 60601

John J. Kim
Rachel L. Doctors
Division of Legal Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

William A. Murray
Special Assistant Corporation Counsel
Office of Public Utilities
800 East Monroe
Springfield, Illinois 62757

Kathleen C. Bassi
Sheldon A. Zabel
Stephen J. Bonebrake
SCHIFF HARDIN LLP
6600 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606

Matthew Dunn, Chief
Division of Environmental Enforcement
Office of the Attorney General
188 West Randolph St., 20th Floor
Chicago, IL 60601

Virginia Yang, Deputy Legal Counsel
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271

Sasha Reyes
Steven Murawski
Baker & McKenzie
One Prudential Plaza, Suite 3500
Chicago, IL 60601

David Rieser
James T. Harrington
Jeremy R. Hojnicky
McGuire Woods LLP
77 West Wacker, Suite 4100
Chicago, Illinois 60601

Faith E. Bugel
Environmental Law and Policy Center
35 East Wacker Drive, Suite 1300
Chicago, Illinois 60601

Keith I. Harley
Chicago Legal Clinic
205 West Monroe Street, 4th Floor
Chicago, Illinois 60606

S. David Farris
Manager, Environmental, Health and Safety
Office of Public Utilities, City of Springfield
201 East Lake Shore Drive
Springfield, Illinois 62757

Bruce Nilles
Sierra Club
122 W. Washington Ave., Suite 830
Madison, WI 53703

Daniel McDevitt
Midwest Generation
440 S. LaSalle Street
Suite 3500
Chicago, IL 60605

ILLINOIS POLLUTION CONTROL BOARD

In The Matter of:)	
Proposed New Clean Air Interstate Rule)	
(CAIR) SO ₂ , NO _x Annual and NO _x Ozone)	
Season Trading Programs, 35 Ill. Adm. Code)	No. R06-26
225. Subparts A, C, D and E)	(Rulemaking – Air)

APPEARANCE

I hereby file my appearance in this proceeding, on behalf of Kincaid Generation, L.L.C.

Respectfully submitted,

By: /s/ *Katherine M. Rahill*
Katherine M. Rahill

Dated: November 13, 2006

Bill S. Forcade
Katherine M. Rahill
JENNER & BLOCK LLP
Attorneys for Kincaid Generation, LLC
One IBM Plaza
Chicago, IL 60611
(312) 222-9350

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	
PROPOSED NEW CAIR SO₂, CAIR NO_x)	R06-26
ANNUAL and CAIR NO_x OZONE SEASON)	(Rulemaking – Air)
TRADING PROGRAMS, 35 ILL.ADM.)	
CODE 225, CONTROL OF EMISSIONS)	
FROM LARGE COMBUSTION SOURCES,)	
SUBPARTS A, C, D, AND E)	

KINCAID GENERATION LLC’S PREPARED TESTIMONY OF C. J. SALADINO

Introduction

My name is C.J. Saladino, and I am the Station Director of the Kincaid Generation L.L.C. power plant in Kincaid, Illinois in Christian County. I have been an employee at Kincaid for 24 years and a life-long resident of Springfield, Illinois. During my career, I have held various positions at the Kincaid facility, including technical staff engineer, water department supervisor, operations supervisor, operations manager and now Director. I am a 1982 graduate of the University of Illinois with a bachelor’s degree in mechanical engineering. In 2005, I also completed the Advanced Management Program at Duke University.

Facility Background

The Kincaid facility comprises two 625-megawatt coal-fired boilers. These units have burned Powder River Basin (PRB) sub-bituminous coal since 1999. The facility switched to lower sulfur western coal in order to meet the federal Acid Rain program sulfur dioxide emissions limitations. Although the PRB coal has a much lower sulfur and ash content, it also has a lower heating value and higher moisture levels. Its relatively low density and high water content makes this coal

susceptible to spontaneous combustion if not packed densely during storage in order to limit free air flow. As a result, the Station has implemented coal handling techniques that include a concerted effort to minimize coal dust through careful housekeeping.

Kincaid's conversion to and handling of this lower emissions sub-bituminous coal has been so successful that the Kincaid plant twice has been chosen by the national Powder River Basin Coal Users group as the Coal Plant of the Year, in 2001 and 2004. Kincaid Station was selected from among hundreds of plants that burn low sulfur PRB coal. Kincaid was honored for going to "extraordinary lengths to keep a clean, safe environment" in order to minimize dust from accumulating to explosive levels. Power stations nominated for the award are judged on safety, housekeeping and use of best practices. Other criteria for the award are availability, heat rate, the amount of electricity generated, and the amount of coal burned.

In 2001, Kincaid began construction of two SCRs, or selective catalytic reduction facilities. These massive controls, which together cost more than \$85 million, began operation in 2002 and have been very effective, removing up to 90% of the nitrogen oxide (NO_x) emissions from the flue gas. These SCRs have enabled Kincaid to achieve the NO_x emissions limits of the Illinois Part 217, Subpart W regulations and Kincaid was one of the first large utility plants to install these SCRs. We currently spend more than \$1 million per year for anhydrous ammonia for the SCR operation during the ozone season. We expect these costs to rise to \$2.5 - \$3.0 million per year for year-round operation for compliance with the proposed Illinois Clean Air Interstate Rule (CAIR).

Kincaid's Environmental Accomplishments

The result of all these activities is much lower emissions both from the stack and from the material handling operations at Kincaid. Accordingly, Kincaid has compiled an exemplary environmental compliance record. Since Dominion purchased the plant in 1998, the plant has received no environmental violations, cut sulfur dioxide and nitrogen oxide emissions drastically from pre-1998 levels, and taken steps to minimize opacity and particulate levels. Kincaid Station was nominated by the Illinois Environmental Protection Agency (IEPA) in 2004 as one of four finalists out of over 1100 facilities for Best Operated Wastewater Treatment Plant. The Station was again nominated this year for the same award.

Kincaid's Community Accomplishments

The Kincaid Power Station supports the community in which our employees live. Nearly all the 147 Kincaid employees live in Christian or Sangamon Counties. The Station supports many charitable activities in the area, including the Shadow House Women's Shelter, Central Illinois Foodbank, Friend-In-Deed Program, and Mary Bryant Home for the Blind. We at Kincaid are extremely proud of our Station and its excellent operations— an achievement we accomplished while generating more power, more efficiently, more safely and, at the same time, with substantially lower emissions than ever before in the plant's history.

Kincaid's Concerns with the IEPA CAIR Proposal

For all these reasons, I am here today to register our concern with the IEPA's proposed implementation of the federal CAIR. We believe the proposal unjustifiably and arbitrarily establishes a NO_x emissions reduction program that goes so far beyond the federal rule that it

may be the most stringent CAIR proposal currently under consideration in the U.S. The IEPA has offered little justification for an additional NO_x “Clean Air Set-Aside” (CASA) of 25% of the Illinois CAIR NO_x budget that significantly exceeds the 5% set aside for new sources established in the EPA model rule (included as the New Unit Set-Aside (NUSA)) in the Illinois CAIR proposal. This “beyond CAIR” proposal also withdraws the incentives for early reductions by “retiring” all 11,299 allowances from the “compliance supplement pool” established by U.S. EPA, thereby eliminating any incentives for affected sources to reduce emissions early and thus accelerate benefits to the environment.¹ Furthermore, we believe the CASA pool set up for an “air pollution control equipment upgrade project”² is too restrictive and should include physical and operational improvements to existing equipment, such as SCRs installed for the Subpart W compliance. The proposal also makes it clear that the IEPA intends to “retire” any allowances left unclaimed in the CASA after the different CASA pools are replenished.³ This is a significant deviation from the federal EPA model rule which redistributes unused allowances from set asides to existing units. The adverse financial impacts to electric generators are significant.

Kincaid urges the Illinois EPA to justify any “beyond CAIR” NO_x reductions with a thorough modeling demonstration. We believe that should there remain local areas in Illinois that fail to meet the air quality standards following implementation of the CAIR regional reductions, the IEPA should thoroughly evaluate the amount of additional air quality improvement needed and

¹ Section 225.480 of the proposed rule: Part 225 – Control of Emissions from Large Combustion Sources, May 30, 2006.

² IBID, Section 225.460(c)(1) of the proposed rule: Part 225 – Control of Emissions from Large Combustion Sources, May 30, 2006.

³ IBID, Section 225.475(b)(5)

the amount of emission reductions needed in the more localized nonattainment area in order to achieve the needed air quality improvements in the most cost-effective manner. Requiring all Illinois sources subject to CAIR to implement “beyond CAIR” reductions across-the-board for the purpose of resolving local problems is not environmentally necessary or economically reasonable. Instead, we urge IEPA to conduct a thorough modeling demonstration to determine the level of reductions that may be necessary to resolve any residual non-attainment problems following implementation of the CAIR reductions. The 25% NO_x “set-aside” is unreasonably burdensome to Illinois generators and their customers and has not been demonstrated to be necessary to achieve attainment with the ambient air quality standards. As USEPA has stated, the CAIR program is designed “to balance the burden for achieving attainment between regional-scale and local-scale control programs.”⁴

Therefore, for the purposes of implementation of CAIR, Kincaid does not believe it is necessary for IEPA to propose the “beyond CAIR” NO_x reductions and urges IEPA’s full adoption of USEPA’s federal “model rule” on the same schedule established by USEPA.

With regard to PM_{2.5} non-attainment, Kincaid questions whether further EGU reductions of SO₂ and NO_x are necessary. Mandated beyond-CAIR EGU reductions of SO₂ and NO_x may not have any beneficial effect on reducing the particle concentration of monitored PM_{2.5}, particularly in urban areas dominated by many different sources of fine particles and precursor pollutants to fine particles. The PM_{2.5} particle composition may well be driven by mobile sources, especially in winter. Another source mix may drive the PM_{2.5} composition in summer. Until additional

⁴ 70 Fed. Reg. 25166 (May 12, 2005)

speciated monitoring data is available, it is premature to require “beyond CAIR” SO₂ or NO_x reductions from EGUs.

Kincaid therefore supports the approach to implement CAIR essentially as established by USEPA, and then work with sources in local nonattainment areas to determine the appropriate mix of reductions needed to resolve the remaining local nonattainment area issues.

We want to emphasize that the Illinois Part 217, Subpart W NO_x rule, based on the federal NO_x SIP Call rules, is a “cap and trade” program, i.e., Illinois affected sources must meet a federal NO_x “budget” or “cap” on emissions during each ozone season (May 1 through September 30). Sources are allocated a discrete number of NO_x allowances for each ozone season and the affected sources must make up any shortfall in the number of allowances they hold versus the number of tons of NO_x the sources emitted during the ozone season. Affected sources have three options to make up any shortfall: reduce NO_x emissions to levels below the number of eligible allowances they hold, use allowances they have “banked” through purchase or over-compliance in previous ozone seasons, or purchase/trade allowances held by other affected sources throughout the 19 eastern states under the federal NO_x SIP Call region. The Kincaid plant chose to reduce NO_x emissions at the stack rather than to rely on extra allowances purchased from other sources.

The Illinois Subpart W rules at Part 217.770 also included an opportunity for affected sources to obtain “early reduction credits” by reducing NO_x emissions to specified levels before the rules were fully effective in the ozone season of 2004.

Kincaid clearly could have relied on the purchase or trade of NO_x allowances from other facilities to comply with the Illinois Subpart W rules, including allowances from the more than 100 Dominion-owned generating units allocated NO_x allowances under the NO_x SIP Call program. Instead, both units at the Kincaid facility were equipped in 2002 with the most effective NO_x controls available – selective catalytic reduction (SCR). While this was certainly a business decision, it was brought about in part by the incentives presented by the early reduction credits available under Part 217.770 of the Subpart W rules. The bottom line is that emissions were reduced earlier than required and the benefits to the environment were delivered faster – a real “win-win” for Kincaid, the IEPA and the environment.

Nevertheless, the IEPA CAIR proposal summarily withdraws this important incentive for early reductions with no other explanation than “for public health and air quality improvements.”⁵ Kincaid urges the Board to restore the allowances for the Compliance Supplement Pool in order to promote early compliance that will provide environmental benefits to accrue and allow affected facilities to properly plan and implement compliance strategies. Withdrawing these early reduction provisions removes the incentive for sources to reduce NO_x emissions in the non-ozone season in 2007 and 2008 (by operating SCR’s year-round).

At the October Illinois Pollution Control Board hearings in Springfield, the IEPA maintained that the 25% CASA does not restrict the allowance market.

⁵ Section 225.480 of the proposed rule: Part 225 – Control of Emissions from Large Combustion Sources, May 30, 2006.

“It is very important to note that a set-aside is not the equivalent of lowering the overall budget because the allowances usually remain in the market. While the recipients of the set-aside allowances are free to hold, sell or retire the allowances as they see fit, it is far more likely that they would offer to sell the allowances in the market in order to realize a financial benefit. As a result, the recipients have an additional source of funding for their projects, and existing sources continue to have a pool of allowances they can utilize if needed to meet their requirements, and the total amount of emissions remain at or below the budgeted amount.”⁶

This explanation gives no consideration of the impact withdrawing these allowances have on the market-based principles of the federal CAIR rule. Withholding the additional 25% of the NO_x allowance budget reverses the economic underpinnings of the rule. Under the federal model rule, the allowances are allocated to affected sources based on the highest three years of heat input over the course of a five year period. Set-asides are presented in the model rule as an option states may adopt, but nowhere suggests such a dramatic set-aside. Indiana, for example, has recently finalized its CAIR rule with a 4½% set-aside for new sources and a ½% set-aside for energy efficiency/renewable energy projects. For Kincaid, the 30% set-aside equates to an annual allowance surrender of 1625 annual trading program allowances and 601 ozone season trading program allowances or, in today’s market, about \$2.5 million per year. Under the IEPA proposal, if Kincaid needed to purchase back these allowances (which under the federal model rule would have been directly allocated to Kincaid), the net financial impact would be \$5 million per year.

The unfortunate final result will ultimately fall on the businesses, factories and institutions that use electricity in Illinois, thereby, disproportionately impacting Illinois competitively with surrounding states that are adopting CAIR rules that more closely resemble the federal approach.

⁶ Testimony of James Ross, Manager-Division of Air Pollution Control, IEPA, October 10, 2006.

IEPA has suggested in its testimony in Springfield that the allowances will remain available in the market for developers as “an additional source of funding for their projects,” and that “existing sources continue to have a pool of allowances they can utilize if needed to meet their requirements”. The IEPA proposal then establishes the largest single set-aside for energy efficiency/renewable energy (EE/RE) projects, with 12%. Under the NO_x SIP Call, several states found that many of the EE/RE allowances were left unclaimed and eventually returned to the utilities. The IEPA proposal, however, states that the agency “may elect to retire” the unclaimed allowances. Since the largest pool of CASA allowances in the IEPA proposal is designated for the EE/RE set-aside, which has historically been under-subscribed under the NO_x SIP Call experience, we expect many of the CASA set-asides for EE/RE projects to go unclaimed and very likely to be retired.

Kincaid urges the Board to reject the 30% NO_x set-aside in favor of a set-aside consistent with the federal model rule or some other more reasonable approach.

As we have stated, we installed SCRs on both units at Kincaid in 2002. SCR is widely accepted as the most effective control for NO_x emissions from coal-fired utility boilers. This equipment has provided up to a 90% reduction in NO_x emissions during the past 5 ozone seasons of 2002 through 2006, enabling Kincaid to over-comply with the Illinois Subpart W rules. We are expecting that this equipment will provide the year-round NO_x reductions needed to comply with the upcoming CAIR reductions. However, the current Illinois CAIR proposal, with the 25% CASA, allocates 5% of the Illinois NO_x budget for both the annual and ozone season trading

program for “air pollution control equipment upgrades” including “installation of selective catalytic reduction.”⁷

Because the eligibility to apply to this “air pollution control equipment upgrade” set-aside apparently hinges on installation of new controls on an existing source, it appears the SCRs at Kincaid would not be eligible for these allowances. This is unfair. Operation of the Kincaid SCRs on a year-round basis will require a dramatic expansion of the operations of this equipment, increasing significantly the costs for ammonia, catalysts, and other variable costs for operating the SCRs. We expect the year-round SCR operation to significantly increase “parasitic” loads on the plant, as well, primarily from increased fan loads.

Allowances were intended to help companies offset these economic burdens, and we do not believe that Illinois should disproportionately burden its electric generators.

Excluding existing air pollution control equipment that must be operated on a year-round basis following adoption of the proposed rule from applying for allowances from the “air pollution control equipment upgrade” set-aside is unfair and Kincaid urges the Board to change the eligibility so that these existing controls are included. We suggest the proposed rule be amended at §225.460(c)(1) as follows:

“Air pollution control equipment upgrades at existing coal-fired electric generating units, as follows: installation of flue gas desulfurization (FGD) for control of SO₂ emissions; installation of a baghouse for control of particulate matter emissions; and installation of *or extended operation of existing* selective

⁷ Section 225.460(c)(1) of the proposed rule: Part 225 – Control of Emissions from Large Combustion Sources, May 30, 2006.

catalytic reduction (SCR), selective non-catalytic reduction (SNCR), or other add-on control devices for control of NO_x emissions.”

I appreciate this opportunity to provide my testimony on these important new rules.