ILLINOIS POLLUTION CONTROL BOARD
April 19, 2007

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| IN THE MATTER OF: | ) | |
| | ) | |
| PROPOSED NEW CLEAN AIR | ) | R06-26 |
| INTERSTATE RULES (CAIR) $SO_2$, $NO_x$ | ) | (Rulemaking – Air) |
| ANNUAL AND $NO_x$ OZONE SEASON | ) | |
| TRADING PROGRAMS, 35 ILL. ADM. | ) | |
| CODE 225, SUBPARTS A, C, D, E, and F | ) | |

Proposed Rule. First Notice.

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

Today the Board proceeds to first notice under the Illinois Administrative Procedure Act (5 ILCS 100/1-1 *et seq.* (2004)) with a rulemaking proposed by the Illinois Environmental Protection Agency (Agency) on May 30, 2006. The Agency states that the purpose of the Clean Air Interstate Rule (CAIR) is to reduce intra- and interstate transport of sulfur dioxide ($SO_2$) and nitrogen oxide ($NO_x$) emissions from fossil fuel-fired electric generating units (affected units) through the adoption of trading programs. The Board accepted this matter for hearing on June 15, 2006. The Board has held five days of hearings, and received numerous public comments. For the reasons more fully outlined below, the Board finds that the proposal is technically feasible and economically reasonable. After proceeding to first notice, the Board will accept additional comments on the proposal.

In today's order, the Board first provides background and procedural background on the proposal. Next, the Board summarizes the proposal and the Agency's proposed amendments. The Board then addresses preliminary matters such as the outstanding motion to dismiss and the motions to amend. The public comments are summarized before the Board considers and addresses the major issues raised at hearing and in public comment. Finally, the Board provides discussion of why it finds the proposal technically feasible and economically reasonable.

## BACKGROUND

The Agency states the proposal satisfies Illinois' obligations under the United States Environmental Protection Agency's (USEPA) Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Revisions to Acid Rain Program; Revisions to the $NO_x$ SIP Call[1] (Federal CAIR), 70 Fed. Reg. 25162 (May 12, 2005). Stat. at 1.[2] The Agency also states the rule satisfies the Agency's obligation to meet Clean Air Act (CAA) requirements for the control

[1] SIP is the short form of state implementation plan.

[2] The Agency's Statement of Reasons included in the rulemaking proposal will be cited as "Stat. at _."

of fine particulate matter ($PM_{2.5}$) and ozone in the Chicago and Metro East/St. Louis nonattainment areas. Stat. at 2.

In the Federal CAIR, the USEPA states it "has assessed the role of transported emissions from upwind States in contributing to unhealthy levels of $PM_{2.5}$ and 8-hour ozone in downwind States." Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 69 Fed. Reg. 4566 (Jan. 30, 2004). The USEPA proposed the Federal CAIR emission reductions for $SO_2$ and $NO_x$ that apply to upwind states based on that assessment. *Id*. The USEPA gave three primary reasons for addressing interstate pollution transport in a timely manner. First, the USEPA stated that emissions from upwind States can, either alone or combined with local emissions, cause NAAQS exceedences and jeopardize public health in downwind communities. *Id*. Second, states the USEPA, the interstate transport of pollution must be addressed on a regional scale because the significant contributions of pollution from upwind states force downwind areas to incur extra clean-up costs in order to achieve greater local emissions reductions. *Id*. Third, a regional approach to controls should result in achieving air quality standards more economically. *Id*.

The Federal CAIR requires 28 eastern states that were identified as significantly contributing or interfering with the maintenance of one or more National Ambient Air Quality Standards (NAAQS) in downwind areas to revise their SIPs to include control measures on $SO_2$ and $NO_x$. The Federal CAIR also requires that 25 states must reduce: (1) annual $SO_2$ and $NO_x$ emissions for the purposes of $PM_{2.5}$ NAAQS; and (2) reduce seasonal $NO_x$ emissions for purposes of eight-hour ozone NAAQS.

In the Federal CAIR, the USEPA found that Illinois significantly contributes both $PM_{2.5}$ and ozone, and is impacted by pollution from other states. USEPA gave Illinois the option of complying with emission budgets set by the USEPA or adopting a federal cap-and-trade program covering its electric generating units (EGUs). The Agency's proposed rule chose the latter option.

The CAA establishes a comprehensive program for controlling and improving the nation's air quality through both state and federal regulation. Stat. at 4. Under Sections 108 and 109 of the CAA, USEPA is charged with identifying air pollutants that endanger the public health and welfare, and with formulating the NAAQS that specify the maximum permissible concentrations of those pollutants in the ambient air. 42 U.S.C. §§ 7408-7409. USEPA has promulgated NAAQS for various pollutants, including 8-hour ozone and $PM_{2.5}$. 40 C.F.R. § 50. Pursuant to Section 107(a) of the CAA, states are given primary responsibility for ensuring that the ambient air quality meets the NAAQS for the identified pollutants. 42 U.S.C. § 7407(a) (2000).

Part D, Subpart I of the CAA, requires adoption of control strategies necessary to demonstrate attainment of the fine particulate matter ($PM_{2.5}$) and eight-hour ozone NAAQS in the greater Chicago moderate nonattainment area and the Metro East/St. Louis moderate nonattainment area. Part D, Subpart 2 of the CAA, requires adoption of control strategies necessary to demonstrate attainment of 8-hour ozone NAAQS for those two nonattainment areas.

Sections 169(A) and 110(a)(2)(D) of the CAA require the adoption of an implementation plan addressing visibility, and a SIP addressing interstate transport of air pollution. Stat. at 2.

The USEPA believes that notwithstanding the CAA requirements for achieving the NAAQS as described above, the majority of eastern states will not be able to meet the 8-hour ozone and $PM_{2.5}$ NAAQS by the statutory deadlines for attainment. *See* 69 Fed. Reg. 4566, 4579 (Jan. 30, 2004). The USEPA believes that a major reason for this failure is that states are not able to address interstate transport of pollution from upwind areas. Interstate transport is the process by which air pollutants move from upwind areas to downwind areas. Stat. at 8.

The source category that USEPA determined to be most cost-effective to control is EGUs, although states have the flexibility to choose the measures to adopt to achieve the specified emissions reductions. Under CAIR, USEPA is requiring that states found to be contributing to $PM_{2.5}$ transport be subject to an annual $NO_x$ limitation and $SO_2$ limitation under CAIR and that states found to be contributing to ozone transport be subject to an ozone season limitation. Since Illinois is a significant contributor for both $PM_{2.5}$ and ozone, USEPA has established three emissions budgets for Illinois: the first would cap emissions of $NO_x$ on an annual basis; the second would cap emissions of $NO_x$ during the ozone season; and the third would cap the emissions of $SO_2$ on an annual basis. These caps are based on emission reductions from EGUs. The required emissions reduction will be implemented in two phases. Phase I for $NO_x$ reductions will start in 2009 (covering 2009-2014) and $SO_2$ reductions will start in 2010 (covering 2010-2014). Phase II for both $NO_x$ and $SO_2$ reductions will start in 2015 (covering 2015 and thereafter).

In lieu of complying with emissions budgets, states have the option of adopting the Federal cap-and-trade programs covering its EGUs: CAIR $NO_x$ Annual trading program; CAIR $NO_x$ Ozone Season trading program; and CAIR $SO_2$ trading program. 40 C.F.R. §§ 51.123(o)(1) and (aa) and 40 C.F.R. § 51.124(o)(1), respectively. With respect to the CAIR $NO_x$ trading programs, each state is given a pool of allowances equal to their $NO_x$ budgets to distribute as they choose. With respect to the CAIR $SO_2$ trading program, USEPA allocates the allowances to affected EGUs based on the allocations that the unit receives under the federal Acid Rain program. The trading programs do not require EGUs to install specific control technology or meet a particular emission limit. Instead, each affected unit is required at the end of each control period to hold allowances sufficient to cover the tons of $NO_x$ and $SO_2$ emitted. These allowances can be obtained either through a direct allocation from a state ($NO_x$ allowances) or USEPA ($SO_2$ allowances) or through trading. It is anticipated that affected units that can install the least costly controls will do so, and will over control, and thereby have extra allowances to sell to other EGUs that cannot as cost-effectively reduce emissions.

The Agency's proposal amends Subpart A and proposes new Subparts C, D, E, and F of Part 225. The Agency proposes adopting the CAIR $SO_2$, CAIR $NO_x$ Annual, and CAIR $NO_x$ Ozone Season trading programs to reduce intrastate and interstate transport of sulfur dioxide ($SO_2$) and nitrogen oxides ($NO_x$) emissions. Stat. at 1.

The proposal is intended to cover the entire State of Illinois. The proposed regulations are expected to affect existing and new EGUs. Stat. at 24. Approximately 229 existing EGUs

will be subject to the CAIR $NO_x$ Annual, CAIR $SO_2$, and CAIR $NO_x$ Ozone Season trading programs. Stat. at 24-25. For the CAIR $NO_x$ Annual, and $SO_2$ trading programs, existing units are those that commenced operation before January 1, 2006; and for the CAIR $NO_x$ Ozone Season trading program, existing units are those that commenced operation before May 1, 2006. Stat. at 25.

Of these units, 170 are gas and oil-fired boilers, 59 are coal-fired boilers, and the remainder are gas and oil-fired combustion turbines. Stat. at 25. Some coal-fired boilers have the capability to burn natural gas, fuel oil or both. Of the 59 coal-fired boilers, 34 are tangentially-fired, five are wall-fired, 18 are cyclone-fired boilers and one is a circulating fluidized bed boiler. *Id*.

The proposed regulations are expected to affect existing EGUs, and any new EGUs that serve a generator greater than 25 megawatts, or any unit with a maximum design heat input that is greater than 250 thousand British thermal units per hour (mmBtu/hr) and that has the potential to use more than 50% of the "potential electrical output capacity" and that sell electricity to the grid. Stat. at 25. While gas-fired turbines typically have low emissions of $SO_2$, they still must comply with the requirements of the CAIR $SO_2$ trading program. *Id*. In Illinois, emissions from oil and gas boilers and turbines are approximately 2,000 tons per year (TPY) of $SO_2$ as compared to 361,000 TPY of $SO_2$ from coal-fired boilers. *Id*.

## PROCEDURAL BACKGROUND

The Agency filed this proposal for rulemaking on May 30, 2006. The Agency filed motions for expedited review, to hold the required hearings in Springfield and Collinsville, and for waiver of certain filing requirements concurrently with the petition.

As noted, the Board accepted this case for hearing on June 15, 2006. In that June 15, 2006 order, the Board also reserved ruling on the three pending Agency motions. On June 28, 2006, the Board sent a letter to Jack Lavin, Director of the Department of Commerce and Economic Opportunity (DCEO) requesting an Economic Impact Study. DCEO did not respond, and the Board received no testimony or comments regarding the DCEO's decision not to perform an economic impact study on this rulemaking.

On June 30, 2006, Dynegy Midwest Generation, Inc. (Dynegy) and Midwest Generation, LLC (Midwest Generation) filed a motion for leave to file responses to the Agency's motion for expedited hearings and to hold required hearings in Springfield and Collinsville, accompanied by the respective responses.

On July 20, 2006, the Board granted, in part, the Agency's motion to expedite. Specifically, the Board declined to send this matter to first notice without commenting on the merits of the proposal, but did grant expedited review to the extent feasible given the Board's available resources and decision deadlines. *See* R06-26, (July 20, 2006). The Board also denied the motion to hold the hearings in Springfield and Collinsville, and granted the motion to waive certain filing requirements.

Hearings in this matter were held before hearing officer John Knittle. The first hearing began on October 10, 2006 and continued through October 12, 2006, in Springfield. The second hearing began on November 28, 2006 and continued through November 29, 2006, in Chicago.

Over the course of the two hearings, Rachel Doctors and John Kim appeared and participated on behalf of the Agency. Kathleen Bassi, Stephen Bonebrake, and Shelden Zabel appeared and participated on behalf of Dynegy and Southern Illinois Power Cooperative (SIPCO). David Rieser appeared and participated on behalf of Ameren Energy Generating Company, Ameren Energy Resources Generating Company, and Electric Energy, Inc. (collectively, Ameren). Steven J. Murawski appeared and participated on behalf of Zion Energy, LLP (Zion). Faith E. Bugel appeared and participated on behalf of the Environmental Law and Policy Center (ELPC). Bruce E. Nilles appeared and participated on behalf of the Sierra Club. James Russell appeared and participated on behalf of the Christian County Generation, LLC. Bill Forcade appeared and participated on behalf of Kincaid Generation, LLC (Kincaid). Finally, Keith Harley appeared and participated on behalf of Environment Illinois.

At the first hearing, the hearing officer entered pre-filed testimony, submitted on behalf of the Agency, of the following witnesses into the record as Agency exhibits: Gary E. Beckstead (Ag. Exh. 6), David E. Bloomberg (Ag. Exh. 10), Roston Cooper (Ag. Exh. 12), Rory Davis (Ag. Exh. 9), Robert Kaleel (Ag. Exh. 4), Yoginder Mahajan (Ag. Exh. 7), James R. Ross (Ag. Exh. 2), and Jacquelyn Sims (Ag. Exh. 8). A total of 20 exhibits were offered and accepted at the first hearing.

On October 11, 2006, the Agency filed a motion to amend the rulemaking proposal. On October 19, 2006, the Agency moved to withdraw the motion. On October 27, 2006, the Agency filed post-hearing comments to the first set of hearings. On November 16, 2006, the Board granted the Agency's motion to withdraw the motion to amend the rulemaking proposal.

At the second hearing, the hearing officer entered pre-filed testimony of the following witnesses into the record as exhibits: Jason M. Goodwin on behalf of Zion (Zion Exh. 1), Gregory Kunkel on behalf of Christian County Generation (Christian County Exh. 1), C.J. Saladino on behalf of Kincaid (Kincaid Exh. 1), Steven C. Whitworth on behalf of Ameren (Ameren Exh. 1), and Charles Kubert on behalf of the ELPC (Kubert Exh. 1). Robert B. Asplund testified on behalf of Kincaid. Seven exhibits were offered and accepted at the second hearing.

On November 27, 2006, the Agency filed a second motion to amend the rulemaking proposal. Dynegy, Midwest Generation, and SIPCO responded to the second motion to amend on December 7, 2006.

At the close of the second hearing, the hearing officer set the public comment period to expire on December 22, 2006. The hearing officer granted the Agency leave to file a reply to any response to the motion to amend the rulemaking within seven days after any response was filed.

On November 30, 2006, Dynegy, Midwest Generation, and SIPCO moved to dismiss the rulemaking proposal. SIPCO affirmed the motion to dismiss on December 15, 2006. On December 13, 2006, Environment Illinois and the ELPC (collectively, Environmental Advocates), responded to the motion to dismiss. On December 18, 2006, the Agency filed three motions for extension of time: (1) a motion for extension of time to respond to the motion to dismiss; (2) a motion for extension of time in which to file a reply to the response to the second motion to amend the rulemaking proposal; and (3) a motion for extension of time to file its written comments.

On December 20, 2006, the Board hearing officer, John Knittle, granted the motions for extension, giving the Agency until December 22, 2006, to respond to the motion to dismiss, and reply to the response to the motion to amend rulemaking. Simultaneously, the hearing officer extended the written comment deadline for all parties to January 5, 2007.

On December 22, 2006, the Agency responded to the motion to dismiss and replied to the response to the motion to amend the rulemaking proposal. On January 5, 2007, SIPCO and Midwest Generation moved to withdraw as parties to the motion to dismiss.

Eleven public comments have been filed to date. The Agency filed post-hearing comments to the first set of hearings on October 27, 2006 (PC1). On December 15, 2006, Kincaid Generation, L.L.C. filed a Dominion $NO_x$ Compliance Strategy and the resumé of Mr. Andy Yaros (PC2). On December 21, 2006, the Board received the post-hearing comments to the second set of hearings from of Jason M. Goodwin (PC3). On January 5, 2007, post-hearing comments were received from Ameren (PC4); the Agency (PC5); Dynegy and SIPCO (PC6); the ELPC, the American Lung Association of Metropolitan Chicago, Environment Illinois, and the Sierra Club (PC7); Midwest Generation (PC8); Midwest Generation and the Agency (PC9); and Kincaid (PC10). On January 10, 2007, the Agency filed a motion for leave to file *instanter* a revised joint comment, and the revised joint comment (PC11) of the Agency and Midwest Generation. Finally, on February 5, 2007, the Sierra Club submitted 85 clean air questionnaires from Harold Washington College (PC12).

## PRELIMINARY MATTERS

The Board must address a number of outstanding preliminary matters before consideration of the proposal itself. Specifically, the Agency's November 27, 2006 motion to amend the proposal; the November 30, 2006 motion to dismiss the proposal filed by Dynegy, Midwest Generation, and SIPCO (and its associated pleadings); and various motions to amend the proposal included in motions as well as comments.

The Board first considers the motion to dismiss. The motion to dismiss is based on the premise that the Board lacks statutory authority to adopt proposed Subparts C, D, and E of Part 225. *See* Mot. to Dis. at 3, 7, 11. Subsequent to the filing of the motion to dismiss, SIPCO and Midwest Generation have asked to withdraw from the motion to dismiss. The Board grants each request to withdraw, thereby leaving Dynegy as the sole remaining movant of the motion to dismiss.

On March 13, 2007, the Agency and Dynegy filed a joint motion to amend Section 225.465(b)(4)(B) of the proposed rule to address Dynegy's concerns regarding the manner in which the clean air set-aside (CASA) provisions penalized sources with consent decrees relative to their baghouse projects (Joint Mot.). Joint Mot. at 1, 3. Dynegy requests that the Board stay action on the motion to dismiss. Joint Mot. at 4. Dynegy and the Agency have agreed that if the Board grants the joint motion to amend and includes the language therein in the Board's first notice of the rule, Dynegy will withdraw its motion to dismiss. Joint Mot. at 4.

No response to the request for stay of the motion to dismiss has been received. The Board grants the request, and will stay the motion to dismiss pending a further pleading on the issue by Dynegy. Thus, the Board will not, at this time, address the substance of the motion to dismiss nor any of the responsive pleadings.

As stated, a number of pleadings seeking to amend the proposal have been filed with the Board. Rather than addressing the substance of each motion here, the Board will address the proposed amendments in the discussion portion of the order. The Board grants all outstanding motions for leave to file and considers each one below.

## MOTIONS TO AMEND

The Board received three motions to amend the rule. Motions to amend were submitted by the Agency on November 27, 2006 (Ag. Mot. to Amend), by Midwest Generation and the Agency, jointly, on February 16, 2007 (Midwest Mot. to Amend), and by Dynegy and the Agency, jointly, on March 13, 2007 (Dynegy Mot. to Amend). The Board grants the following three motions to amend as described in the Board Discussion below.

### Agency's November 27, 2006 Motion to Amend

The Agency's motion to amend addresses changes and clarifications as a result of communications with USEPA, the first hearing in Springfield, stylistic conventions used in the Board's second notice for R06-25, and typographical errors. Ag. Mot. to Amend at 2.

The Agency proposed changes that were recommended by USEPA such as several changes to definitions in Section 225.130. The definitions were revised to provide clarity and/or be consistent with wording in the April 28, 2006 Federal Register. Ag. Mot. to Amend at 2-3.

The Agency also proposed revisions to the following sections to conform to federal requirements. For example, Section 225.140 reflects latest the updates in the Incorporations by Reference. In Sections 225.300, 225.400, and 225.500, the Agency proposes using applicability language verbatim from the April 28, 2006 *Federal Register*.

The Agency would replace the term "CAIR designated representative" with "owner or operator" and add a more detailed description of the allowance transfer deadline in Sections 225.310(d), 225.410(d), and 225.510(d). The Agency also recommends that in Section 225.310(d)(1), the term "ton" be replaced with "tonnage" to clarify that an allowance has a different value depending on the year it is allocated.

In Sections 225.310(e)(1)(D) and (f)(4), 225.410(e)(1)(D) and (f)(4), and 225.510(e)(1)(D) and (f)(4), the Agency suggests changes to conform to federal requirements for the owner or operator to submit documents to demonstrate compliance. The Agency also amends Sections 225.320(a)(1), (2) and (c), 225.410(a)(1), (2) and (c), and 225.510(a)(1), (2) and (c) to require the owner or operator to submit supplemental information requested by the Agency, reference the Agency's authority to issue permits and specify that allocations, transfers or deductions of allowances automatically amend the permit.

In Section 225.325, the Agency again replaces the term "ton" with "tonnage" to clarify that an allowance has a different value depending on the year it is allocated, and it retains that value no matter when it is used for compliance or traded. The term also reflects that while the Agency does not, other states may have the authority to issue $SO_2$ allowances.

Sections 225.430 and 225.530are amended by the Agency to conform to 40 C.F.R. § 51.123(p) and (aa) and reflect timing required by the federal CAIR rule for $NO_x$ allowance allocations, such that the Agency will make initial allocations for control periods 2009 through 2011 no later than July 31, 2007, and will submit subsequent allocations 4 years in advance of the control period. Allowances from the New Unit Set-Aside (NUSA) would be reported to USEPA by July 31 of the applicable control period, and new units would not receive allowances for the first year of commercial operation.

The Agency recommends amending Sections 225.435 and 225.535 to reflect the change in dates that allocations must be made and allows the owner/operator to use heat input data in lieu of gross electrical output data from years 2006 through 2008. Sections 225.440 and 225.540 limit allocations of allowances on a *pro rata* basis and Sections 225.445 and 225.545 reflect requirements of 40 C.F.R. § 51.123 for submittal dates, while Sections 225.455 and 225.555 require aggregated allowances under the CASA to equal at least one. Ag. Mot. to Amend at 3-6.

The Agency also proposed amendments as a result of comments made at the hearing October 10-12, 2006 in Springfield. The Agency added a definition for "commence construction" and amended the definition for "project sponsor" to lessen the possibility that more than one organization or person could submit applications for the same project. Ag. Mot. to Amend at 6.

In response to comments made at the first hearing, the Agency amended Sections 225.430 and 225.530 to clarify allowances from the CASA would be allocated in the year they are to be used based on reductions made in the previous year. Ag. Mot. to Amend at 6. Further, the Agency amended Sections 225.435 and 225.535 clarify that either gross electrical output or heat input may be used to calculate converted gross output for the control periods 2009 through 2013. *Id*.

The Agency next states it amended Sections 225.450 and 225.550 to allow other measurement systems for gross electrical output, but that such a system must be in place by January 1, 2008 and that data for the initial allocations for control periods 2009-2011, be submitted to the Agency by June 1, 2007. In addition, the Agency amended Sections 225.455

and 225.555 to reflect the new definition of "project sponsor" and that units found to be out of compliance must restore their allowances to the Agency. Ag. Mot. to Amend at 6-7.

The Agency amended Sections 225.460 and 225.560 to clarify which projects are not eligible to receive allowances from the CASA, such as combined heat and power projects that are also CAIR $NO_x$ units or CAIR $NO_x$ Ozone Season units, projects pursuant to a consent decree or court order, and Supplemental Environmental Projects. Ag. Mot. to Amend at 7.

In Sections 225.465 and 225.565, the Agency amended language to reflect changes in Sections 225.460 and 225.560, clarifying that combined heat and power projects are eligible at a different rate for CASA allowances than other projects listed as supply-side projects. Ag. Mot. to Amend at 7. Clarifications were made for projects pursuant to consent decrees and court orders. Amendments to these sections also specify that clean technology projects and highly efficient power generation projects use the same formula to calculate allowances. *Id*.

Finally, the Agency amended Sections 225.470 and 225.570 to reflect the new definition and certification requirements of a "project sponsor," and Sections 225.475 and 225.575 to reflect new dates and the tipping scheme for excess allowances. Ag. Mot. to Amend at 7.

**Midwest Generation and the Agency's Joint Motion to Amend (2-16-2007)**

The joint motion to amend from Midwest Generation and the Agency would correct two typographical errors. At Section 225.615(g)(3)(D), "for" would replace "or" in the phrase ". . . applicable requirements for ~~or~~ particulate matter or opacity." Midwest Mot. to Amend at 1.

Section 225.625(a)(3) would be amended to reflect a Control Technology deadline of December 31, 2015 rather than the year 2013. The motion states the 2015 deadline was agreed to by the Agency and Midwest Generation and is embodied in a December 10, 2006 Memorandum of Understanding. Midwest Mot. to Amend at 1-2.

**Dynegy and the Agency's Joint Motion to Amend (3-13-2007)**

The joint motion to amend from Dynegy and the Agency would address Dynegy's concerns with CASA provisions that penalize sources with consent decrees for baghouse projects. Dynegy Mot. to Amend at 3. *See* PC 6. The motion explains that the Agency initially determined CASA allowances for baghouses installed pursuant to a consent order or decree based on two principles: (1) baghouses required by a consent order or decree should not be eligible for as many allowances as baghouses installed for other reasons, and (2) the number of eligible allowances should be consistent with allowances available for $SO_2$ and $NO_x$ controls since CAIR is intended to reduce particulate matter, the primary pollutant removed by a baghouse. Dynegy Mot. at Amend at 3-4.

The motion reflects the Agency's agreement to revise the number of allowances for baghouses installed pursuant to a consent order or decree. The amendments are intended to provide an incentive for such baghouses to provide greater control of particulate matter than required by the consent order or decree. Dynegy Mot. to Amend at 4. Specifically, the proposed

amendments redefine and introduce new parameters as well as a second formula for calculating the number of allowances for a particular baghouse project at Section 225.465(b)(4)(B). Dynegy Mot. to Amend at 2-3.

## SUMMARY OF PUBLIC COMMENTS

### Public Comment 2: Kincaid

On December 15, 2006, Kincaid filed the Dominion $NO_x$ Compliance Strategy and resumé of Mr. Andy Yaros, docketed as public comment 2. Mr. Yaros works as Manager of Environmental Systems (Fossil & Hydro) at Dominion Resource Services of Richmond, Virginia (Dominion) developing compliance plans under CAIR, in addition to various other environmental regulations. Tr. 11/29/06 at 27.

Dominion predicates its $NO_x$ compliance strategy on making the most economical decisions on a Dominion System basis, under the $NO_x$ SIP Call Cap & Trade Regulations. PC 2 at 1. Dominion asserts that the most economic means to affect this strategy is to install high capital cost selective catalytic reduction (SCR) equipment on their largest units with the highest $NO_x$ rates. *Id*. Mr. Yaros asserts in PC 2 that while SCR represents a huge capital investment and large annual operating costs, it is generally more cost-effective in terms of cost per $NO_x$ ton removed, and is also capable of removing 90% of $NO_x$. *Id*.

Mr. Yaros states that in executing this strategy, Dominion has put SCRs on 12 of their largest coal units. PC 2 at 1. With SCRs removing 90% or more on their large units, Dominion is able to put less costly controls on smaller units that do not remove nearly as high a percentage of $NO_x$. ***Id.*** With SCRs on the large Dominion units, and other lower-cost equipment (selective non-catalytic $NO_x$ reduction (SNCR) equipment or advanced over-fired air (OFA)) on most of the smaller, older units, Dominion is able to comply company-wide, with the SIP Call, and with CAIR in the future. ***Id.*** However, if Dominion loses substantial allowances from large units with SCRs, Mr. Yaros states in PC 2 that then the economics of the strategy do not work and Dominion would be forced to invest in more controls which tend to have a much higher cost per $NO_x$ ton removed, or to rely on buying allowances in the marketplace. ***Id.***

### Public Comment 3: Jason M. Goodwin

Mr. Goodwin states he has filed written comments and testified in this rulemaking on behalf of Zion. PC 3 at 1. In PC 3, Mr. Goodwin seeks to provide additional facts and thoughts to supplement Zion's primary position on the issues that could bridge a gap between the seemingly divergent views expressed throughout the public comment period regarding fuel-weighting/fuel-neutrality and the proposed CASA. ***Id.***

#### Fuel-Weighting/Fuel-Neutrality

Mr. Anand Rao, of the Board's technical unit, asked Mr. Goodwin whether there is an alternative weighting factor that Zion would be willing to support. PC 3 at 2. Goodwin emphasizes that Zion prefers a fuel-neutral allocation mechanism, but is willing to consider a

compromise alternative fuel-weighting factor that closes the gap between the fuel-neutral option and the Agency's current proposal. *Id.*

Mr. Goodwin states that Zion suggests a compromise factor of 0.7 for both gas-fired and oil-fired units. PC 3 at 2. This number represents the mid-point between 1.0 for coal-fired units and 0.4 for gas-fired units and is a minimal increase from the 0.6 factor for oil-fired units/operating modes. *Id.* A revised oil-fired factor that is consistent with the proposed gas-fired factor is necessary to streamline the process for determining the quantity of allowance allocations. *Id.* A compromise factor also provides additional consideration for reliability (through enhanced allocation treatment) for units operating in gas-curtailed situations when: (a) natural gas is unavailable; (b) power demand is potentially very high; or (c) reliability of the electric power supply is critical. *Id.*

Mr. Goodwin believes that Zion's recommended position on fuel-weighting is entirely consistent with the majority of fuel-weighting concepts being used in states where Calpine Operating Services Company, Inc. (COSCI) has been involved: Alabama, Arkansas and Wisconsin are all fuel-neutral; Florida, Louisiana and Minnesota all follow a standard of 0.4 gas/0.6 oil/ 1.0 coal (consistent with federal model); and South Carolina follows a standard of 0.6 gas/0.6 oil/1.0 coal (state-based custom approach). PC 3 at 3.

**CASA**

In response to comments about the Agency's proposed CASA size, Mr. Goodwin states that the Agency's proposed 25% CASA is far out of line with the proposed set-aside pools in many other CAIR states. Mr. Goodwin compared the proposed set-aside pools in a number of other CAIR states and concluded that the CASA, as set forth in the proposal, should be revised based on two factors. PC 3 at 3.

First, a smaller proportion of the total allowance budget should be made available for non-emitting sources. Mr. Goodwin suggests a CASA set-aside percentage in the 5-10% range, rather than the proposed 25%, because setting aside such a large portion of the allowance pool unjustifiably increases the compliance burden on facilities that already face significant emission reduction obligations through an artificial reduction in allowances available for allocations. PC 3 at 4. Second, Mr. Goodwin suggests that CASA applicants be restricted to electric-generating sources and that non-generating sources be eliminated from consideration in the proposed rule. *Id.*

**Public Comment 4: Ameren Corporation**

In general, Ameren states that it supports the proposal filed by the Agency, as amended by the amended proposal filed on November 11, 2006, with one exception. PC 4 at 1. Ameren requests that the Board allow the use of CASA allowances to support advanced OFA $NO_x$ reduction strategies and to adopt the amendment proposed by Ameren in Attachment A to the pre-filed testimony of Mr. Michael Menne. *Id*.

Ameren supports the Agency in establishing an innovative approach to promote important energy and environmental goals. PC 4 at 2. Ameren agrees that CASA is a useful balancing of technology, economic, energy and environmental considerations in achieving those goals, and specifically requests the Board to adopt those portions of the amended proposal that allow Ameren and other companies seeking to use the multi-pollutant strategy to achieve CASA allowances. *Id*.

Regarding Ameren's requested amendment, Ameren contends that the Agency's basis for not including this proposal in its amended proposal is based almost entirely on policy rather than technical grounds. *Id*. According to Ameren, the Agency excluded OFA because it was not expected to reduce $NO_x$ as effectively, nor be as capital intensive as the listed technologies. *Id*. at 3-4. Ameren contends that from a policy standpoint, the only issue should be whether $NO_x$ reductions can be achieved, and that substantial cost effective $NO_x$ reductions benefit the entire process. *Id*. at 4. Ameren argues that when equal technologies to achieve $NO_x$ goals exist, companies should not be given incentives to choose the higher-cost technology simply because allowance credits may be available. *Id*.

Ameren proposes language, included as Attachment B to Ameren Exhibit 1, designed to create a narrow and limited eligibility for OFA projects. PC 4 at 5. Ameren states that such projects can only be eligible if they achieve 30% reductions. Ameren states this percentage reduction represents the level at which advanced OFA becomes directly comparable to SNCR (a CAIR-listed technology) and distinct from the first generation OFA used at some Illinois facilities. Alternatively, projects must be installed as part of a phased $NO_x$ control program which includes an advanced computerized combustion control system or a $NO_x$ control reduction strategy already identified as eligible under Sections 225.460(c) and 225.560(c). *Id*.

**Public Comment 5: The Agency**

The Agency asserts that although the testimony elicited and evidence submitted to date in this proceeding reflects agreement of all parties on many of the issues involved, some of the regulated sources do not agree with the Agency's approach for allocations based on gross electrical output or the amount of the set-asides. PC 5 at 2. The Agency notes that representatives of the power plants do not necessarily agree as to whether allowances should be allocated on heat input or gross electrical output or the amount of the set-asides. *Id*. The Agency further notes that although the participating environmental interest groups are generally supportive of the proposed rulemaking, they do not favor including the fluidized bed boilers in the CASA. *Id*.

The Agency states that an additional public comment filed jointly with Midwest Generation that describes and proposes the combined pollutant standards (CPS). According to the Agency, the CPS provides compliance flexibility for the mercury emissions reduction requirements in R06-25 (35 Ill. Adm. Code 225, Subpart B) in exchange for significant reductions in $NO_x$ and $SO_2$ emissions. PC 5 at 3. The Agency contends that the CPS, like the multi-pollutant standard (MPS) included in R06-25, are voluntary provisions that allow for additional compliance flexibility. *Id*.

**Fuel-Weighting**

The Agency maintains that fuel-weighting as proposed is appropriate. PC 5 at 4. According to the Agency, the predominant sources of both $NO_x$ and $SO_2$ emissions in Illinois are the coal-fired power plants. *Id*. The Agency concludes that since these sources emit higher rates of both pollutants, reductions at these sources will provide the greatest benefits, and the greater the feasibility, the more likely they are to be controlled. *Id*. In addition, the Agency contends that its economic analysis that found the $NO_x$ policy to be economically reasonable based upon the proposed fuel-weighting allocation methodology. Deviation from this allocation methodology, states the Agency, would impact the economic analysis performed and relied upon for the proposed rule. *Id*.

**CASA**

The Agency rejects a proposal on behalf of Christian County Generation to eliminate *pro rata* reduction of CASA allocations for early adopters. The Agency states it has explored a number of allocation schemes. PC 5 at 6. The Agency found that *pro rata* allocation was ultimately felt to best serve those purposes by proportionately sharing among all eligible, and that fixed portion schemes would be particularly problematic for the Agency to implement because Illinois' CASA allocation scheme is specifically based on the number of electricity hours generated or conserved, which will change from year to year. *Id*. The Agency concluded that the rule could not, therefore, simply offer a fixed number of allowances. *Id*. The Agency views the current scheme as a compromise that allows a portion of the CASA to all those eligible, while simultaneously being implementable given the Agency's limited resources. *Id*. at 6-7.

After considering the view by participants that the 30% set-aside is too great, the Agency maintains its support for the 30% CASA as currently drafted. The Agency contends that the USEPA left the authority to the individual States to distribute their allocations as necessary to meet their own State's individual goals. PC 5 at 7. The Agency states that it has chosen to carve a set-aside away from the main pool to provide incentive to various other areas to promote Illinois' interests (*e.g*., pollution control upgrades for cleaner air, integrated gasification combined cycle (IGCC) for cleaner generation, energy efficiency/renewable energy (EE/RE) efforts for zero emission generation, and a small pool to undertake these projects early on) whose individual contributions benefit the environment. *Id*. Further, the Agency argues that each of those project categories assists Illinois EPA in their duty to attain NAAQS. *Id*.

The Agency hired outside consultants to perform a financial analysis of the impact, under the worst-case scenario that the 30% set-aside was effectively retired. The Agency states the results showed that relying solely on a 70% main pool, the reliability of the grid was intact and residential and commercial electric rates would not be greatly impacted. PC 5 at 7.

The Agency does not agree that it should increase the RE/EE set-asides from 12 to 15.4% for the purpose of "being consistent with the policy goals and policy targets" set forth in the Governor Blagojevich's Sustainable Energy Plan. PC 5 at 9. While both the Governor's plan and the allocation methodology proposed in the Illinois CAIR encourage renewable energy and energy efficiency, states the Agency, they are mutually exclusive programs. *Id*. Nonetheless,

states the Agency, the set-aside allowances and the Governor's energy plan are complimentary and further the same goal. *Id*.

The Agency declines to allow OFA projects to receive allowances from the CASA. PC 5 at 10. The Agency asserts that the primary purpose of the CASA, with respect to the pollution control upgrade category, is to reduce the typically large capital costs with the goal of promoting a few selected project types that are comparatively much more expensive than OFA and advanced OFA. *Id*. The Agency contends that the more costly controls generally result in the greatest reductions in emissions. *Id*.

The Agency agrees to allow the only remaining fluidized bed combustion (FBC) boiler in Illinois to receive CASA allowances. The single existing FBC boiler is the SIPCO 123 boiler in Marion, Williamson County. The Agency, however, will not allow any future FBC boilers to receive CASA allowances. PC 5 at 11. When constructed in 2001, SIPCO's FBC boiler was considered a more current technology that the 58 other and older boilers in Illinois. The boiler achieves lower $NO_x$ and $SO_2$ emission rates than any of the other boilers in Illinois, but the rates could be lower if SIPCO decided to operate the $NO_x$ controls at a greater capacity or install additional $NO_x$ and $SO_2$ controls. *Id*. at 12. The Agency concludes that providing SIPCO CASA allowances will encourage these further reductions in emissions.

However, future FBC boilers will not receive CASA allowances because the Agency seeks to ultimately encourage the most promising clean coal technology, such as integrated gasification combined cycle (IGCC) facilities, that are capable of much lower emissions than FBC boilers. *Id*. at 12-13.

The Agency agrees to revise the allocation method in the proposed in Sections 225.465(b)(5)(B) and 225.565(b)(5)(B) relating to allocating CASA allowances to clean coal technology projects. PC 5 at 17. SIPCO directly measures its emission rate in pound per megawatt (lb/MW) rather than converting from pound per million Btu (lb/mmBtu). *Id*. The Agency had previously performed an estimate that does not report the direct measurement that SIPCO performs and therefore was less accurate than the direct measurement. *Id*. at 17-18.

The proposed revision will result in the same CASA allowance distribution as compared to the prior estimate. PC 5 at 18. The Agency asserts that the proposed revision will include new subsections in Sections 225.465(b)(5)(B) and 225.565(b)(5)(B). The new subsections will include a factor change from 1.0 to 1.4 in the same equation currently used. *Id*. The factor change will compensate for SIPCO's direct measurements and provide the same level of incentive the Agency was previously attempting to achieve. *Id.*

**Air Quality Modeling**

The Agency rejects a suggestion by Mr. Saladino, on behalf of Kincaid, that the Agency conduct additional modeling to determine the amount of further reductions that may be necessary to meet air quality standards following the implementation of CAIR reductions. PC 5 at 18-19.

The Agency asserts that the technical support document[3] submitted to the Board in this rulemaking presented the results of two modeling studies that address the issues raised by Mr. Saladino, and that the Agency has, therefore, already presented the type of modeling requested by Mr. Saladino. *Id*. Further, the Agency states it cannot conclude that it would be economically reasonable for the Chicago nonattainment area to meet air quality standards. *Id*. at 19.

**Summary of Proposed Changes**

The Agency made several additional changes to the rule language suggested by the USEPA. PC 5 at 21. The Agency contends that the three most significant suggested amendments were: (1) deleting Subsection (d)(5)(C) in Sections 225.445 and 225.545 that required the Agency to reduce a unit's allocation from the NUSA if it had been allocated excess allowances for the prior control period; (2) deleting the definition for "CAIR Trading programs" because it was not used in the proposal; and (3) clarifying the language concerning fractional allowances to indicate that the Agency can only allocate whole allowances and allowances that cannot be distributed on that basis will be retained and distributed *pro rata* for the next control period. *Id*.

**Public Comment 6: Dynegy and SIPCO**

In their post-hearing comment, Dynegy and SIPCO (for the purposes of this comment, "the companies") express frustration that the Agency has not changed in any substantive way to reflect industry arguments concerning the size of the CASA and an allocation methodology based upon only a two-year look-back and gross electrical output. PC 6 at 2. The only concession, argue the companies, has been to allow the conversion of heat input to gross electrical output for the first several years of the program. *Id*. The companies conclude the public comment by suggesting improvements to the rule as proposed.

Dynegy and SIPCO contend they have also expressed deep concerns about the two-year look-back and the demonstrated inability of the Agency to consistently and timely submit allocations to the USEPA. With no "levelizing" of a two-year look-back, the Agency's failure to timely submit allocations could be devastating to the companies. In addition, the companies generally prefer that allocations be based upon heat input rather than gross electrical output as proposed by the Agency. Finally, the companies state they do not support any change to the proposed reliance on fuel-weighting as included in the rule. PC 6 at 2.

**CASA**

Dynegy and SIPCP state they have consistently expressed their position that a set-aside of 25% for the CASA is not justifiable. The companies argue that the Agency never explained why it chose 25% of the total cap for the size of the CASA. Further, the companies state that

[3] The proposal includes a technical support document (TSD) that provides information supporting the rulemaking proposal.

other than the retirement of unused CASA allowances in the distant future, the Agency did not demonstrate how the CASA will result in improvements to air quality in Illinois. The Agency repeated throughout its oral testimony, state the companies, that the CASA would not reduce the overall emissions cap. In fact, modeling by the Agency's consultant, ICF, demonstrated that $NO_x$ emissions in Illinois would not be reduced with a 25% CASA even if the entire 25% were retired. Therefore, conclude the companies, the proposed CASA will merely displace the location of the emissions. PC 6 at 3.

**Use of Unused, Accrued CASA Allowances for CAA Demonstrations.** Dynegy and SIPCO contend that the Agency has not presented a clear rationale for the 25% set-aside. PC 6 at 3. The Agency originally stated that the large set-aside was necessary for attainment and that the Agency would retire unused, accrued allowances from the collective set-aside pools. *Id*. The companies contend, however, that the Agency's position shifted and the Agency later acknowledged that it could not quantify the number of allowances that would be available for retirement and that retirements could not be used to demonstrate attainment. *Id*. at 4.

Dynegy and SIPCP state that the same doubts concerning the unused, accrued set-aside allowances for purposes of demonstrating attainment also apply to reliance on these allowances in a maintenance plan: they cannot be quantified and their number is not permanent. PC 6 at 4. The companies state that in the proposed rule, the language states the Agency *may* retire the unused, accrued allowances. PC 6 at 4; citing proposed 35 Ill. Adm. Code 225.475(b)(5). Accordingly, the companies assert that the Agency cannot say there are a permanent number of allowances that would be retired in the future. The companies further contend that actual emissions reductions are not quantifiable because the Agency cannot predict with certainty how many allowances will be used from year to year and the rate at which unused allowances will accrue and thereby be eligible for retirement. PC 6 at 4-5.

Next, Dynegy and SIPCO dispute the Agency's "the-more-$NO_x$-reduced-the-better" principle. The companies argue that the Agency has not provided support for several aspects of this approach. First, the companies state that while the Agency claims that various additional reductions of $NO_x$ are necessary in order for the state to demonstrate attainment of the ozone and $PM_{2.5}$ NAAQS, the Agency's own witness, Mr. Robert Kaleel, indicated that the Chicago area has attained the 8-hour ozone standard. PC 6 at 6. The companies note that attainment of the 8-hour ozone standard in Chicago was achieved without the implementation of any part of CAIR and conclude by questioning the need for a 25% CASA for air quality purposes relative to ozone. PC 6 at 6.

**Comprehensive Approach to CAA Requirements.** The companies seek a comprehensive approach to federal requirements that they claim the Agency has failed to set forth. The companies state that industry cannot support the "'*ad hoc*, willy nilly approach' – or lack of comprehensive, organized approach – that the Agency has put forth so far." Dynegy and SIPCO contend that this approach has forced individual companies, including the operators of all the EGUs subject to this proposed rule except City Water Light & Power, to enter into negotiations with the Agency on an individual basis, resulting in the "inconsistent hodge podge" of regulation that will become Part 225. PC 6 at 6-7.

The companies state that the Agency has failed to explain the role that the proposal will play in the overall plan for the attainment demonstrations or provide information regarding the amount of local $NO_x$ reduction necessary for attainment. The companies seek a demonstration by the Agency of the air quality benefit derived from the 25% CASA, the air quality needs, and how a 25% CASA satisfies those needs. PC 6 at 8.

**Lack of Identified Projects.** Next, Dynegy and SIPCO state that the Agency has not identified projects that justify the size of the set-aside. The companies state that even in light of testimony by ELPC witness, Mr. Charles Kubert, regarding energy efficiency and renewable energy (EE/RE) projects, the Agency's identification of new coal-fired projects either permitted or under review, and recognizing Ameren's eligibility for early-adopter CASA allowances, the evidence does not justify anything approaching a 25% CASA.

The companies state that through the "tipping" provisions of the CASA, a significant portion of the CASA allowances could go to Ameren. It is extremely inequitable, state the companies, that the five other power generation companies in the state should be expected to subsidize Ameren through the CASA when the other companies had reduced $SO_2$ emissions for many years prior to implementation of the MPS.

**Effect of 25% Set-Aside on Economic Analysis of the Proposed Rule.** The companies dispute the Agency's economic analysis of the CASA as highly cost effective. The companies contend that the 25% CASA is the equivalent to not allocating allowances to the Dynegy, City Water Light & Power, and SIPCO systems, with 102 megawatts (MW) still not accounted for. PC 6 at 10.

The companies question the Agency's reasoning that Illinois' cap is not affected by the 25% CASA. The Agency contends the CASA allowances remain in the regional pool to be purchased by Illinois EGUs that are not allocated a number of allowances sufficient to cover their emissions, and so the rule remains within the scope of USEPA's determination of highly cost effective. Dynegy and SIPCO argue, however, that if EGUs must purchase allowances that USEPA intended be allocated to them without cost, then the Illinois rule is significantly different from USEPA's assumptions in its "highly cost effective" analysis. The companies argue that the Illinois rule will be significantly more costly for Illinois EGUs than for EGUs in states with set-asides the same as or closer to the 5% new unit set-aside (NUSA) provided in the model rule. The companies note that the USEPA's analysis did not assume a CASA of any size. PC 6 at 11.

The companies dispute the Agency's contention that USEPA granted flexibility to states with respect to inclusion of a set-aside for EE/RE projects. According to the companies, USEPA does not suggest anywhere in the preamble to CAIR that there should be an additional set-aside for early adopters, clean coal technology, and so forth. The companies assert that the Agency's set-aside proposal exhibits "pretzel-like flexibility, very bent but rigid." PC 6 at 12.

**Extremely Large Proposed CASA Neither Mandated Nor Supported.** The companies contend that the Governor's energy plans are no bases to justify the size of the EE/RE portion of the CASA. The Agency, state the companies, relied upon the Governor's Sustainable Energy Plan to justify the size of the EE/RE portion of the CASA. However, the Governor's

Sustainable Energy Plan states that the responsibility for ensuring that the requisite percentage of power used in Illinois lies with the distributors of power, not the EGUs. PC 6 at 12-13.

The companies also agree that the Agency does not bear the responsibility for developing CAIR to accommodate the Governor's Energy Plan. The companies agree that there are no regulations or other mandates with respect to that plan, and believe that it would be more appropriate to eliminate the CASA for that very reason. PC 6 at 13.

**Disparate Treatment of EGUs Subject to Consent Decrees.** The companies disagree with the Agency's rationale for excluding EGUs that entered into consent decrees prior to May 30, 2006. The companies opine that the clear purpose of carving out reductions for these EGUs was to exclude Dynegy from participation in the CASA for reductions it will achieve pursuant to its consent decree with USEPA. PC 6 at 14.

Dynegy and SIPCO disagree with the Agency's rationale that a consent decree is somehow not voluntary. The companies emphasize that no source is compelled to enter into a consent decree, and very often a consent decree contains no admission of liability or guilt. Entering into a consent decree is often more economical than defending against an enforcement action. The companies further state that entry into the consent decree is a business decision and not involuntary. PC 6 at 14-15.

**Review of CASA Allowance Allocations.** The companies seek clarification of proposed Section 225.455(b) for appeals of CASA allocations. The companies note that while the regulations do not provide for Board review of the Agency's final decisions regarding CASA allocations, the Environmental Protection Act (Act) provides for the review of permits issued by the Agency. PC 6 at 15.

The companies state that while an upheld appeal of a CASA allocation would not likely qualify as noncompliance with the Subpart, it could result in a readjustment of the distribution of CASA allowances for the given time period. This scenario could involve the return of allowances to the Agency for redistribution. The companies suggest that the language of the proposed Section 225.455(b) should be amended to address this potentiality. PC 6 at 15-16.

**Adding Overfire Air to the CASA.** The companies oppose Ameren's proposal to add "advanced" OFA to the CASA. The companies contend that, if the Board were to accept Ameren's proposal without certain qualifications, Ameren would again be rewarded merely for coming to par with the other generators in the state. Steven Whitworth testified that only two of Ameren's Illinois units are currently fitted with OFA. PC 6 at 16-17.

The companies state that unless the regulated community as a whole would be given credit for OFA systems that achieve a specified level of $NO_x$ removal (rather than distinguishing between "advanced" and other OFA schemes), the Board should reject Ameren's request. PC 6 at 17.

**Annual Operation of SCRs.** The companies address Dominion's suggested that annual operation of SCRs installed since adoption of Part 217, Subpart W should be eligible for CASA

credit. The companies state that if the Agency and the Board consider inclusion of Dominion's suggestion, the resulting CASA language should include annual operation of previously installed SNCRs, as well. PC 6 at 17.

**Purpose of the CASA.** The companies assert that the CASA as it is structured, does not further the Agency's stated purpose of CASA. According to the companies, the Agency has stated that the purpose of the CASA is to encourage early reductions, principally obtained through construction and operation of new or upgraded pollution control devices, and encourage projects that will benefit the environment. PC 6 at 17-18. The companies state that providing carve-out "incentives" for those who reduce early, subsidizing the costs of more expensive pollution control equipment, is inconsistent and skews how CASA allowances are allocated. *Id*. at 18.

Dynegy and SIPCO state that a project does not have to be "big-ticket" to benefit the environment. The companies state, for example, that low $NO_x$ burners and OFA are less "big-ticket" than SNCR, yet they benefit the environment without exposing the environment to ammonia slip or leaks. PC 6 at 18.

Finally, the companies argue that the CASA does not treat all EGUs equally. The companies claim that CASA subsidizes the construction of pollution control equipment by some companies at the expense of others. For example, Dominion has made improvements on the Kincaid facility and SIPCO has installed a circulating fluidized bed (CFB) unit, baghouses, a scrubber, and an SNCR, yet they are effectively penalized 25% of the allowances USEPA anticipated they would receive. Although SIPCO may receive some allowances from the CASA, that number of allowances does not come close to the 25% it will lose to the CASA. PC 6 at 19-20.

**CASA Allowances for MPS Reductions.** The companies state that despite the Agency's contentions, not all projects undertaken pursuant to the MPS will be excluded from having to surrender allowances to the Agency. PC 6 at 20. According to the companies, it appears that beginning in 2012 for $NO_x$ projects and 2013 for $SO_2$ projects, the project sponsors may apply for allowances from the CASA, but under the language of Section 225.233(f)(1) of the MPS, the project sponsors would have to surrender those allowances back to the Agency because those allowances would have been generated "as a result of actions taken to comply with the standards of subsection (e) of this Section [225.233]." *Id*. at 20-21; citing Proposed New 35 Ill. Adm. Code 225 Control of Emissions From Large Combustion Sources (Mercury), R06-25, slip op. at 113 (Nov. 2, 2006).

**Conclusion.** For all of the reasons provided above, the companies assert that industry is very reluctant to agree that a 30% set-aside is justifiable or even beneficial to interests the state purports to promote through creation of the set-aside. The companies state that the CASA is either a misguided attempt to support so-called green projects, or is skewed to benefit one company. Neither scenario is acceptable to the companies. The CASA represents 4,521 (megawatt electrical (Mwe). The companies state that at $2,500/allowance, this represents $47,643,750 value lost to the existing power generators on an annual basis plus $9,528,750 in allowance value for the NUSA. Moreover, state the companies, the Agency has specifically

omitted the CSP of 11,299 allowances, worth $28,274,500 at $2,500 per allowance. The companies reason that since the Agency proposes to encourage early reductions, the cost of the lost CSP is actually double that, or $56,495,000. PC 6 at 21-22.

**Allocation Methodology**

**Heat Input v. Gross Electrical Output.** The companies oppose the Agency's proposal that allowance allocations be based upon gross electrical output rather than heat input. The companies suggest that the rule language simply mirror the federal requirements. PC 6 at 24. SIPCO adamantly opposes reliance on gross electrical output as the basis for allowance allocations. *Id*. at 24. Dynegy prefers reliance on gross electrical output as the basis for allocations, but would find heat input as a basis for allocations acceptable because of the amount of historical data on heat input, and the well-established quality assurance procedures for reporting. *Id*. Further, notes Dynegy, it was the basis USEPA used for establishing caps under the federal CAIR, and the Agency has put forth no compelling reason to switch from heat input as the basis for allocations. *Id*.

The companies state that the efficiency assumed in the Agency's heat input to gross electrical output formula is not representative of actual efficiencies at the plants. This formula disadvantages the vast majority of the regulated entities to varying degrees and is particularly disadvantageous to SIPCO.

The companies state that industry wants an appropriate conversion formula to be applied. PC 6 at 25. The current conversion formula, for example, would put integrated gasification/combined cycle (IGCC) plants at a disadvantage. Alternatively, state Dynegy and SIPCO, if Illinois followed the federal example, as new sources, IGCC plants would be allocated allowances based upon gross electrical output pursuant to USEPA's formula. *Id*.

With respect to encouraging efficiency, the companies note that not all types of boilers are considered environmentally beneficial and not all clean coal technology are exceedingly efficient. CFBs, for example, are considered a clean coal technology and are eligible for allowance allocations under the CASA. Operation of the CFB, however, is not as efficient as other types of boilers in terms of gross electrical output. Compared to USEPA's list of the top 25 most efficient boilers, SIPCO's CFB, state the companies, is almost 40% less efficient. The companies explain that this means the CFB requires 40% more Btu to generate a kilowatt-hour. The environmental controls of a CFB occur inside the boiler resulting in a gross heat rate penalty. In other types of boilers, controls are external to the boiler and appear more efficient when comparing gross heat rates. As a result, SIPCO's CFB is penalized by the use of gross electrical output as the basis for allowance allocations. Nonetheless, SIPCO's CFB has inherently lower emissions and was specifically designed to burn recovered coal fines, which provides an environmental benefit by reducing acid run-off. PC 6 at 25-26.

**Acceptable Gross Electrical Output Data.** The companies understand, from the Agency's presentations at the Springfield hearing and in subsequent discussions, that the Agency will accept as gross electrical output data any data that is acceptable to USEPA pursuant to 40 C.F.R. § 60 or 75. The companies note that the proposed language requires an actual

measurement device be installed on the generator. However, such a device is not required by USEPA pursuant to 40 C.F.R. § 60 or 75. The companies urge the Board to ensure that the rule language reflects the parties' intent. PC 6 at 27.

**Fuel-Weighting.** The companies support the Agency's proposal regarding weights assigned to fuel types and oppose the change suggested by Zion. PC 6 at 27. Zion requested that the Board remove the fuel-weighting or, alternatively, assign a factor of 1.0 for coal and 0.6 for all other fuels. The companies argue that the change would result in fewer allowances allocated to the companies, and with a 25% CASA, the companies do not support any amendments that would further reduce the number of allocated allowances. *Id*. at 27-28. The companies state that use of fuel factors is appropriate for the reasons provided by the USEPA and the Agency. *Id*.

**Look-Back Period and Annual Updating.** The companies oppose the Agency's approach to annual allowance allocations, and support use of the USEPA's approach of using a permanent baseline. PC 6 at 28-29. The companies state that the look-back period will, from time to time, include periods when the EGUs experience outages of various lengths of time. The companies contend that the rule is not clear on how companies that opt in to the MPS will be able to bank their allowances to cover outage years. *Id*. at 29. The companies are also concerned with the approach of annual updating because of the Agency's past failures to timely allocate allowances. Further, state the companies, a two-year look-back period would require that the updating occur annually and timely. PC 6 at 28-29. Failure to timely allocate allowances under this approach could also effect the EGUs' emissions trading. *Id*. at 30-31.

USEPA suggested a permanent baseline for sources in the model rule, reasoning that it "will eliminate the potential for a generation subsidy (and efficiency loss) as well as any potential incentive for less efficient existing units to generate more." PC 6 at 29; citing 70 Fed. Reg. 25161, 25279 (May 12, 2005). The companies urge the Board to revise the updating allocation methodology to take the average of the three highest years' heat input during a five-year look-back period (currently in place in Illinois under Part 217, Subpart W). *Id*. at 31. The companies contend this approach would level the effects of outages. *Id*.

**Suggested Improvements to the Rule as Proposed**

**CASA Size.** The companies propose reducing the CASA size to 5% of the state's cap. This 5%, state the companies, would cover the allowances necessary to address the projects that Mr. Kubert stated were in development. PC 6 at 34.

**CASA Categories.** The companies recommend that the CASA be limited to EE/RE projects if the size of the CASA is reduced as urged above. If the existing companies are not effectively penalized by the loss of an additional 20% of their allowances as anticipated by USEPA in establishing the state's cap, then the additional CASA categories are not necessary. If the Board decides not reduce the size of the CASA, the companies urge the Board to accept the changes to the CASA indicated in their Response to the Agency's Motion to Amend Rulemaking. PC 6 at 34.

The companies state that if the Board determines that it is appropriate to include OFA as a CASA category, the rule should also make historical OFA systems that meet or exceed the 30% reduction threshold eligible regardless of whether upgrades to existing OFA systems are necessary to achieve such a reduction level. PC 6 at 34-35.

**Compliance Supplement Pool.** The companies favor including the CSP in the rule, as opposed to its retirement. PC 6 at 35.

**Allocation Methodology.** The companies strongly urge the Board to reject the Agency's proposed allocation methodology and replace it with one that reflects USEPA's model rule. The companies doubt the Agency will consistently manage the proposed annual updating methodology for two trading programs plus the CASA in the timeframes set forth in the rule. PC 6 at 35.

## Public Comment 7: Environmental Advocates

The ELPC, by itself and on behalf of American Lung Association of Metropolitan Chicago; Environment Illinois; and the Sierra Club (collectively, "Environmental Advocates") urge the Board to amend the Agency's proposed CAIR rule in three principle ways. PC 7 at 1. First, the renewable energy and energy efficiency set-asides should be increased to better meet the rule's own renewable energy goals. *Id.* Second, the CASA proposed for circulating fluidized bed (FBC) boilers should be eliminated, since FBC boilers are not a clean coal technology. *Id.* Third, the fuel-weighting factors should be eliminated, since they discourage the use of cleaner fuels in energy production. *Id.*

### The Energy Efficiency and Renewable Energy Set Aside Should be Increased

Renewable energy production projects will benefit from assignment of allowances corresponding to the amount of energy they produce. PC 7 at 2. The Agency has acknowledged that while the Governor's plan calls for 10% of Illinois energy to come from renewable sources by 2015, the current CAIR proposal will only lead to an offset of 5-8% of future need. *Id.* The RE/EE set asides included in CASA, currently set at 12%, should be raised to 15%, with an annual increase of 1% to a maximum of 20%. *Id.* This will best allow the Illinois CAIR rule to work toward both the Governor's plan and its own goals. *Id.*

In response to requests made at hearing, the Environmental Advocates attached several studies concerning renewable energy to the comment. PC 7 at 2. One study that dealt with the effects of wind turbines on radar concluded that with proper planning and site selection, any conflict between radar technology and wind turbines may be mitigated. *Id.* Two further studies compared wind power to coal power. *Id*. at 4. The first concluded that adding new wind power can be more economically effective than adding new gas or coal power and that a higher percentage of dollars spent on coal and gas will leave the state. *Id.* The second study showed that developing wind power instead of coal power and natural gas power can have a net benefit to a state's economy. *Id.* Another attachment to the comment showed that generation costs of RE/EE are competitive with coal. *Id.*

**The Rule Should Not Provide Incentives for FBC Boilers**

The Environmental Advocates state that FBC boilers should not receive CASA credits because: (1) controlled FBC boilers are not lower in $NO_x$ emissions than controlled pulverized coal (PC) boilers; (2) FBC boilers do not achieve the low $NO_x$ emissions that IGCC plants do; and (3) FBC boilers emit more greenhouse gases than PC boilers. PC 7 at 4. The Environmental Advocates contend that Agency's explanation for including FBC boilers in the CASA lacks justification for FBC boilers receiving CASA credits. According to the Environmental Advocates, the TSD contains no support for giving incentive credits to FBCs and the Agency was merely responding to concerns of the coal-fired power plants in doing so. *Id*. at 5. The Environmental Advocates contend that because the Agency puts forward no persuasive reason for including FBC boilers in the CASA, and because FBC boilers emit more $NO_x$ and greenhouse gases than controlled PC boilers and IGCC plants, FBC boilers should be removed from the CASA. *Id.*

**FBC Boilers Do Not Lead to Reduced $NO_x$ Emissions Compared to PC Boilers**. While FBC boilers may be lower emitting than PCs when looking at uncontrolled emissions, FBC boilers are not lower emitting once controlled. PC 7 at 5. In this day and age, new coal-fired power plants are all built with controls. *Id*. at 5. Therefore, it is emissions from controlled FBC boilers compared to emissions from controlled PC boilers that should be considered because that is demonstrative of what the actual emissions will be. *Id.* Therefore, PC boilers generally achieve lower $NO_x$ emissions levels and have lower $NO_x$ permit levels than FBC boilers because PC boilers, but not new FBC boilers, can install the most effective $NO_x$ controls (SCR). New PC boilers, which generally use the most modern $NO_x$ controls, achieve approximately 30% lower $NO_x$ emissions than FBC boilers, which generally are built without the best performing $NO_x$ controls. *Id.* Consequently, there is no justification for offering incentives for FBC boilers considering they do not achieve lower emission levels than PC boilers. *Id.*

**FBC Boilers Do Not Achieve Emissions Levels Comparable to IGCC**. The TSD discusses the eligibility for other projects to receive credits under this section for the "Clean Coal Technology" incentive and states that projects that use "technologies that achieve comparable emission rates" to IGCC or CFB boilers may be eligible for the set-aside. PC 7 at 6; citing TSD at 112. However, FBC boilers and IGCC projects themselves do not achieve comparable $NO_x$ emissions rates. PC 7 at 7. CFB boilers permit levels have generally ranged from 0.07 to 0.08lb/MMBtu. *Id.* Expected $NO_x$ emission levels for recently proposed IGCC plants average 0.039lb/MMBtu, resulting upwards of 45% lower $NO_x$ emissions. *Id.* Since CFB boilers do not perform nearly as well as IGCC, they should not be included in the same category of incentives. *Id.* If the two projects listed in the clean coal technologies category are not similar in their effects, it would be impossible to determine what emissions rates new projects ought to be achieving in order to receive clean coal technology credits. *Id.* at 8; *see* proposed 35 Ill. Adm. Code 225.460(e). For these reasons, the Environmental Advocates assert that FBC boilers should be removed from the CASA. *Id*.

**CFB Boilers Emit 15% More Greenhouse Gases**. CFB boilers emit more $N_2O$, a potent greenhouse gas, than PC boilers. PC 7 at 7. Comparatively, CFB boilers emit approximately 15% more global warming pollutants than PC boilers. *Id.* In fact, SNCR, the

$NO_x$ controls most commonly used on CFB boilers, increase the amount of $N_2O$. *Id.* Creating an incentive for a technology that emits 15% more global warming pollutants than the alternatives is contrary to both state and the Agency goals. *Id.* Both the Governor and Agency Director Doug Scott have publicly stated that reducing global warming pollutants is a state priority. PC 7 at 8. By endorsing CFB boilers and providing incentives or them, the Environmental Advocates contend that the Agency and the state are acting completely contrary to state policy on global warming. *Id.* The Environmental Advocates conclude that it is incumbent upon the Board to correct the course of this rule and remove "clean coal" incentives for CFB boilers. *Id.*

**Illinois Should Adopt a Fuel-Neutral Approach In Allocating NOx Allowances To Specific Sources**

The Environmental Advocates note that the federal CAIR proposal is fuel-neutral, meaning it did not include an adjusted fuel-weighting calculation to determine $NO_x$ emission credit allowances. PC 7 at 9; citing 69 Fed. Reg. 4610 (2004). According to the State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO), a fuel-neutral allocation system that does not differentiate between coal and non-coal units "even[s] the playing field by treating all units the same. Among other things, this allows the trading program to do a more effective job of determining the most cost effective compliance mix." PC 7 at 10.

The Environmental Advocates state that the operators of coal-fired EGUs, or their trade associations, submitted virtually all of the comments USEPA received in opposition to the fuel-neutral approach to determine $NO_x$ emission credit allowances. PC 7 at 10. The Agency did not object to the fuel-neutral approach in allocating $NO_x$ emission credit allowances in their March 30, 2004 comments. *Id.*

When CAIR was promulgated in final form, it was no longer fuel-neutral. PC 7 at 10. As a result, Illinois, which had argued for deeper reductions, now found itself with more $NO_x$ allowances by virtue of the elimination of fuel-neutrality. *Id*. However, having given Illinois additional $NO_x$ allowances, CAIR in its final form explicitly does not require Illinois or any other state to use the fuel allocation factors in distributing allocations to individual sources. *Id.* The USEPA allowed individual states to decide whether to use a fuel-neutral or fuel-weighted system in making allocations to individual systems. *Id*. at 11. The Environmental Advocates ask that the Board eliminate or modify the fuel-weighting component of the proposed Illinois rule. *Id.*

The Environmental Advocates contend that in the fuel-weighted system that is now a part of the proposed rule, coal-fired power plants are the clear beneficiaries by comparison to their oil- and especially gas-fired counterparts. PC 7 at 12. According to the Environmental Advocates, the immediate losers of this market inefficiency are the gas and oil fired boilers and combustion turbines identified by the Agency. *Id.* The Environmental Advocates contend that Agency's reasoning for using a fuel-weighted system that benefits one sector at the expense of others has been consistent throughout these proceedings, and it is twisted. *Id.* Oil- and gas-fired EGUs are being punished for using an inherently cleaner fuel, which disadvantages EGUs that generate an equivalent unit of energy with lower emissions compared to a coal-fired unit. *Id.*

Many oil and gas fired EGUs are also being punished by virtue of operating more modern, well-controlled facilities than their coal-fired counterparts. PC 7 at 12. The Environmental Advocates point to testimony made by Jason Goodwin to clarify this point. *Id*. at 13. The Environmental Advocates add that "[p]utting modern, well-controlled and cleaner facilities at such disadvantage is a far cry from the Agency's stated objective." *Id.* In the TSD, the Agency states its objective is to provide more allowances to sources that operate more efficiently, install air pollution control equipment, and upgrade equipment. *Id.*; citing TSD at 35. In light of the success of fuel-neutral $NO_x$ seasonal trading program and the Agency's stated policy to provide more allowances to efficient, modern facilities, the Environmental Advocates ask why the Agency proposed a fuel-weighted system? PC 7 at 14. Mr. Goodwin was succinct in stating, "clearly, Illinois is strongly oriented to coal generation." *Id.* The Environmental Advocates state that on this issue, the Illinois CAIR rule is not reasonably related to the stated purposes of encouraging cleaner energy generation. *Id.*

For these reasons, the Environmental Advocates recommend that the Board amend the CAIR rule to increase the renewable energy and energy efficiency set-asides, remove any allowance incentives granted to fluidized boilers, and eliminate the included fuel-weighting factors. PC 7 at 15-16.

**Public Comment 8: Post-Hearing Comments of Midwest Generation**

Midwest Generation supports a three-year averaging and five-year look-back period to determine an EGU's allowances, rather than the two-year period in the Agency's proposed rule. PC 8 at 1. Midwest Generation is concerned that the two-year look-back will encompass periods when the EGUs experience outages of various lengths of time and EGUs will consequently receive a "short" allocation. *Id*

In addition, Midwest is concerned about the process of annual updating and the relevant look-back period. PC 8 at 1. Where the look-back is so short with no "levelizing" allowed through the averaging of a number of years' operations chosen from a larger number of years, such as the highest three years' operation out of a specified five-year period, it becomes critical that the updating occur annually and timely. *Id.* at 1-2.

USEPA has suggested a permanent baseline for sources in the model rule, which the USEPA has stated is easier to implement administratively. PC 8 at 2; citing 70 Fed. Reg. 25161, 25279 (May 12, 2005). New sources roll into the existing source permanent baseline once they have five years of operating data, causing an adjustment of all existing sources' allocations. *Id.* USEPA reasoned that it chose not to utilize an updating system for allocating allowances, in order to avoid the subsidization of increased fuel use and the associated market distortions. *Id.*; citing 71 Fed. Reg. 25328, 25356 (Apr. 28, 2006). The USEPA further stated that if allocations were based upon updated heat input data then increased fuel use would result in increased future allocations and thus would in effect be subsidized. *Id.* Midwest believes that this is the best approach for providing certainty to existing plants, integrating new plants into the allowance system, and minimizing the resource burden on the Agency associated with annual updating. *Id.* Midwest also urges the Agency to consider using a five-year look-back (three highest years of operational heat input over a five-year period). *Id.* This approach will help to levelize the

allowances for EGUs in Illinois and will avoid skewed distribution of allowances or penalties associated with unexpected or extended outages. *Id.*

Like Dynegy and SIPCO, Midwest Generation is concerned that future human error could result in delayed allowance allocations by the Agency, and believes the rules should be written to ensure against, or at least minimize, the negative outcomes of human error. PC 8 at 3.

According to Midwest Generation, as a safety net, the USEPA has provided in its $NO_x$ trading rules that when a state fails to allocate allowances in a timely manner, USEPA will rely upon the previous allocation to cover the unallocated period. PC 8 at 3. If a timely allocation is not made for the two $NO_x$ programs proposed by these rules, some EGUs will be frozen at an allowance level that reflects extensive outages. *Id.* This cannot be avoided under the current language of the rule, yet either of Midwest Generation's proposed alternatives would avoid this outcome. *Id.*

Midwest Generation urges the Board to revise the rule to reflect the three-year averaging concept and the five-year look-back period. PC 8 at 4. Finally, Midwest Generation requests that the Board consider heat input as the basis for allocations, which is how Midwest Generation has reported and certified for years. *Id*. at 5. Heat input data is more reliable than output data as the manner of output data's measurement and its quality assurance is not uniform. *Id.*

**Public Comment 9: Joint Comment of the Agency and Midwest Generation**

Please refer to PC 11, a revised joint comment of Midwest Generation and the Agency, discussed below.

**Public Comment 10: Final Comments of Kincaid**

Over the past eight years, Dominion's Kincaid station has been installing pollution controls, switching fuels and making other changes to ensure compliance with the increasingly more stringent air quality emissions limitations. Kincaid supports the adoption of state regulations that embrace the federal CAIR. PC 10 at 1-2.

Kincaid does not support Subparts D and E of the Agency's proposal. Specifically, Kincaid states it does not support the 25% CASA. Kincaid states the Agency has provided no justification that the level of the proposed set-aside is necessary from an air quality perspective. Kincaid further contends that these provisions will significantly increase compliance costs for Illinois sources and competitively disadvantage the state relative to surrounding states. According to Kincaid, this approach also could jeopardize USEPA approval of the Illinois CAIR SIP, and even Illinois sources' participation in the federal trading program. Kincaid asserts this may also deny Illinois the economic advantages of the USEPA trading program that many other surrounding states will realize through the adoption of the USEPA rule.

Kincaid also does not support the proposed withholding of allowances from the compliance supplement pool (CSP). The early reduction incentives that Illinois included in its rules implementing the $NO_x$ SIP Call not only provide companies added compliance flexibility

that eases the burden once the requirements take effect, but also benefit the environment by providing real emission reductions sooner. PC 10 at 2-3.

Kincaid opposes any requirement that all Illinois sources subject to CAIR implement "beyond CAIR" reductions. The Agency should evaluate only those local areas in Illinois that fail to meet the air quality standards following implementation of the CAIR regional reductions. PC 10 at 3. Taking this approach, asserts Kincaid, the Agency can determine the amount of additional air quality improvement and emission reductions needed in the more localized nonattainment area in order to achieve the needed air quality improvements in the most cost-effective manner. *Id*. Kincaid urges the Board to reject the IEPA proposal and, instead, approve full adoption of USEPA's federal "model rule" on the same schedule established by USEPA. PC 10 at 3-4.

Kincaid further contends that "beyond CAIR" reductions are premature without more data and more research demonstrating that EGU reductions of $SO_2$ and $NO_x$ impact $PM_{2.5}$ concentrations. PC 10 at 4. Until additional speciated monitoring data is available, argues Kincaid, it is premature to require "beyond CAIR" $SO_2$ or $NO_x$ reductions from EGUs because the absolute value of $PM_{2.5}$ concentrations measured in the field may not be driven by $SO_2$ or $NO_x$ reductions. *Id*. Kincaid, therefore, supports the approach to implement CAIR essentially as established by USEPA, in addition to working with sources in local nonattainment areas to determine the appropriate mix of reductions needed to resolve the remaining local nonattainment area issues. PC 10 at 4-5.

Kincaid states that source apportionment data provided by the Lake Michigan Air Directors Consortium (LADCO) indicates that Illinois EGUs make up only a small part of the ozone non-attainment problem in the Chicago area (Illinois EGU $NO_x$ emissions make up 4% of the ozone contribution, behind "Illinois Non-road," "Illinois Non-EGU," and "Indiana On-road" sources). PC 10 at 5.

Kincaid argues that adopting "beyond CAIR" $NO_x$ reductions will place Illinois at an economic disadvantage compared to surrounding states. PC 10 at 6. Kincaid contends that the 25% CASA proposal will severely restrict $NO_x$ allocations for affected units. Essentially, asserts Kincaid, the 25% set-aside becomes a 25% reduction beyond the $NO_x$ limits in the federal CAIR rule. Imposition of "beyond CAIR" control strategies, such as the ones described in the white paper prepared by LADCO on additional control scenarios for EGUs, could have a significant negative impact on the economies of several Midwestern states. *Id*.

Kincaid states that recent studies on "beyond CAIR" requirements and corresponding impacts of higher electric rates on the State of Illinois show increases in electric rates, an decreased demand for coal mined in Illinois, Indiana and Ohio, a reduced annual economic output in the five-state region (Illinois, Indiana, Ohio, Michigan, and Wisconsin), and reduced employment in the five-state region. In addition, Kincaid can provide an estimated cost for the five-state Midwest region for a scenario where LADCO controls are supplemented by replacement power to compensate for early generating unit retirements at $865 million per year. Kincaid contends Illinois would not have to bear its portion of these costs if it were to adopt the federal CAIR program. PC 10 at 8-9.

Kincaid supports the Agency proposal to adopt the federal CAIR $SO_2$ trading program as part of the Illinois CAIR rule. Modeling conducted by LADCO in the fall of 2005, suggests the current $PM_{2.5}$ models are not yet sufficiently accurate on which to base regulatory decisions. PC 10 at 9.

Kincaid supports the five-year baseline proposed at Part 225, Subparts D and E, Sections 225.435(a) and 225.535(a) for the initial annual and ozone season allocation of $NO_x$ allowances for the years 2009, 2010, and 2011. For the year 2012 and beyond, Kincaid urges IEPA to use a five-year baseline, with an average of the three highest years, throughout the annual and seasonal $NO_x$ trading rules with periodic revisions every five or six years. Kincaid asserts that a longer baseline period will ensure that allocations will be fairly distributed among affected facilities, taking into account market swings, prolonged maintenance breaks and lengthy outages to install the extensive control equipment needed to comply with these rules as well as the recently finalized mercury rules at Part 225, Subpart B. PC 10 at 10.

The Illinois Subpart W rules at Part 217.770 include 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 states that its facility was equipped with the most effective $NO_x$ controls available, emissions were reduced earlier than required and the benefits to the environment were delivered. 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." Kincaid urges the Board to restore the allowances for the CSP 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 SCRs year-round). PC 10 at 11-12.

Withholding the additional 25% of the $NO_x$ allowance budget significantly impacts the economics of the rule for EGUs. For Kincaid, the 30% set-aside (CASA plus NUSA) equates to an annual allowance surrender of about $2.5 million per year. Under the IEPA proposal, if Kincaid needed to purchase back these allowances (which under federal model rule would have been directly allocated to Kincaid), the net financial impact would be $5 million per year. PC 10 at 12-13.

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, and, regarding the EEC/RE set-aside, to adopt provisions that would return any allowances not claimed by EEC/RE projects to the EGUs. PC 10 at 13.

To effect this change, Kincaid suggests that the Board amend Section 225.475(b)(4) of the proposed Subpart D: CAIR $NO_x$ Annual Trading Program as follows:

> If allowances still remain undistributed after the allocations and distributions in the above subsections are completed, the Agency may elect to retire any CAIR $NO_x$ allowances**,**

> *with the exception of allowances assigned to the Energy Efficiency and Conservation/Renewable Energy set-aside,* that have not been distributed to any CASA category, to continue progress toward attainment or maintenance of the National Ambient Air Quality Standards pursuant to the CAA. *Allowances from the Energy Efficiency and Conservation/Renewable Energy set-aside that remain undistributed shall be distributed to each CAIR $NO_x$ unit in accordance with section 225.440.* PC 10 at 14 (emphasis in original).

Kincaid suggests that the Board make the following similar changes in section 225.575(b)(4) of the proposed Subpart E: CAIR $NO_x$ Ozone Season Trading Program:

> If allowances still remain undistributed after the allocations and distributions in the above subsections are completed, the Agency may elect to retire any CAIR $NO_x$ allowances**,** *with the exception of allowances assigned to the Energy Efficiency and Conservation/Renewable Energy set-aside,* that have not been distributed to any CASA category, to continue progress toward attainment or maintenance of the National Ambient Air Quality Standards pursuant to the CAA. *Allowances from the Energy Efficiency and Conservation/Renewable Energy set-aside that remain undistributed shall be distributed to each CAIR $NO_x$ Ozone Season unit in accordance with section 225.440.* PC 10 at 14 (emphasis in original).

According to Kincaid, because the eligibility to apply 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. Allowances were intended to help companies offset their economic burdens, and Kincaid does not believe that Illinois should disproportionately burden its electric generators. PC 10 at 15.

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. Kincaid suggests that the Board amend the proposed rule at Section 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 $SO_2$ emissions; installation of a baghouse for control of particulate matter emissions; and installation of *or extended operation of existing* selective catalytic reduction (SCR), selective non-catalytic reduction (SNCR), or other add-on control devices for control of $NO_x$ emissions. PC 10 at 15.

Kincaid states that the USEPA noted in its CAIR preamble that the "EPA's CAIR and the previously promulgated $NO_x$ SIP Call reflect EPA's determination that the required $SO_2$ and $NO_x$ reductions are sufficient to eliminate upwind States' significant contribution to downwind nonattainment. These programs are not designed to eliminate all contributions to transport, but rather to balance the burden for achieving attainment between regional-scale and local-scale control programs." PC 10 at 16. Kincaid supports the USEPA's position that CAIR does not

require states to prepare an attainment SIP to comply with CAIR and that the CAIR-related emission reductions are not designed to result in attainment of the NAAQS. *Id*.

Finally, Kincaid contends that the Board has failed to evaluate the technical feasibility and economic reasonableness of the combined impact of CAIR and CAMR. Both regulations impose unique impacts on coal-fired EGUs. Kincaid states that it has provided information in both regulatory proceedings that the economic impact of the individual and combined regulations is unreasonable. Further, states Kincaid, the Board's failure to evaluate the simultaneous impact of both rules is inconsistent with Illinois law. PC 10 at 16; citing Commonwealth Edison Co. v. PCB, 25 Ill. App. 3d 271, 323 N.E.2d 84 (1st Dist. 1975) (*aff'd* 62 Ill. 2d 494, 343 N.E.2d 4 (1976); Illinois State Chamber of Commerce v. PCB, 67 Ill. App. 3d 839, 384 N.E.2d 922 (1st Dist. 1978).

**Public Comment 11: Revised Joint Comment of the Agency and Midwest Generation**

On January 10, 2007, five days after the close of the public comment period, the Agency moved to file *instanter* a revised joint public comment (PC11), intended to supplement PC 9 that the Agency and Midwest Generation filed jointly on January 5, 2007. The Agency attached the revised public comment to the motion. The Board grants the motion, accepts PC 11, and discusses the two comments below.

The Agency and Midwest Generation assert that on December 10, 2006, they entered into a memorandum of understanding (MOU) under which the parties agreed to a timeline for Midwest Generation to achieve "deep and sustained" reductions in emissions of mercury, $SO_2$, and $NO_x$ from Midwest Generation's coal-fired Illinois EGUs. PC 9 at 2. As a result, the Agency and Midwest Generation ask the Board to include a new section, 35 Ill. Adm. Code Section 225, titled Subpart F, Combined Pollutant Standards, 35 Ill. Adm. Code Section 225.600 *et seq.* in the proposed CAIR rulemaking that reflects the parties' agreement. *Id*.

The parties to the MOU assert that Subpart F will establish an alternative means of compliance with the proposed emissions standards for mercury in Subpart B, Section 225.230(a) and will establish specific emissions levels for $NO_x$, PM, and $SO_2$. PC 9 at 2. Under Subpart F, the agreement provides that Midwest Generation will achieve reductions in mercury, $NO_x$, PM, and $SO_2$ emissions through a combination of permanent shut-downs of EGUs, installation of activated halogenated carbon injection systems for reduction of mercury (ACI), and the installation of pollution control equipment for $NO_x$, PM, and $SO_2$ emissions that will also reduce mercury emissions. *Id*. EGUs identified for compliance with the proposed Subpart F are referred to as a combined pollutant standard group (CPS Group). *Id*.

The parties to the MOU assert that the owner or operator of the CPS Group must begin installation of ACI equipment on certain EGUs twelve months earlier than the dates required for installation and operation of ACI under the recently adopted mercury standards in Subpart B, Section 225. The proposed Subpart F specifically provides that ACI must be installed and operable by July 1, 2008 or July 1, 2009, depending on the EGU. PC 9 at 2. Further, by January 1, 2015, EGUs in the CPS Group (other than Will County 3, which has a compliance deadline of Jan. 1, 2016) must achieve mercury emissions standards of either: (a) 0.0080 lbs

mercury/GWh gross electrical output; or (b) a minimum 90% reduction of input mercury. *Id*. at 2-3.

The MOU mandates, first, that by 2012, all operable EGUs in the CPS Group must achieve and maintain an overall average annual $NO_x$ emission rate of no more than 0.11 lbs/mmBtu. PC 9 at 3. Second, the MOU provides that by 2013, all operable EGUs in the CPS Group must achieve an overall average $SO_2$ emissions rate of no more than 0.44 lbs/mmBtu, and each subsequent year continue to reduce the overall average $SO_2$ emissions from all operable EGUs to 0.11 lbs/mmBtu by 2019. Third, that the owner or operator of the CPS Group must install and operate SNCR (or an equivalent technology) to reduce $NO_x$ emissions and flue gas desulfurization (FGD) equipment to reduce $SO_2$ emissions at the EGUs specified in Section 225.625 of the proposed Subpart F, and according to the schedule established therein. *Id*. at 3.

The parties to the MOU anticipate that the new equipment required under Subpart F will achieve reductions in $SO_2$, $NO_X$, and mercury beyond that required from existing regulations, and will further reduce ambient levels of ozone and $PM_{2.5}$. *Id*. According to the parties, these reductions will improve air quality and result in significant benefits to public health and the environment. *Id*.

The parties to the MOU agree that compliance with the proposed Subpart F is both technically feasible and economically reasonable, and expect that the levels reductions required in the proposed Subpart F will substantially contribute to the State's efforts to achieve the CAA's NAAQS. The parties add that any further reductions needed beyond those proposed in Subpart F would need to come from other sources. PC 9 at 4.

In the revised public comment, the Agency and Midwest Generation note that they were not able to agree on specific deadlines and milestones related to shutting down or installing new control equipment at certain facilities prior to the filing deadline for PC 9. PC 11 at 1. However, since the January 5, 2007 filing deadline, the Agency and Midwest Generation have reached an agreement on those issues. Accordingly, the Agency and Midwest Generation attached to PC 11 the revised language of the new Subpart F that includes the agreed upon milestones, options, and deadlines applicable to the EGUs specifically referenced in the rule. *Id*.

## BOARD DISCUSSION

The Board has held five days of hearings and received substantial testimony and comments on this proposal. The comments and the additional language changes suggested by both the Agency and the participants have been evaluated, and the first-notice proposal adopted by the Board today reflects the Board's consideration of all the comments and testimony the Board has received. The Board will discuss below the issues raised by the participants at the hearings and in the post-hearing comments along with the first-notice changes.

Section 27 of the Act requires that the Board must determine that a rule of general applicability is economically reasonable and technically feasible before adopting the rule. The majority of interested participating parties support the majority of the rule as amended during this proceeding. However, a number of issues still remain.

The major contested issues are: (1) whether the size of the CASA is too large; (2) whether over-fired air (OFA) projects should be excluded from receiving allowances from the CASA 25% set aside; (3) whether a *pro rata* allocation of allowances from the CASA is appropriate; (4) whether fluidized bed combustion (FBC) boilers should receive CASA allowances in the clean coal technology category; (5) whether allocations should be based on gross electrical output or heat input; (6) whether a two-year look-back provision updated on an annual basis to determine an EGU's allowances is appropriate; (7) whether the air quality modeling submitted by the Agency in the TSD is appropriate and supportive of the emissions standards in the proposal; (8) whether fuel-weighting as proposed is appropriate; and (9) whether a new section titled Subpart F, Combined Pollutant Standards, should be included in the proposal.

The Board will address each contested issue separately.

## CASA

### Size of the CASA

The CASA, and particularly the 30% set-aside, has been widely addressed during this rulemaking proceeding. The Agency asserts that the USEPA left the authority to the individual states to distribute their allocations as necessary to meet their own State's individual goals. PC 5 at 7. The Agency contends that a financial analysis of the impact of the worst-case scenario that the 30% set-aside (CASA plus NUSA) was effectively retired showed that relying solely on a 70% main pool, the reliability of the grid would be intact and residential and commercial electric rates would not be greatly impacted. *Id*.

Kincaid provided testimony that the 30% set-aside is too great and that the proposal penalizes facilities that have already installed the best available technology. *See* Kincaid Exh. 1 (Test. of Saladino) at 13. Kincaid argues that the Agency proposal to adopt "beyond CAIR" $NO_x$ reductions through a proposed set-aside program that far surpasses that of any surrounding states, places Illinois electricity consumers at a severe economic disadvantage. PC 10 at 6. Kincaid contends that there appears to be little chance that these allowances will ever be returned to the EGUs since the proposal calls for any $NO_x$ allowances that remain unclaimed from the four CASA allowance pools to be used to replenish each of the four CASA pools. PC 10 at 6.

Zion asserts that the Agency's proposed 25% CASA is far out of line with the proposed set-aside pools in many other CAIR states. PC 3 at 3. Zion believes that the CASA in the proposed rule should be revised. Zion contends that a smaller proportion of the total allowance budget should be made available for non-emitting sources. Zion suggests a CASA set-aside percentage in the 5-10% range, rather than the proposed 25%, because setting aside such a large portion of the allowance pool unjustifiably increases the compliance burden on facilities that already face significant emission reduction obligations through an artificial reduction in allowances available for allocations. PC 3 at 4. Second, Zion suggests that CASA applicants be restricted to electric generating sources and that non-generating sources be eliminated from consideration in the proposed rule. *Id.*

Ameren believes that CASA represents a useful balancing of technology, economic, energy and environmental considerations, and specifically requests the Board to adopt those portions of the amended proposal that allow Ameren and other companies which seek to utilize the Multi-Pollutant Strategy (MPS) to obtain CASA allowances. PC 4 at 3.

Dynegy and SIPCO contend that a set-aside of 25% for the CASA is not justifiable. PC 6 at 2. They argue that setting aside 25% of Illinois' cap is the equivalent of providing no allowances to approximately a 4,250 MW EGU, and that this is equivalent to not allocating allowances to the entirety of Dynegy's system plus City Water Light & Power plus SIPCO - with 102 MW still not accounted for. PC 6 at 11.

Conversely, the ELPC provided testimony recommending that the RE/EE set-asides be increased in order to be consistent with the policy goals and policy targets set forth in the Governor Blagojevich's Sustainable Energy Plan. Tr.2 at 138. The ELPC testified that increasing the RE/EE set-aside from 12-15.4% would provide enough allowances to reach the Governor's Sustainable Energy Plan goal of having 10% of the electricity provided to Illinois consumers come from renewable energy sources by 2015. PC 7 at 3.

The Board finds that the set-aside as proposed by the Agency is appropriate. Kincaid's assertion that it is penalized for previously installing technology is interesting but not persuasive. The Agency has stated that its goal in drafting the set aside was to reasonably maximize the impact for future emissions reductions, and not to reward entities that would already be utilizing emission controls. The intention appears to have been to provide as large an incentive as possible to attract new controls by subsidizing the large installation costs and not the already existing, and smaller, operational costs. The Board agrees that providing incentives for controls already installed would lessen the incentive for new controls.

Further, the record shows that a number of facilities are in a situation similar to Kincaid regarding CASA allowances for already installed equipment. Fourteen units are controlled by SCR/ SNCR, one unit controlled by baghouse, and five units controlled by FGD. Each of these units is ineligible for CASA as proposed.

Kincaid acknowledged at hearing that the installation of the SCRs was a voluntary decision made for business purposes. *See* Kincaid Exh. 1 (Test. of Saladino) at 7. Kincaid's installation of the SCRs was spurred at least in part by the incentives presented by the early reduction credits available under Part 217.770 of the Subpart W rules. Thus CASA aside, Kincaid has already received credit to assist in recovering installation costs for their SCRs. Finally, the Board agrees with the Agency in that while entities that have previously installed controls may not avail themselves to CASA allocations for those installations, such entities may still earn allowances by participating in a different CASA category.

The Board finds that the ELPC's position that the Agency increase the RE/EE set-asides from 12-15.4% to be consistent with the policy of Governor Blagojevich's Sustainable Energy Plan is likewise without merit. The Governor's Sustainable Energy Plan and the allocation methodology proposed in the Illinois CAIR may both encourage renewable energy and energy efficiency, but they are separate programs. The Agency has stated that it did not intend to set its

RE/EE allocations predicated on the policy goals of the Governor's Sustainable Energy Plan. Nonetheless, the Board notes that the possibility of under subscription in CASA categories other than RE/EE may result in allocations eligible for approved RE/EE projects, thereby exceeding the 12% initial design value.

**Over-Fired Air**

A question exists as to whether OFA projects should be excluded from receiving allowances from the CASA. As proposed, Sections 225.460(c)(1) and 225.560(c) specifically exclude OFA from the list of projects eligible for CASA clean technology allowances. The Agency maintains that neither standard OFA nor advanced OFA should be an eligible project for the CASA. The Agency argues that OFA is expected to be a common $NO_x$ control employed by sources under the model CAIR trading program due to its low costs. PC 5 at 10. The Agency contends that allowing OFA or advanced OFA to be considered for allowances from the CASA could greatly reduce the available CASA allowances and, therefore, reduce the incentive for sources to install the significantly more costly and typically more effective $NO_x$ controls such as SNCR and SCR. *Id*. at 10-11.

Ameren requests that the Board allow the use of CASA allowances to support advanced OFA $NO_x$ reduction strategies. PC 4 at 1. Ameren proposes that projects providing advanced OFA to achieve at least a 30% reduction of the baseline $NO_x$ or OFA projects which are included as part of a comprehensive $NO_x$ reduction strategy with other technologies listed in the section allowed to receive CASA allowances. PC 4 at 3.

Dynegy and SIP argue that if the Board were to accept Ameren's proposal without certain qualifications, Ameren would again be rewarded merely for coming to par with the other generators in the state. PC 6 at 16. Dynegy and SIP contend that unless the regulated community as a whole would be given credit for OFA systems, regardless of the date of installation, that achieve a specified level of $NO_x$ removal rather than by use of some type of ambiguous "advanced" OFA scheme, they cannot support Ameren's requested addition to the CASA. PC 6 at 17.

In reviewing the record, the main reason cited by many companies for not installing controls is the large capital costs, and to a lesser degree the generally smaller ongoing operating and maintenance costs. The testimony shows that the costs of OFA and advanced OFA are significantly less than the costs of other controls. The Agency's primary stated purpose in establishing the pollution control upgrade category of the CASA was to lower the capitol costs of upgrading thereby promoting more expensive controls than OFA and advanced OFA. Further, the Agency contends that the more costly controls generally result in the greatest reductions in emissions. PC 5 at 10.

The Board agrees with the Agency in that no evidence exists that advanced OFA would result in significantly higher costs than standard OFA. The Agency's conclusion that it is likely that many units would be installing OFA control technology even without CASA incentives is soundly supported in the record. *See e.g.*, Prefiled Test. of Menne at 5. Further, any CASA allowances allocated to OFA or advanced OFA could possibly offset more costly controls with

greater reductions in emissions and, therefore, increase the probability that such controls will not be installed, whereas it does not appear that further incentive for the use of OFA and advanced OFA is necessary.

## ***Pro rata* Allocation of Allowances from the CASA**

The Agency argues that *pro rata* allocation of CASA allowances (a proportionate sharing among all eligible parties) is the best allocation method in that it provides equality for applicants as well as ease of implementation for the Agency. The Agency specifically found that fixed portion schemes would be difficult to implement because the CASA allocation scheme is based on the number of electricity hours generated or conserved and will vary each year.

Christian County Generation provided testimony that would eliminate *pro rata* reduction of CASA allocations for early adopters, primarily to reduce the uncertainty in allocations introduced by a *pro rata* allotment. Christian County Exh. 1 (Test. of Kunkel), at 6. As an alternate, Christian County Generation suggested a first-come first-serve basis. Tr.2 at 156.

The Board finds that a proportionate sharing of allowances among all eligible applications is appropriate. The Board agrees with the Agency that a system using fixed portions could lead to difficulties in execution since the CASA is based on the number of electricity hours generated or conserved, which will vary on a yearly basis. A *pro rata* allocation system will open up the CASA to all eligible facilities, and will also be workable from the Agency's perspective.

## **Fluidized Bed Combustion Boilers**

In its in initial proposal, the Agency proposed that FBC boilers be allowed to receive CASA allowances in the clean coal technology category. However, the Agency committed to review its stance on this issue after the first hearing and now proposes that Illinois' single existing FBC boiler be allowed to receive CASA allowances, but that allowances to any future FBC boilers will be denied. PC 5 at 11. The Board agrees with the Agency and adopts the revisions proposed by the Agency to Sections 225.460 and 225.465 with some minor changes.

The ELPC argues that allowances should not be available as proposed for FBC boilers. PC 7 at 2. The ELPC argues that FBC boilers should not receive CASA credits because: (1) controlled FBCs are not lower in $NO_x$ emissions than controlled pulverized coal (PC) boilers; (2) they do not achieve the low $NO_x$ emissions that IGCC plants do; and (3) they emit more greenhouse gases than PC boilers. PC 7 at 4.

The ELPC argues that because new FBC boilers have not been required to install the most effective $NO_x$ controls, PC boilers achieve lower $NO_x$ emissions levels and have lower $NO_x$ permit levels than FBC boilers. PC 7 at 6. PC boilers using the most modern $NO_x$ controls achieve approximately 30% lower $NO_x$ emissions than FBCs, which are generally built without the best-performing control technology. *Id*. Further, the ELPC argues that expected $NO_x$ emission levels for recently proposed IGCC plants result in more than 45% lower $NO_x$ emissions. *Id*. at 7.

Illinois currently has 59 coal-fired boilers that will be affected by the proposal. Only one of these is an FBC boiler: the SIPCO FBC boiler in Marion. The other boilers are all pulverized coal combustion (PCC) boilers and cyclone-fired boilers (which burn crushed coal). The SIPCO FBC boiler was constructed in 2001 and began operation in 2003. PC 5 at 11.

The SIPCO FBC boiler is approximately 120 MW in size, fires predominantly Illinois coal, and is a circulating FBC boiler with limestone injection and add-on controls consisting of an SNCR and baghouse. From 2003 to 2005, the SIPCO FBC boiler had an average annual $NO_x$ emission rate of 0.10 lbs/mmbtu, which is lower than the system-wide $NO_x$ emission rates for any of the other boilers in Illinois. It is believed that this $NO_x$ emission rate was achieved with only part-time operation of the SNCR for $NO_x$ control. The $NO_x$ emission rate from SIPCO's FBC boiler has reached as low as 0.06 lbs/mmbtu during the 3rd quarter of 2005. For $SO_2$, the FBC boiler had an average annual $NO_x$ emission rate of 0.47 lbs/mmbtu, which likewise is lower than the system-wide $SO_2$ emission rates for any of the other boilers in Illinois. These emission rates could be lower should SIPCO decide to more fully utilize the $NO_x$ controls currently in place or install additional controls for $NO_x$ and $SO_2$ on the FBC boiler. *Id.* at 12.

Regarding the existing SIPCO FBC boiler, the Board agrees with the Agency that it is appropriate to recognize SIPCO's prior initiative to invest in a cleaner technology and allow SIPCO FBC to receive CASA allowances. The record indicates that the uncontrolled emission rates of FBC boilers are lower than the emission rates of other boilers for both $NO_x$ and $SO_2$. Further, the SIPCO FBC boiler's actual emissions between 2003 and 2005 averaged at 0.10 lbs/mmbtu for $NO_x$ and 0.47 lbs/mmbtu for $SO_2$ with part-time operation of SNCR for $NO_x$ control. As noted by the Agency, the FBC boiler emission rates could be lower should SIPCO decide to more fully utilize the $NO_x$ controls currently in place or install additional controls for $NO_x$ and $SO_2$ on the FBC boiler. Allowing the SIPCO FBC to receive CASA allowances provides an incentive for SIPCO to further reduce $NO_x$ emissions because the number of CASA allowances received is proportional to the amount of $NO_x$ emitted.

The Board also agrees with the Agency's position to deny access to CASA allowances for any new FBC boiler. At the time of construction, SIPCO's FBC boiler was considered a more current technology for utility boilers. PC 5 at 11. However, since the installation of SIPCO's FBC boiler, IGCC facilities have become commercially viable and the number of applications for IGCC permits has increased nationwide. PC 5 at 13. The record is clear, and the Agency acknowledges, that FBC boilers result in higher $NO_x$ emissions than IGCC plants. Since IGCC have become commercially viable, the Board finds that CASA allowances for clean coal technology must be available only for the most promising commercially available technology, *i.e.*, IGCC. The Board also finds persuasive the ELPC's argument that it is inappropriate to allow "other" technologies that achieve emission rates comparable to FBC boilers to receive CASA allowance. *See* PC 7 at 6. To further the Agency's intent and implement the ELPC's suggestion, the Board amends Section 225.460(e) to exclude FBC boilers from the list of comparable technologies. The Board, therefore, amends Section 225.460(e) to limit the comparison only to projects similar in effect as the projects listed in Section 225.460(a), (b), (c)(1) and (c)(2)(A).

In light of the Agency's amended proposal and the changes discussed above, the Board does not need to consider the impact of FBC boilers on greenhouse gases (GHG). The Board notes, however, that the matter is multifaceted and factors such as fuel choice may have as great an impact on GHG as boiler type.

The Agency has revised the allocation method in the proposed in Sections 225.465(b)(5)(B) and 225.565(b)(5)(B) relating to allocating CASA allowances to clean coal technology projects to account for the fact that SIPCO directly measures its emission rate in pound per megawatt (lb/MW) rather than converting from pound per million Btu (lb/mmBtu). PC 5 at . The Agency asserts that the proposed revision will not result in a significant change for the CASA allowance distribution. *Id*. The proposed revision will include new subsections in Sections 225.465(b)(5)(B) and 225.565(b)(5)(B). Subsection (b)(5)(B) will include an equation similar in all respects to the prior method with the exception of a factor change from 1.0 to 1.4. The factor change will compensate for SIPCO's direct measurements and provide the same level of incentive that the Agency was previously attempting to achieve. *Id*.

The Board agrees that the SIPCO FBC boiler represents a special circumstance as compared to the other boilers in the state. The solution proposed by the Agency has merit in that it recognizes the difference between the SIPCO FBC boiler and existing boilers, while also recognizing that clean coal technology has improved since the SIPCO FBC boiler was constructed. The Agency's new proposal along with the changes made by the Board should also alleviate the concerns raised by the ELPC in that future FBC boilers will not have access to CASA clean coal technology allowances.

By focusing on the most promising technology (IGCC), the Agency's proposal accomplishes CASA intentions while not penalizing SIPCO for its recent installation of, what until recently, was the best commercially viable technology. As is evidenced by the increasing number of IGCC applications for permits nationwide, it is that only recently have IGCC facilities been recognized and accepted as commercially viable. Thus, the Board finds that the Agency's amended proposal that Illinois' existing FBC boiler be allowed to receive CASA allowances, but that allowances to any future FBC boilers will be denied is appropriate.

## Two-Year Look-Back

The Agency's proposed rule for allowance trading includes a two-year look-back period, updated on an annual basis, to determine an EGU's allowances. Dynegy and SIPCO are very deeply troubled by the Agency's approach to annual allowance allocations. The proposed rule includes a two-year look-back period to determine an EGU's allowances, to be updated annually. The companies' concern with the two-year look-back is that the look-back period will, from time to time, encompass periods when the EGUs experience outages of various lengths of time. PC 6 at 28. Dynegy and SIPCO are concerned that where the look-back is so short with no "levelizing" allowed through the averaging of a number of years' operations chosen from a larger number of years, such as the highest three years' operation out of a specified five-year period. PC 6 at 28-29. The companies argue that in light of the Agency's past failure to timely allocate allowances, it becomes critical that the updating occur annually and timely. PC 6 at 29.

Dynegy and SIPCO argue that the USEPA suggested a permanent baseline for sources in the model rule with new sources rolling into the existing source permanent baseline once they have five years' operating data, causing an adjustment of all existing sources' allocations. PC 6 at 29, citing 70 Fed. Reg. 25161, 25279 (May 12, 2005). Dynegy and SIPCO argue that a permanent baseline comprised of the three highest years' operational heat input or converted heat input over a five-year period would provide the level of certainty of the allowance stream. PC 6 at 32.

Midwest Generation is also concerned about the impact of outages on what it opines is a short, two-year, look-back period. PC 8 at 1. Midwest Generation asserts that under the current language of the rule, these situations cannot be avoided. *Id.* Further, Midwest Generation notes that the USEPA has provided in its $NO_x$ trading rules that when a State fails to timely allocate allowances, USEPA will rely upon the previous allocation to cover the unallocated period. PC 8 at 3. Thus, argues Midwest Generation, if a timely allocation is not made for the two $NO_x$ programs proposed by these rules, some EGUs may be frozen at an allowance level that reflects extensive outages. *Id.* Midwest supports revising the rule to reflect a three-year averaging concept and five-year look-back period.

While the Board is cognizant of the issues concerning a two-year look-back, the benefits of relative short look-back period outweigh any potential difficulties. The Agency asserts that a two-year look-back period is provides an incentive for efficient operations, which will result in fewer emissions per unit of power produced. Stat. at 35. The Board agrees with this general principle.

In addition, the concerns raised by Midwest Generation, SIPCO and Dynegy were also raised to the Agency prior to the proposal being filed with the Board. In response, the Agency changed the initial look-back period for the 2009, 2010, and 2011 control periods from using data only from 2004 and 2005, to allowing the use of data from the three highest control periods of 2001 through 2005. Stat. at 48. The Agency reasoned that because companies did not have an opportunity to plan for the first allocation when scheduling outages, such a change was appropriate, and that with respect to future allocations, the allocations will balance out. *Id*.

Again, the Board finds the Agency's logic persuasive. Also, the changes incorporated into the proposal to allow the use of data from the three highest periods should alleviate the concerns raised as noted above. Because allocations are made annually and with a shorter look-back period, if a company has a planned outage in one control period, it will need and will receive fewer allowances for that control period, and since the company should have received allowances for that future outage year based on a higher rate of operation, it should have excess banked allowances from the outage year that it can use for the allocation year that reflects the prior outage. Thus, the short look-back period allows low and high usage years to be quickly accounted for, and the Board will adopt the rule as proposed in this regard.

## Heat Input vs. Gross Electrical Output

The Agency is proposing that allocations be based on gross electrical output for both new and existing affected units. For sources that do not currently have the equipment installed to

measure gross electrical output, the initial allocations for control periods 2009 through 2011 will be based on heat input. A conversion factor of 3.413 mmBtu/MWh and an efficiency factor of 33% will be used to convert the heat input of a unit to gross electrical output. Stat. at 35; TSD at 101.

Midwest requests that the Board consider heat input as the basis for allocations, which is what Midwest has reported and certified for years. PC 8 at 5. Midwest argues that heat input data is more reliable than output data as the manner of output data's measurement and its quality assurance is not uniform. *Id.*

The joint comment filed by Dynegy and SIPCO asserts that the two companies generally prefer that allocations be based upon heat input rather than gross electrical output as proposed by the Agency. PC 6 at 2. However, that same public comment provides that Dynegy prefers reliance on gross electrical output as the basis for allocations, but would find heat input as a basis for allocations acceptable. PC 6 at 24. Nonetheless, Dynegy and SIPCO assert that the efficiency assumed in the Agency's formula at Section 225.435(a)(2) to convert heat input to gross electrical output is not representative of actual efficiencies at the plants. *Id*.

Further, Dynegy and SIPCO assert that it is their understanding is that the Agency will accept as gross electrical output data any data that is acceptable to USEPA pursuant to 40 C.F.R. § 60 or 75. PC 6 at 27. Dynegy and SIPCO are concerned about language currently in the rule suggesting that there must be an actual measurement device installed on the generator, effectively a wattmeter, when such is not required by USEPA pursuant to 40 C.F.R. § 60 or 75. Dynegy and SIPCO ask the Board to ensure that the language included in the rule reflects the parties' intent. *Id*.

Christian County Generation provided testimony that its integrated gasification combined cycle (IGCC) project would be greatly disadvantaged by an allocation methodology that relies upon heat input. Tr.2 at 126-29.

The Board finds that the Agency's proposal to use gross electrical output as a basis for distributing allowances is reasonable. The Agency's proposal allows owners and operators that do not have gross electrical output data for the initial look-back period to use heat input data for the allocations during the first three control periods. Additional flexibility was provided for in the amendment to the proposal filed on November 27, 2006. As amended, the proposal clarifies that either gross electrical output or heat input may be used to calculate converted gross output for the control periods 2009 through 2013. The proposal also allows for other measurement systems for gross electrical output provided that such a system is in place by January 1, 2008, and that data for the initial allocations for control periods 2009-2011 be submitted to the Agency by June 1, 2007.

The Board is aware that the June 1, 2007 date for submission of initial allocations is rapidly approaching. The Board encourages any interested party to comment on this fact during the first-notice period. The Board finds in this opinion and order that gross electrical output does encourage efficiency, and that its application in this instance, as amended, is technical feasible and economically reasonable.

## Air Quality Modeling

Kincaid urges the Agency 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. PC 10 at 3; Kincaid Exh. 1 (Test. of Saladino) at 4-5. Kincaid asserts that recent air quality modeling by LADCO suggests additional reductions from the EGU sector beyond the reductions expected from the federal CAIR program will not solve the residual ozone and $PM_{2.5}$ non-attainment problem in the Chicago area. PC 10 at 4.

The Agency asserts that it presented the results of two modeling studies that address the issues raised by Kincaid in the TSD, and has, therefore, already presented the type of modeling suggested. PC 5 at 19.

In reviewing the record, the Board notes that in March 2005, the USEPA presented a document entitled: "Technical Support Document for the Final Clean Air Interstate Rule – Air Quality Modeling." TSD at 35. The Agency summarized the USEPA's modeling results in the TSD showing that $NO_x$ and $SO_2$ reductions from power plants are effective in reducing ozone and $PM_{2.5}$ concentrations in downwind nonattainment areas, but that CAIR would not provide sufficient emission reductions, even in Phase II, to allow the Chicago nonattainment area to attain either the ozone or $PM_{2.5}$ standards. *Id*.

The TSD also presented the results of modeling performed by LADCO. *See* Table 3-5 of the TSD. The LADCO modeling indicates that in order to reach the emission reduction targets needed for both ozone and $PM_{2.5}$ attainment, local VOC reductions of approximately 75% are needed for Chicago to attain the ozone standard, assuming that no additional reductions are achieved regionally beyond those provided by CAIR.

The Agency asserts that when regional reductions of $NO_x$ and $SO_2$ are made, the modeling indicates that there is less emission reduction burden in the nonattainment area. The USEPA's modeling, therefore, clearly shows that Illinois must seek additional emission reductions, either locally or regionally, to achieve attainment of the air quality standards. PC 5 at 19.

The Board finds that modeling submitted by the Agency in the TSD is appropriate and supportive of the emissions standards in the proposal. The record indicates, notes the Board, that lowering emissions of $NO_x$ and $SO_2$ from power plants is effective in reducing ozone and $PM_{2.5}$ concentrations in downwind nonattainment areas. Therefore, the Board finds that the record supports adopting the proposal, and that no additional modeling is needed at this time.

## Fuel-Weighting

The various participants are split on this issue, but the Agency maintains that fuel-weighting as proposed is appropriate. Zion prefers a fuel-neutral allocation mechanism, but is willing to consider a compromise alternative fuel-weighting factor that closes the gap between

the fuel-neutral option and the Agency's current proposal, and suggests a compromise factor of 0.7 for both gas-fired and oil-fired units. PC 3 at 2.

The ELPC urges the elimination or modification of the fuel-weighting component of the proposed Illinois rule, arguing that a fuel-neutral approach will achieve the deeper, faster reductions the Agency seeks. PC 7 at 10.

Dynegy and SIPCO support the Agency's proposal regarding weights assigned to fuel types, noting that the USEPA retained the fuel factors. Dynegy and SIPCO encourage the Board to retain them as proposed by the Agency. PC 6 at 27-28.

The fuel-weighting factors in the proposal are identical to the federal CAIR model rule and reflect different burdens to control emissions. As testified to at hearing, coal-fired units bear the greatest burden to achieve emission reductions under CAIR. Tr.1 at 127-29. This is also the reason stated by the USEPA for not employing a fuel-neutral allocation methodology in the CAIR model rule.

The Board agrees with the Agency that the predominant sources of both $NO_x$ and $SO_2$ emissions in Illinois are from coal-fired power plants, and that these sources likewise have higher emission rates for both pollutants. Reductions at these sources, therefore, will provide the greatest benefits. The more feasible controlling these emissions is under the proposed rule, the more likely they are to be controlled. Accordingly, the Board the Board does not modify the Agency's approach to fuel-weighting as proposed.

## **Proposed Supbart F**

As noted above, the Agency and Midwest Generation have proposed a new Subpart F be added to the proposal as a result of a December 10, 2006 MOU between the parties. The new subpart establishes an alternative means of compliance with the proposed emissions standards for mercury in Subpart B, Section 225.230(a) and will establish specific emissions levels for $NO_x$, PM, and $SO_2$.

The proposed Subpart was included in joint public comments, PC 9 and PC 11, filed before the Board on January 5 and 10, 2007. Because it was filed at the close of the public comment period, interested parties other than the Agency and Midwest Generation have not had the opportunity to comment on the proposed Subpart. The Board agrees that the proposal for compliance set forth in Subpart F will achieve greater reductions in $SO_2$, $NO_x$, and mercury than the proposed CAIR standards. The Board also finds the proposed Subpart F will further reduce ambient levels of ozone and $PM_{2.5}$, leading to benefits to public health and the environment. The parties to the MOU assert that the proposed Subpart F is both technically feasible and economically reasonable, and that the level of mercury, $NO_x$, and $SO_2$ reductions required in the proposed Subpart F is expected to substantially contribute to the State's efforts to achieve the CAA's NAAQS. PC 9 at 4.

The Board finds that Subpart F is technically feasible and economically reasonable, and includes the proposed Subpart in the proposal the Board adopts today. Nonetheless, the Board invites comments on the Subpart during the post first-notice public-comment period.

## Technical Feasibility and Economic Reasonableness

The Agency has demonstrated that technology is available to meet CAIR requirements. The Board will first discuss the CAIR $SO_2$ and $NO_x$ issues before reaching a decision on technical feasibility and economic reasonableness.

## CAIR $SO_2$ Trading Program

In the federal CAIR and supporting documents, the USEPA has determined that the control techniques required for EGUs to comply with the CAIR $SO_2$ trading program are highly cost-effective, and are, thus, technically feasible and economically reasonable. Stat. at 40, citing Exh. A, 70 Fed. Reg. 25165 (May 12, 2005).

Control techniques for reducing $SO_2$ emissions from new or existing fossil fuel-fired EGUs include physical coal cleaning to remove pyrites (inorganic sulfur compounds); chemical coal cleaning to remove pyrites and organic sulfur present in coal; switching to either natural gas or to low sulfur western coal; blending coal and limestone before combustion; dry scrubbing with limestone or lime slurry (also called spray dryer absorber); and FGD. Stat. at 41; TSD 5.1.

The record shows that coal cleaning can result in $SO_2$ emission reductions ranging from 10-40% for physical coal cleaning and can result in $SO_2$ emission reductions ranging from 50-75% for chemical coal cleaning, while emissions reductions achieved through fuel substitution depend on the type of fuel, ranging from 50-80% from switching to low-sulfur coal to 98-100% from switching to natural gas. TSD 5.1. Emission reductions from dry $SO_2$ removal range from 60-85% for combustion of a limestone mixture to 90-98% when spray drying is used in conjunction. Other than fuel switching to natural gas, the greatest emission reductions of $SO_2$ are achieved through the use of a FGD, ranging from 90-98% reduction, regardless of the type used. *Id*.

The Agency contends that costs of coal cleaning processes vary from $10.10 (at 35-70% pyretic sulfur removal) to $58.67 per ton of coal (at 99% pyretic sulfur and 24-72% organic sulfur removal). Stat. at 42. Cost data for FGD systems, expressed as electrical output, range from $7.89 to $14.36 mill/kWh for a lime FGD to $9.72 to $63.82 mill/kWh for magnesium oxide FGDs. TSD 6.1.

The record shows that in Illinois, electric utility units are currently using coal washing, blending low-sulfur western coal with higher sulfur eastern coal, and FGDs. Blending coal with limestone is not currently used in Illinois, but companies have submitted applications to the Agency to use the process at two boilers. TSD 5.1.

The Agency contends that cost effectiveness of $SO_2$ controls for Illinois' EGUs will be $500 to $800 (in 1999 dollars) per ton of $SO_2$ reduced in the years 2010 through 2014, and $700 to $1200 (in 1999 dollars) per ton of $SO_2$ reduced in the year 2015 and the years thereafter. Stat. at 42, TSD Table 6-6. The Agency asserts that it relied upon the cost analyses performed by USEPA and believes that the cost effectiveness of controls for Illinois EGUs will be similar.

Stat. at 42.

**$NO_x$**

$NO_x$ emissions from EGUs are regulated in Illinois under the federal Acid Rain Program (Title IV of the CAA), the $NO_x$ SIP Call trading program as set forth in Subpart W of 35 Ill. Adm. Code Part 217, and a state rate-based rule set forth in Subpart V of 35 Ill. Adm. Code Part 217. Under Phase I of the federal Acid Rain program, $NO_x$ emissions for affected units lb/mmBtu are limited to 0.45 lb/mmBtu and 0.50 lb/mmBtu for certain existing tangential and wall-fired boilers burning coal, respectively. Under Phase II, $NO_x$ emissions are limited to 0.40 and 0.46 for these boilers. The limit for cyclone-fired boilers greater than 155 MW is 0.86 lb/mmBtu. *See* Stat. at 42. However, in Illinois, any unit serving a generator that has a nameplate capacity greater than 25 MWe and produces electricity for sale was required to meet a $NO_x$ emissions limit during the ozone season of 0.25 lb/mmBtu, beginning with the 2003 control period. *See* 35 Ill. Adm. Code 217, Subpart V.

In 2000, Illinois adopted the federal $NO_x$ SIP Call trading program. An initial $NO_x$ emission budget for EGUs was established based on an emission rate of 0.15 lb/mmBtu. The program commenced with the 2004 ozone season. Sources complied with this rule through either installation of add-on controls, or trading of $NO_x$ allowances. Stat. at 43

The allowance allocation budget for the CAIR $NO_x$ Annual and Ozone Season programs in 2009 is based on a $NO_x$ emission rate of 0.15 lb/mmBtu and for 2015, 0.125 lb/mmBtu. The Agency anticipates that sources that installed SNCR with ammonia or urea injection or SCR with ammonia to comply with the requirements of Subpart W (Federal $NO_x$ SIP Call trading program) will be able to meet the requirements of the CAIR $NO_x$ Annual trading program by operating the add-on controls year round. Stat. at 43. The Agency asserts that compliance with the CAIR $NO_x$ Ozone Season trading program during Phase I will not require additional control measures since the $NO_x$ allocation budget for the years 2009 through 2014 is the same in Illinois, 30,701 tons for allocation. *Id*.

However, the Agency states that for the annual program, sources that have not yet installed add-on controls are anticipated to either need to install add-on control or purchase additional allowances. Stat. at 43-44.

The control technologies available to reduce $NO_x$ emissions from EGUs have been discussed at hearing, in public comments, and by the USEPA. A listing of the technologies can be found in table 5-2 of the Agency's TSD. These technologies include combustion tuning (CT), burner-out-of-service (BOOS), OFA, Low $NO_x$ Burners (LNB), Fuel Switching (low nitrogen coal or natural gas), lean flue gas reburn, SNCR, and SCR. The record indicates that operational modifications such as BOOS, OFA, and LNB can achieve $NO_x$ reductions in a range of 10-25% for coal-fired boilers and 30-50% for gas and oil-fired boilers, reburning can achieve $NO_x$ reductions in a range of 50-60% for coal-fired boilers and gas and oil-fired boilers, fuel switching from coal to natural gas or low-nitrogen coal can achieve $NO_x$ reductions in a range of 40-75% for all types of boilers, while SNCR can achieve $NO_x$ emission reductions in a range of 30-60% for all types of boilers, and SCR can achieve $NO_x$ reductions in a range of 75-90% for

all types of boilers. *See* TSD Table 5-2.

Tables 6-3, 6-4, and 6-5 of the TSD summarize the range of cost effectiveness of the various control options for each type and size of EGU. TSD Tables 6-3, 6-4, and 6-5. According to the Agency, for the control periods 2009 through 2014, there will be no additional cost associated with complying with the CAIR $NO_x$ Ozone Season trading program because the Illinois' CAIR $NO_x$ Ozone Season budget remains the same as the current $NO_x$ SIP Call budget. Stat. at 44. This estimate assumes the cost effectiveness values for Illinois EGUs are the same as that calculated by USEPA for the entire region impacted by CAIR. *Id*. For the CAIR $NO_x$ Annual trading program, there will be an additional cost of $500 per ton to operate these controls in the non-ozone season in 2009 through 2014 (October 1 through March 31), and the cost effectiveness of annual and seasonal $NO_x$ controls for Illinois EGUs will be $1,600 per ton of $NO_x$ reduced in 2015 and thereafter. TSD 6.3.

The Agency used an integrated planning model (IPM) to evaluate the economic impact of the CASA and NUSA provisions included in this proposal. According to the Agency, the IPM modeling shows that the reduction of allowances only minimally increases the costs discussed above. Stat. at 44. The Agency stresses that while the CASA is 25% of the allowances, existing units are eligible to apply for these allowances for free if they install air pollution controls, build clean units, or implement other energy conserving or renewable energy projects. *Id*. The Agency contends that IPM modeling represents the worst-case scenario because it did not address the potential use of any CASA allowances for the existing EGUs. The Agency notes, however, that future projects will more likely be eligible for CASA use and thus further reduce cost. Stat. at 45.

**Discussion**

After carefully reviewing the entirety of the record, the Board finds that the proposal as amended is technically feasible and economically reasonable. In making this determination, the Board considers the USEPA findings on CAIR $NO_x$ and $SO_2$ control technology costs and applications, and $NO_x$ and $SO_2$ removal effectiveness. The Board is also persuaded by the IPM modeling provided by the Agency. In addition to the IPM modeling discussed above, the Agency conducted modeling to determine the cost impact of the 25% CASA and 5% NUSA on Illinois electricity rates. That modeling projects that retail electricity rates will not change, and there was a slight change in average production costs. TSD Table 7.6.

While retail electricity prices for the CAIR region are projected to increase minimally with the implementation of CAIR, the Board agrees with the Agency that trading will provide EGUs a cost-effective way to comply with CAIR that will minimize the costs passed on to consumers. The Agency estimates that regional retail electricity prices will be 2-3% higher with CAIR. In Illinois, the Agency predicts the retail electricity prices will increase 2.6% in 2010 and 4.3% in 2015 as a result of implementing CAIR. However, by 2020, the Agency expects rates to decrease 2.6%, leaving a net increase of 1.7%. TSD 6.4.

The Board notes that the $SO_2$ trading program the Agency proposes is substantially identical to the measurement requirements for the federal CAIR Rule developed by the USEPA.

Further, the issues concerning $NO_x$ are issues that relate to the underlying federal requirements. The Board, therefore, finds the USEPA's decision to adopt the requirements persuasive.

In addition, the Board notes that the interested parties in this rule making in large part do not argue that the proposal is not technically feasible or economically reasonable. Kincaid argues that no evidence exists in the record of either regulatory proceeding that it is technically feasible and economically reasonable for the affected facilities to comply simultaneously with both CAIR and CAMR regulations, and that it has provided information in both regulatory proceedings that the economic impact of the individual and combined regulations is unreasonable. PC 10 at 20. The Board disagrees. The Board has considered whether each rulemaking is technically feasible and economically reasonable, and has decided affirmatively in both rules.

The Board has made additional changes to the rule, including those necessary to comport with the requirements of the APA. The Board will not summarize or delineate the entirety of the rule or the changes made by the Board. The Board's order reflects these changes.

## Additional Amendments

The Board notes that a number of proposed amendments were made during the public comment period and in other pleadings. Above the Board granted motions to amend filed by the Agency, the Agency and Dynegy, jointly, and the Agency and Midwest Generation, jointly. The Board incorporates the amendments proposed in those motions, as specified above, into the proposal.

In addition, the Board amends the proposed language in Subpart F, Section 225.625(a)(1), (2), (3) and (c)(2) from "on before" to "on or before" the dates provided by which the EGU must meet control technology requirements. The Board asks the Agency to comment if these amendments in any way change the intent of the proposed rule language.

## CONCLUSION

The Board finds that the proposal is technically feasible and economically reasonable. The Board adopts the Agency's proposal, as amended, for first-notice publication in the *Illinois Register*. After first-notice publication, the Board will accept additional comments on the proposal.

## ORDER

The Board directs the Clerk to cause the filing of the following rule with the Joint Committee on Administrative Rules for its first-notice review.

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD

SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 225
CONTROL OF EMISSIONS FROM LARGE COMBUSTION SOURCES

SUBPART A: GENERAL PROVISIONS

Section
225.100 Severability
225.120 Abbreviations and Acronyms
225.130 Definitions
225.140 Incorporations by Reference
225.150 Commence Commercial Operation

SUBPART B: CONTROL OF MERCURY EMISSIONS FROM COAL-FIRED ELECTRIC GENERATING UNITS

Section
225.200 Purpose
225.202 Measurement Methods
225.205 Applicability
225.210 Compliance Requirements
225.220 Clean Air Act Permit Program (CAAPP) Permit Requirements
225.230 Emission Standards for EGUs at Existing Sources
225.232 Averaging Demonstrations for Existing Sources
225.233 Multi-Pollutant Standard (MPS)
225.234 Temporary Technology-Based Standard for EGUs at Existing Sources
225.235 Units Scheduled for Permanent Shut Down
225.237 Emission Standards for New Sources with EGUs
225.238 Temporary Technology-Based Standard for New Sources with EGUs
225.240 General Monitoring and Reporting Requirements
225.250 Initial Certification and Recertification Procedures for Emissions Monitoring
225.260 Out of Control Periods for Emission Monitors
225.261 Additional Requirements to Provide Heat Input Data
225.263 Monitoring of Gross Electrical Output
225.265 Coal Analysis for Input Mercury Levels
225.270 Notifications
225.290 Recordkeeping and Reporting
225.295 Treatment of Mercury Allowances

SUBPART C: CLEAN AIR ACT INTERSTATE RULE (CAIR) $SO_2$ TRADING PROGRAM

Section
225.300 Purpose
225.305 Applicability
225.310 Compliance Requirements
225.315 Appeal Procedures
225.320 Permit Requirements
225.325 Trading Program

SUBPART D: CAIR $NO_x$ ANNUAL TRADING PROGRAM

Section
225.400 Purpose
225.405 Applicability
225.410 Compliance Requirements
225.415 Appeal Procedures
225.420 Permit Requirements
225.425 Annual Trading Budget
225.430 Timing for Annual Allocations
225.435 Methodology for Calculating Annual Allocations
225.440 Annual Allocations
225.445 New Unit Set-Aside (NUSA)
225.450 Monitoring, Recordkeeping and Reporting Requirements for Gross Electrical Output and Useful Thermal Energy
225.455 Clean Air Set-Aside (CASA)
225.460 Energy Efficiency and Conservation, Renewable Energy, and Clean Technology Projects
225.465 Clean Air Set-Aside (CASA) Allowances
225.470 Clean Air Set-Aside (CASA) Applications and Recordkeeping
225.475 Agency Action on Clean Air Set-Aside (CASA) Applications
225.480 Compliance Supplement Pool

SUBPART E: CAIR $NO_x$ OZONE SEASON TRADING PROGRAM

Section
225.500 Purpose
225.505 Applicability
225.510 Compliance Requirements
225.515 Appeal Procedures
225.520 Permit Requirements
225.525 Ozone Season Trading Budget
225.530 Timing for Ozone Season Allocations
225.535 Methodology for Calculating Ozone Season Allocations
225.540 Ozone Season Allocations
225.545 New Unit Set-Aside (NUSA)

**SUBPART F: COMBINED POLLUTANT STANDARDS**



AUTHORITY: Implementing and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/27].

SOURCE: Adopted in R06-25 at 31 Ill. Reg. 129, effective December 21, 2006; amended in R06-26 at 31 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 225.130 Definitions

The following definitions apply for the purposes of this Part. Unless otherwise defined in this Section or a different meaning for a term is clear from its context, the terms used in this Part have the meanings specified in 35 Ill. Adm. Code 211.

*"Agency" means the Illinois Environmental Protection Agency.* [415 ILCS 5/3.105]

"Averaging demonstration" means, with regard to Subpart B of this Part, a demonstration of compliance that is based on the combined performance of EGUs at two or more sources.

"Base Emission Rate" means, for a group of EGUs subject to emission standards for NOx and $SO_2$ pursuant to Section 225.233, the average emission rate of NOx or $SO_2$ from the EGUs, in pounds per million Btu heat input, for calendar years 2003 through 2005 (or, for seasonal $NO_x$, the 2003 through 2005 ozone seasons), as determined from the data collected and quality assured by the USEPA, pursuant to the 40 CFR 72 and 96 federal Acid Rain and $NO_x$ Budget Trading Programs, for the emissions and heat input of that group of EGUs.

*"Board" means the Illinois Pollution Control Board.* [415 ILCS 5/3.130]

"Boiler" means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

"Bottoming-cycle cogeneration unit" means a cogeneration unit in which the energy input to the unit is first used to produce useful thermal energy and at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.

"CAIR authorized account representative" means, for the purpose of general accounts, a responsible natural person who is authorized, in accordance with 40 CFR 96 subparts BB, FF, BBB, FFF, BBBB, and FFFF to transfer and otherwise dispose of CAIR $NO_x$, $SO_2$, and $NO_x$ Ozone Season allowances, as applicable, held in the CAIR $NO_x$, $SO_2$, and $NO_x$ Ozone Season general account, and for the purpose of a CAIR $NO_x$ compliance account, a CAIR $SO_2$ Allowance System Tracking account, or a CAIR $NO_x$ Ozone Season compliance account, the CAIR designated representative of the source.

"CAIR designated representative" means for a CAIR $NO_x$ source, a CAIR $SO_2$ source, and a CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ unit, CAIR $SO_2$ unit and CAIR $NO_x$ Ozone Season unit at the source, the natural person who is authorized by the owners and operators of the source and all such units at the source, in accordance with 40 CFR 96 subparts BB, FF, BBB, FFF, BBBB, and FFFF as applicable, to represent and legally bind each owner and operator in matters pertaining to the CAIR $NO_x$ Annual Trading Program, CAIR $SO_2$ Trading Program, and the CAIR $NO_x$ Ozone Season Trading Program, as applicable. For any unit that is subject to one or more of the following programs: CAIR $NO_x$ Annual Trading Program, the CAIR $SO_2$ Trading Program, the CAIR $NO_x$ Ozone Season Trading Program, or the federal Acid Rain Program, the designated representative for the unit must be the same natural person for all programs applicable to the unit.

"CAIR Trading Programs" means the requirements of this Part, and those provisions of the federal CAIR $NO_x$ Annual Season, CAIR $SO_2$, or CAIR $NO_x$ Ozone Season Trading Programs set forth in 40 CFR 96, as incorporated by reference in Section 225.140.

"Coal" means any solid fuel classified as anthracite, bituminous, subbituminous, or lignite by the American Society for Testing and Materials (ASTM) Standard

Specification for Classification of Coals by Rank D388-77, 90, 91, 95, 98a, or 99 (Reapproved 2004).

"Coal-derived fuel" means any fuel (whether in a solid, liquid or gaseous state) produced by the mechanical, thermal, or chemical processing of coal.

"Coal-fired" means:

For purposes of Subparts B, D, and E combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during a specified year;

For purposes of Subpart C, combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel.

"Cogeneration unit" means, for the purposes of Subparts C, D, and E, a stationary, fossil fuel-fired boiler or a stationary, fossil fuel-fired combustion turbine of which both of the following conditions are true:

It uses equipment to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and

It produces either of the following during the 12-month period beginning on the date the unit first produces electricity and during any subsequent calendar year after that in which the unit first produces electricity:

For a topping-cycle cogeneration unit, both of the following:

Useful thermal energy not less than five percent of total energy output; and

Useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output, or not less than 45 percent of total energy input if useful thermal energy produced is less than 15 percent of total energy output; or

For a bottoming-cycle cogeneration unit, useful power not less than 45 percent of total energy input.

"Combined cycle system" means a system comprised of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.

"Combustion turbine" means:

An enclosed device comprising a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and

If the enclosed device pursuant to ~~under~~ the above paragraph of this definition is combined cycle, any associated duct burner, heat recovery steam generator and steam turbine.

"Commence commercial operation" means, for the purposes of Subpart B of this Part, with regard to an EGU that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation. Such date must remain the unit's date of commencement of operation even if the EGU is subsequently modified, reconstructed or repowered. For the purposes of Subparts C, D and E, "commence commercial operation is as defined in Section 225.150.

"Commence construction" means, for the purposes of Section 225.460(f), 225.470, 225.560(f), and 225.570, that the owner or owner's designee has obtained all necessary preconstruction approvals (e.g., zoning) or permits and either has:

Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

For purposes of this definition:

"Construction" shall be determined as any physical change or change in the method of operation, including but not limited to fabrication, erection, installation, demolition, or modification of projects eligible for CASA allowances, as set forth in Sections 225.460 and 225.560.

"A reasonable time" shall be determined considering but not limited to the following factors: the nature and size of the project, the extent of design engineering, the amount of off-site preparation, whether equipment can be fabricated or can be purchased, when the project begins (considering both the seasonal nature of the construction activity and the existence of other projects competing for construction labor at the same time, the place of the environmental permit in the sequence of corporate and overall governmental approval), and the nature of the project sponsor (e.g., private, public, regulated).

"Commence operation," for purposes of Subparts C, D and E, means:

To have begun any mechanical, chemical, or electronic process, including, for the purpose of a unit, start-up of a unit's combustion chamber, except as provided in 40 CFR 96.105, 96.205, or 96.305, as incorporated by reference in Section 225.140.

For a unit that undergoes a physical change (other than replacement of the unit by a unit at the same source) after the date the unit commences operation as set forth in the first paragraph of this definition, such date will remain the date of commencement of operation of the unit, which will continue to be treated as the same unit.

For a unit that is replaced by a unit at the same source (e.g., repowered), after the date the unit commences operation as set forth in the first paragraph of this definition, such date will remain the replaced unit's date of commencement of operation, and the replacement unit will be treated as a separate unit with a separate date for commencement of operation as set forth in this definition as appropriate.

"Common stack" means a single flue through which emissions from two or more units are exhausted.

"Compliance account" means, for the purposes of Subparts D and E, a CAIR $NO_x$ Allowance Tracking System account, established by USEPA for a CAIR $NO_x$ source or CAIR $NO_x$ Ozone Season source pursuant to 40 CFR 96 subparts FF and FFFF in which any CAIR $NO_x$ allowance or CAIR $NO_x$ Ozone Season allowance allocations for the CAIR $NO_x$ units or CAIR $NO_x$ Ozone Season units at the source are initially recorded and in which are held any CAIR $NO_x$ or CAIR $NO_x$ Ozone Season allowances available for use for a control period in order to meet the source's CAIR $NO_x$ or CAIR $NO_x$ Ozone Season emissions limitations in accordance with Sections 225.410 and 225.510, and 40 CFR 96.154 and 96.354, as incorporated by reference in Section 225.140. CAIR $NO_x$ allowances may not be used for compliance with the CAIR $NO_x$ Ozone Season Trading program and CAIR $NO_x$ Ozone Season allowances may not be used for compliance with the CAIR $NO_x$ Annual Trading program.

"Control period" means:

For the CAIR $SO_2$ and $NO_x$ Annual Trading programs in Subparts C and D, the period beginning January 1 of a calendar year, except as provided in Sections 225.310(d)(3) and 225.410(d)(3), and ending on December 31 of the same year, inclusive; or

For the CAIR $NO_x$ Ozone Season Trading Program in Subpart E, the period beginning May 1 of a calendar year, except as provided in Section 225.510(d)(3), and ending on September 30 of the same year, inclusive.

"Designated representative" means, for the purposes of Subpart B of this Part, the same as defined in 40 CFR 60.4102.

"Electric generating unit (EGU)" means a fossil fuel-fired stationary boiler, combustion turbine or combined cycle system that serves a generator that has a nameplate capacity greater than 25 MWe and produces electricity for sale.

"Flue" means a conduit or duct through which gases or other matter is exhausted to the atmosphere.

"Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

"Fossil fuel-fired" means the combusting any amount of fossil fuel, alone or in combination with any other fuel in any calendar year.

"Generator" means a device that produces electricity.

"Gross electrical output" means the total electrical output from an EGU before making any deductions for energy output used in any way related to the production of energy. For an EGU generating only electricity, the gross electrical output is the output from the turbine/generator set.

"Heat input" means, for the purposes of Subparts C, D, and E, a specified period of time, the product (in mmBtu/hr) of the gross calorific value of the fuel (in Btu/lb) divided by 1,000,000 Btu/mmBtu and multiplied by the fuel feed rate into a combustion device (in lb of fuel/time), as measured, recorded and reported to USEPA by the CAIR designated representative and determined by USEPA in accordance with 40 CFR 96, subpart HH, HHH, or HHHH, if applicable, and excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

"Higher heating value (HHV)" means the total heat liberated per mass of fuel burned (Btu per pound), when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions.

"Input mercury" means the mass of mercury that is contained in the coal combusted within an EGU.

"Integrated gasification combined cycle (IGCC)" means a coal-fired electric utility steam generating unit that burns a synthetic gas derived from coal in a combined-cycle gas turbine. No coal is directly burned in the unit during operation.

"Nameplate capacity" means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady-state basis and during continuous operation (when not restricted by

seasonal or other deratings) as specified by the manufacturer of the generator or, starting from the completion of any subsequent physical change in the generator resulting in an increase in the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady-state basis and during continuous operation (when not restricted by seasonal or other deratings), such increased maximum amount as specified by the person conducting the physical change.

"Oil-fired unit" means a unit combusting fuel oil for more than 15.0 percent of the annual heat input in a specified year and not qualifying as coal-fired.

"Output-based emission standard" means, for the purposes of Subpart B of this Part, a maximum allowable rate of emissions of mercury per unit of gross electrical output from an EGU.

"Potential electrical output capacity" means 33 percent of a unit's maximum design heat input, expressed in mmBtu/hr divided by 3.413 mmBtu/MWh, and multiplied by 8,760 hr/yr.

"Project sponsor" means a person or an entity, including but not limited to the owner or operator of an EGU or a not-for-profit group, that provides the majority of funding for an energy efficiency and conservation, renewable energy, or clean technology project as listed in Sections 225.460 and 225.560, unless another person or entity is designated by a written agreement as the project sponsor for the purpose of applying for $NO_x$ allowances or $NO_x$ Ozone Season allowances from the CASA.

"Rated-energy efficiency" means the percentage of thermal energy input that is recovered as useable energy in the form of gross electrical output, useful thermal energy, or both that is used for heating, cooling, industrial processes, or other beneficial uses as follows:

For electric generators, rated energy efficiency is calculated as one kilowatt hour (3,413 Btu) of electricity divided by the unit's design heat rate using the higher heating value of the fuel, and expressed as a percentage.

For combined heat and power projects, rated-energy efficiency is calculated using the following formula:

$$REE = ((GO + UTE)/HI) \times 100$$

Where:

REE = Rated-energy efficiency, expressed as percentage.
GO = Gross electrical output of the system expressed in Btu/hr.
UTE = Useful thermal output from the system that is used for heating, cooling, industrial processes or other beneficial uses, expressed in Btu/hr.

HI = Heat input, based upon the higher heating value of fuel, in Btu/hr.

"Repowered" means, for the purposes of an EGU, replacement of a coal-fired boiler with one of the following coal-fired technologies at the same source as the coal-fired boiler:

Atmospheric or pressurized fluidized bed combustion;

Integrated gasification combined cycle;

Magnetohydrodynamics;

Direct and indirect coal-fired turbines;

Integrated gasification fuel cells; or

As determined by the USEPA in consultation with the United States Department of Energy, a derivative of one or more of the technologies under this definition and any other coal-fired technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of January 1, 2005.

"Rolling 12-month basis" means, for the purposes of Subpart B of this Part, a determination made on a monthly basis from the relevant data for a particular calendar month and the preceding 11 calendar months (total of 12 months of data), with two exceptions. For determinations involving one EGU, calendar months in which the EGU does not operate (zero EGU operating hours) must not be included in the determination, and must be replaced by a preceding month or months in which the EGU does operate, so that the determination is still based on 12 months of data. For determinations involving two or more EGUs, calendar months in which none of the EGUs covered by the determination operates (zero EGU operating hours) must not be included in the determination, and must be replaced by preceding months in which at least one of the EGUs covered by the determination does operate, so that the determination is still based on 12 months of data.

"Total energy output" means, with respect to a cogeneration unit, the sum of useful power and useful thermal energy produced by the cogeneration unit.

"Useful thermal energy" means, for the purpose of a cogeneration unit, the thermal energy that is made available to an industrial or commercial process, excluding any heat contained in condensate return or makeup water:

Used in a heating application (e.g., space heating or domestic hot water heating); or

Used in a space cooling application (e.g., thermal energy used by an absorption chiller).

(Source: Amended at 31 Ill. Reg. _____, effective _____)

Section 225.140 Incorporations by Reference

The following materials are incorporated by reference. These incorporations do not include any later amendments or editions.

a) 40 CFR 60, 60.17, 60.45a, 60.49a(k)(1) and (p), 60.50a(h), and 60.4170 through 60.4176 (2005).

b) 40 CFR 75 (~~2005~~ 2006).

c) 40 CFR 78 (2006).

d) 40 CFR 96, CAIR $SO_2$ Trading Program, subpart AAA (excluding 40 CFR 96.204 and 96.206), subpart BBB, subpart FFF, subpart GGG, and subpart HHH (2006).

e) 40 CFR 96, CAIR $NO_x$ Annual Trading Program, subpart AA (excluding 40 CFR 96.104, 96.105(b)(2), and 96.106), subpart BB, subpart FF, subpart GG, and subpart HH (2006).

f) 40 CFR 96, CAIR $NO_x$ Ozone Season Trading Program, subpart AAAA (excluding 40 CFR 96.304, 96.305(b)(2), and 96.306), subpart BBBB, subpart FFFF, subpart GGGG, and subpart HHHH (2006).

g~~e~~) ASTM. The following methods from the American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken PA 19428-2959, (610) 832-9585:

1) ASTM D388-77 (approved February 25, 1977), D388-90 (approved March 30, 1990), D388-91a (approved April 15, 1991), D388-95 (approved January 15, 1995), D388-98a (approved September 10, 1998), or D388-99 (approved September 10, 1999, reapproved in 2004), Classification of Coals by Rank.

2) ASTM D3173-03, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke (Approved April 10, 2003).

3) ASTM D3684-01, Standard Test Method for Total Mercury in Coal by the Oxygen Bomb Combustion/Atomic Absorption Method (Approved October 10, 2001).

4) ASTM D5865-04, Standard Test Method for Gross Calorific Value of Coal and Coke (Approved April 1, 2004).

5) ASTM D6414-01, Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by Acid Extraction or Wet Oxidation/Cold Vapor Atomic Absorption (Approved October 10, 2001).

6) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method) (Approved April 10, 2002).

h) Federal Energy Management Program, M&V Measurement and Verification for Federal Energy Projects, US Department of Energy, Office of Energy Efficiency and Renewable Energy, Version 2.2, DOE/GO-102000-0960 (September 2000).

(Source: Amended at 31 Ill. Reg. _____, effective _____)

Section 225.150 Commence Commercial Operation

Commence commercial operation means, for the purposes of Subparts C, D and E, with regard to a unit serving a generator:

a) To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in 40 CFR 96.105, 96.205, or 96.305, as incorporated by reference in Section 225.140.

1) For a unit that is a CAIR $SO_2$ unit, CAIR $NO_x$ unit, or a CAIR $NO_x$ Ozone Season unit pursuant to 40 CFR 96.104, 96.204 or 96.304, respectively, on the date the unit commences commercial operation on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subsection (a) of this Section and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date will remain the unit's date of commencement of commercial operation, which will continue to be treated as the same unit.

2) For a unit that is a CAIR $SO_2$ unit, CAIR $NO_x$ unit, or a CAIR $NO_x$ Ozone Season unit pursuant to 40 CFR 96.104, 96.204 or 96.304, respectively, on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subsection (a) of this Section and that is subsequently replaced by a unit at the same source (e.g., repowered), such date will remain the replaced unit's date of commencement of commercial operation, and the replaced unit will be treated as a separate unit with a separate date for

commencement of commercial operation as defined in subsection (a) or (b) of this Section as appropriate.

b) Notwithstanding subsection (a) of this Section and except as provided in 40 CFR 96.105, 96.205, or 96.305 for a unit that is not a CAIR $SO_2$ unit, CAIR $NO_x$ unit, or a CAIR $NO_x$ Ozone Season unit pursuant to Section 225.305, 225.405, or 225.405, respectively, on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subsection (a) of this Section, the unit's date for commencement of commercial operation will be the date on which the unit becomes an affected unit pursuant to Section 225.305, 225.405, or 225.405, respectively.

1) For a unit with a date for commencement of commercial operation as defined in subsection (b) of this Section and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date will remain the unit's date of commencement of commercial operation, which shall continue to be treated as the same unit.

2) For a unit with a date for commencement of commercial operation as defined in subsection (b) of this Section and that is subsequently replaced by a unit at the same source (e.g., repowered), such date will remain the replaced unit's date of commencement of commercial operation, and the replaced unit will be treated as a separate unit with a separate date for commencement of commercial operation as defined in subsection (a) or (b) of this Section as appropriate.

(Source: Added at 31 Ill. Reg. _____, effective _____)

## SUBPART C: CLEAN AIR ACT INTERSTATE RULE (CAIR) $SO_2$ TRADING PROGRAM

### Section 225.300 Purpose

The purpose of this Subpart C is to control the emissions of sulfur dioxide ($SO_2$) from EGUs annually by implementing the CAIR $SO_2$ Trading Program pursuant to 40 CFR 96, as incorporated by reference in Section 225.140.

(Source: Added at 31 Ill. Reg. _____, effective _____)

### Section 225.305 Applicability

a) Except as provided in subsections (b)(1), (b)(3), and (b)(4) of this Section:

1) The following units are CAIR $SO_2$ units, and any source that includes one or more such units is a CAIR $SO_2$ source subject to the requirements of this Subpart C: any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

2) If a stationary boiler or stationary combustion turbine that, pursuant to subsection (a)(1) of this Section, is not a CAIR $SO_2$ unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit will become a CAIR $SO_2$ unit as provided in subsection (a)(1) of this Section on the first date on which it both combusts fossil fuel and serves such generator.

b) The units that meet the requirements set forth in subsections (b)(1), (b)(3), and (b)(4) of this Section will not be CAIR $SO_2$ units and units that meet the requirements of subsections (b)(2) and (b)(5) of this Section are CAIR $SO_2$ units:

1) Any unit that is a CAIR $SO_2$ unit pursuant to subsection (a)(1) or (a)(2) of this Section and:

A) Qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit; and

B) Does not serve at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe supplying any calendar year more than one-third of the of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution for sale.

2) If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and meets the requirements of subsection (b)(1) of this Section for at least one calendar year, but subsequently no longer meets all such requirements, the unit shall become a CAIR $SO_2$ unit starting on the earlier of January 1 after the first calendar year during which the unit no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of subsection (b)(1)(B) of this Section.

3) Any unit that is a CAIR $SO_2$ unit pursuant to subsection (a)(1) or (a)(2) of this Section commencing operation before January 1, 1985 and:

A) Qualifies as a solid waste incineration unit; and

B) With an average annual fuel consumption of non-fossil fuel for 1985-1987 exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).

4) Any unit that is a CAIR $SO_2$ unit under subsection (a)(1) or (a)(2) of this Section commencing operation on or after January 1, 1985: and

A) Qualifies as a solid waste incineration unit; and

B) With an average annual fuel consumption of non-fossil fuel the first three years of operation exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).

5) If a unit qualifies as a solid waste incineration unit and meets the requirements of subsection (b)(3) or (b)(4) of this Section for at least three consecutive years, but subsequently no longer meets all such requirements, the unit shall become a CAIR SO2 unit starting on the earlier of January 1 after the first three consecutive calendar years after 1990 for which the unit has an average annual fuel consumption of fuel of 20 percent or more.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.310 Compliance Requirements

a) The owner or operator of a CAIR $SO_2$ unit must comply with the requirements of the CAIR $SO_2$ Trading Program for Illinois as set forth in this Subpart C and 40 CFR 96, subpart AAA (CAIR $SO_2$ Trading Program General Provisions, excluding 40 CFR 96.204, and 96.206); 40 CFR 96, subpart BBB (CAIR Designated Representative for CAIR $SO_2$ Sources); 40 CFR 96, subpart FFF (CAIR $SO_2$ Allowance Tracking System); 40 CFR 96, subpart GGG (CAIR $SO_2$ Allowance Transfers); and 40 CFR 96, subpart HHH (Monitoring and Reporting); as incorporated by reference in Section 225.140 .

b) Permit requirements:

1) The owner or operator of each source with one or more CAIR $SO_2$ units at the source must apply for a permit issued by the Agency with federally enforceable conditions covering the CAIR $SO_2$ Trading Program ("CAIR permit") that complies with the requirements of Section 225.320 (Permit Requirements).

2) The owner or operator of each CAIR $SO_2$ source and each CAIR $SO_2$ unit at the source must operate the CAIR $SO_2$ unit in compliance with its CAIR permit.

c) Monitoring requirements:

1) The owner or operator of each CAIR $SO_2$ source and each CAIR $SO_2$ unit at the source must comply with the monitoring requirements of 40 CFR 96, subpart HHH. The CAIR designated representative of each CAIR $SO_2$ source and each CAIR $SO_2$ unit at the CAIR $SO_2$ source must comply with those sections of the monitoring, reporting and recordkeeping requirements of 40 CFR 96, subpart HHH, applicable to the CAIR designated representative.

2) The compliance of each CAIR $SO_2$ source with the emissions limitation pursuant to subsection (d) of this Section will be determined by the emissions measurements recorded and reported in accordance with 40 CFR 96, subpart HHH and 40 CFR 75.

d) Emission requirements:

1) By the allowance transfer deadline, March 1, 2011, and by March 1 of each subsequent year, the owner or operator of each CAIR $SO_2$ source and each CAIR $SO_2$ unit at the source must hold a tonnage equivalent in CAIR $SO_2$ allowances available for compliance deductions pursuant to 40 CFR 96.254(a) and (b) in the CAIR $SO_2$ source's CAIR $SO_2$ Allowance System Tracking account. The allowance transfer deadline means by midnight of March 1 (if it is a business day) or midnight of the first business day thereafter. The number of allowances held may not be less than the total tons of $SO_2$ emissions for the control period from all CAIR $SO_2$ units at the CAIR $SO_2$ source, as determined in accordance with 40 CFR 96, subpart HHH.

2) Each ton of $SO_2$ emitted by a CAIR $SO_2$ unit in excess of the tonnage authorization of CAIR $SO_2$ allowances held by the owner or operator for each CAIR $SO_2$ unit in its CAIR $SO_2$ Allowance System Tracking account for each day of the applicable control period will constitute a separate violation of this Subpart C, the Clean Air Act, and the Act.

3) Each CAIR $SO_2$ unit will be subject to the monitoring requirements of subsection (c)(1) of this Section starting on the later of January 1, 2009, or the deadline for meeting the unit's monitoring certification requirements pursuant to 40 CFR 96.270(b)(1) or (2) and for each control period thereafter.

4) CAIR $SO_2$ allowances must be held in, deducted from, or transferred into or among allowance accounts in accordance with this Subpart and 40 CFR 96, subparts FFF and GGG.

5) In order to comply with the requirements of subsection (d)(1) of this Section, a CAIR $SO_2$ allowance may not be deducted for compliance according to subsection (d)(1) of this Section, for a control period in a calendar year before the year for which the allowance is allocated.

6) A CAIR $SO_2$ allowance is a limited authorization to emit $SO_2$ in accordance with the CAIR $SO_2$ Trading Program. No provision of the CAIR $SO_2$ Trading Program, the CAIR permit application, the CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.205, and no provision of law, will be construed to limit the authority of the United States or the State to terminate or limit this authorization.

7) A CAIR $SO_2$ allowance allocated by USEPA pursuant to the CAIR $SO_2$ Trading Program does not constitute a property right.

8) Upon recordation by USEPA pursuant to 40 CFR 96 subpart FFF or subpart GGG, every allocation, transfer, or deduction of a CAIR $SO_2$ allowance to or from a CAIR $SO_2$ source's compliance account, as defined by 40 CFR 96.202, is deemed to amend automatically, and become a part of, any CAIR permit of the CAIR $SO_2$ source. This automatic amendment of the CAIR permit will be deemed an operation of law and will not require any further review.

e) Recordkeeping and reporting requirements:

1) Unless otherwise provided, the owner or operator of the CAIR $SO_2$ source and each CAIR $SO_2$ unit at the source must keep on site at the source each of the documents listed in subsections (e)(1)(A) through (e)(1)(D) of this Section for a period of five (5) years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Agency or USEPA.

A) The certificate of representation for the CAIR designated representative for the source and each CAIR $SO_2$ unit at the source, all documents that demonstrate the truth of the statements in the certificate of representation, provided that the certificate and

documents must be retained on site at the source beyond such five-year period until the documents are superseded because of the submission of a new certificate of representation pursuant to 40 CFR 96.213, changing the CAIR designated representative.

B) All emissions monitoring information, in accordance with 40 CFR 96, subpart HHH.

C) Copies of all reports, compliance certifications, and other submissions and all records made or required pursuant to the CAIR $SO_2$ Trading Program or documents necessary to demonstrate compliance with the requirements of the CAIR $SO_2$ Trading Program or with the requirements of this Subpart C.

D) Copies of all documents used to complete a CAIR permit application and any other submission or documents used to demonstrate compliance pursuant to the CAIR $SO_2$ Trading Program.

2) The CAIR designated representative of a CAIR $SO_2$ source and each CAIR $SO_2$ unit at the source must submit to the Agency and USEPA the reports and compliance certifications required pursuant to the CAIR $SO_2$ Trading Program, including those pursuant to 40 CFR 96, subpart HHH.

f) Liability:

1) No revision of a permit for a CAIR $SO_2$ unit may excuse any violation of the requirements of this Subpart C or the requirements of the CAIR $SO_2$ Trading Program.

2) Each CAIR $SO_2$ source and each CAIR $SO_2$ unit must meet the requirements of the CAIR $SO_2$ Trading Program.

3) Any provision of the CAIR $SO_2$ Trading Program that applies to CAIR $SO_2$ source (including any provision applicable to the CAIR designated representative of a CAIR $SO_2$ source) will also apply to the owner and operator of the CAIR $SO_2$ source and to the owner and operator of each CAIR $SO_2$ unit at the source.

4) Any provision of the CAIR $SO_2$ Trading Program that applies to a CAIR $SO_2$ unit (including any provision applicable to the CAIR designated representative of a CAIR $SO_2$ unit) will also apply to the owner and operator of the CAIR $SO_2$ unit.

5) The CAIR designated representative of a CAIR $SO_2$ unit that has excess $SO_2$ emissions in any control period must surrender the allowances as required for deduction pursuant to 40 CFR 96.254(d)(1).

6) The owner or operator of a CAIR $SO_2$ unit that has excess $SO_2$ emissions in any control period must pay any fine, penalty, or assessment or comply with any other remedy imposed pursuant to the Act and 40 CFR 96.254(d)(2).

g) Effect on other authorities. No provision of the CAIR $SO_2$ Trading Program, a CAIR permit application, a CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.205 will be construed as exempting or excluding the owner and operator and, to the extent applicable, the CAIR designated representative of a CAIR $SO_2$ source or a CAIR $SO_2$ unit, from compliance with any other regulation promulgated pursuant to the CAA, the Act, any State regulation or permit, or a federally enforceable permit.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.315 Appeal Procedures

The appeal procedures for decisions of USEPA pursuant to the CAIR $SO_2$ Trading Program are set forth in 40 CFR 78, as incorporated by reference in Section 225.140.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.320 Permit Requirements

a) Permit requirements:

1) The owner or operator of each source with a CAIR $SO_2$ unit is required to submit:

A) A complete permit application addressing all applicable CAIR $SO_2$ Trading Program requirements for a permit meeting the requirements of this Section 225.320, applicable to each CAIR $SO_2$ unit at the source. Each CAIR permit must contain elements required for a complete CAIR permit application pursuant to subsection (b)(2) of this Section.

B) Any supplemental information that the Agency determines is necessary in order to review a CAIR permit application and issue a CAIR permit.

2) Each CAIR permit will be issued pursuant to Section 39 or 39.5 of the Act, must contain federally enforceable conditions addressing all applicable CAIR $SO_2$ Trading Program and requirements, and will be a complete and segregable portion of the source's entire permit pursuant to subsection (a)(1) of this Section.

3) No CAIR permit may be issued and no CAIR $SO_2$ Allowance System Tracking account may be established for the CAIR $SO_2$ source, until the Agency and USEPA have received a complete certificate of representation for a CAIR designated representative or alternate designated representative pursuant to 40 CFR 96, subpart BBB, for a source and the CAIR $SO_2$ unit at the source.

4) For all CAIR $SO_2$ units that commenced operation before July 1, 2008, the owner or operator of the unit must submit a CAIR permit application meeting the requirements of this Section 225.320 on or before July 1, 2008.

5) For CAIR $SO_2$ units that commence operation on or after July 1, 2008, and that are and are not subject to Section 39.5 of the Act, the owner or operator of such units must submit applications for construction and operating permits pursuant to the requirements of Sections 39 and 39.5 of the Act, as applicable, and 35 Ill. Adm. Code 201 and the applications must specify that they are applying for CAIR permits, and must address the CAIR permit application requirements of this Section 225.320.

b) Permit applications:

1) Duty to apply. The owner or operator of any source with one or more CAIR $SO_2$ units must submit to the Agency a CAIR permit application for the source covering each CAIR $SO_2$ unit pursuant to subsection (b)(2) of this Section by the applicable deadline in subsection (a)(4) or (a)(5) of this Section. The owner or operator of any source with one or more CAIR $SO_2$ units must reapply for a CAIR permit for the source as required by this Subpart, 35 Ill. Adm. Code 201, and, as applicable, Sections 39 and 39.5 of the Act.

2) Information requirements for CAIR permit applications. A complete CAIR permit application must include the following elements concerning the source for which the application is submitted:

A) Identification of the source, including plant name. The ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the Energy Information Administration must also be included, if applicable;

B) Identification of each CAIR $SO_2$ unit at the source; and

C) The compliance requirements applicable to each CAIR $SO_2$ unit as set forth in Section 225.310.

3) An application for a CAIR permit will be treated as a modification of the CAIR $SO_2$ source's existing federally enforceable permit, if such a permit has been issued for that CAIR $SO_2$ source, and will be subject to the same procedural requirements. When the Agency issues a CAIR permit pursuant to the requirements of this Section 225.320, it will be incorporated into and become part of that CAIR $SO_2$ source's existing federally enforceable permit.

c) Permit content. Each CAIR permit is deemed to incorporate automatically the definitions and terms pursuant to Section 225.120 and, upon recordation of USEPA under 40 CFR 96, Subparts FFF and GGG as incorporated by reference in Section 225.140, every allocation, transfer, or deduction of a CAIR $SO_2$ allowance to or from the compliance account of the CAIR $SO_2$ source covered by the permit.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.325 Trading Program

a) The CAIR $SO_2$ Trading Program is administered by USEPA. CAIR $SO_2$ allowances are issued as described by the definition for allocate in 40 CFR 96.220, as incorporated by reference in Section 225.140. The amount of CAIR $SO_2$ allowances to be credited to a CAIR $SO_2$ source's CAIR $SO_2$ Allowance Tracking System account for a CAIR $SO_2$ unit will be determined in accordance with 40 CFR 96.253, as incorporated by reference in Section 225.140.

b) A CAIR $SO_2$ allowance is a limited authorization to emit $SO_2$ during the calendar year for which the allowance is allocated or any calendar year thereafter pursuant to the CAIR $SO_2$ Trading Program as follows:

1) For one CAIR $SO_2$ allowance allocated for a control period in a year before 2010, one ton of $SO_2$, except as provided for in the compliance deductions pursuant to 40 CFR 96.254(b);

2) For one CAIR $SO_2$ allowance allocated for a control period in 2010 through 2014, 0.5 ton of $SO_2$, except as provided for in the compliance deductions pursuant to 40 CFR 96.254(b); and

3) For one CAIR $SO_2$ allowance allocated for a control period in 2015 or later, 0.35 ton of $SO_2$, except as provided for in the compliance deductions pursuant to 40 CFR 96.254(b).

(Source: Added at 31 Ill. Reg. _____, effective _____)

SUBPART D: CAIR $NO_x$ ANNUAL TRADING PROGRAM

Section 225.400 Purpose

The purpose of this Subpart D is to control the annual emissions of nitrogen oxides ($NO_x$) from EGUs by determining allocations and implementing the CAIR $NO_x$ Annual Trading Program.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.405 Applicability

a) Except as provided in subsections (b)(1), (b)(3), and (b)(4) of this Section:

1) The following units are CAIR $NO_x$ units, and any source that includes one or more such units is a CAIR $NO_x$ source subject to the requirements of this Subpart D: any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

2) If a stationary boiler or stationary combustion turbine that, pursuant to subsection (a)(1) of this Section, is not a CAIR $NO_x$ unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit will become a CAIR $NO_x$ unit as provided in subsection (a)(1) of this Section on the first date on which it both combusts fossil fuel and serves such generator.

b) The units that meet the requirements set forth in subsections (b)(1), (b)(3), and (b)(4) of this Section will not be CAIR $NO_x$ units and units that meet the requirements of subsections (b)(2) and (b)(5) of this Section are CAIR $NO_x$ units:

1) Any unit that is a CAIR $NO_x$ unit pursuant to subsection (a)(1) or (a)(2) of this Section and:

A) Qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit; and

B) Does not serve at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe supplying any calendar year more than one-third of the of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution for sale.

2) If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and meets the requirements of subsection (b)(1) of this Section for at least one calendar year, but subsequently no longer meets all such requirements, the unit shall become a CAIR $NO_x$ unit starting on the earlier of January 1 after the first calendar year during which the unit no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of subsection (b)(1)(B) of this Section.

3) Any unit that is a CAIR $NO_x$ unit pursuant to subsection (a)(1) or (a)(2) of this Section commencing operation before January 1, 1985 and:

A) Qualifies as a solid waste incineration unit; and

B) With an average annual fuel consumption of non-fossil fuel for 1985-1987 exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).

4) Any unit that is a CAIR $NO_x$ unit under subsection (a)(1) or (a)(2) of this Section commencing operation on or after January 1, 1985: and

A) Qualifies as a solid waste incineration unit; and

B) With an average annual fuel consumption of non-fossil fuel the first three years of operation exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).

5) If a unit qualifies as a solid waste incineration unit and meets the requirements of subsection (b)(3) or (b)(4) of this Section for at least three consecutive years, but subsequently no longer meets all such requirements, the unit shall become a CAIR $NO_x$ unit starting on the earlier of January 1 after the first three consecutive calendar years after

1990 for which the unit has an average annual fuel consumption of fuel of 20 percent or more.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.410 Compliance Requirements

a) The owner or operator of a CAIR $NO_x$ unit must comply with the requirements of the CAIR $NO_x$ Annual Trading Program for Illinois as set forth in this Subpart D and 40 CFR 96, subpart AA ($NO_x$ Annual Trading Program General Provisions, excluding 40 CFR 96.104, 96.105(b)(2), and 96.106); 40 CFR 96, subpart BB (CAIR Designated Representative for CAIR $NO_x$ Sources); 40 CFR 96, subpart FF (CAIR $NO_x$ Allowance Tracking System); 40 CFR 96, subpart GG (CAIR $NO_x$ Allowance Transfers); and 40 CFR 96, subpart HH (Monitoring and Reporting); as incorporated by reference in Section 225.140.

b) Permit requirements:

1) The owner or operator of each source with one or more CAIR $NO_x$ units at the source must apply for a permit issued by the Agency with federally enforceable conditions covering the CAIR $NO_x$ Annual Trading Program ("CAIR permit") that complies with the requirements of Section 225.420 (Permit Requirements).

2) The owner or operator of each CAIR $NO_x$ source and each CAIR $NO_x$ unit at the source must operate the CAIR $NO_x$ unit in compliance with its CAIR permit.

c) Monitoring requirements:

1) The owner or operator of each CAIR $NO_x$ source and each CAIR $NO_x$ unit at the source must comply with the monitoring requirements of 40 CFR 96, subpart HH and Section 225.450. The CAIR designated representative of each CAIR $NO_x$ source and each CAIR $NO_x$ unit at the CAIR $NO_x$ source must comply with those sections of the monitoring, reporting and recordkeeping requirements of 40 CFR 96, subpart HH, applicable to a CAIR designated representative.

2) The compliance of each CAIR $NO_x$ source with the $NO_x$ emissions limitation pursuant to subsection (d) of this Section will be determined by the emissions measurements recorded and reported in accordance with 40 CFR 96, subpart HH.

d) Emission requirements:

1) By the allowance transfer deadline, March 1, 2010, and by March 1 of each subsequent year, the allowance transfer deadline, the owner or operator of each CAIR $NO_x$ source and each CAIR $NO_x$ unit at the source must hold CAIR $NO_x$ allowances available for compliance deductions pursuant to 40 CFR 96.154(a) in the CAIR $NO_x$ source's CAIR $NO_x$ compliance account. The allowance transfer deadline means by midnight of March 1 (if it is a business day) or midnight of the first business day thereafter. The number of allowances held may not be less than the tons of $NO_x$ emissions for the control period from all CAIR $NO_x$ units at the source, as determined in accordance with 40 CFR 96, subpart HH.

2) Each ton of $NO_x$ emitted in excess of the number of CAIR $NO_x$ allowances held by the owner or operator for each CAIR $NO_x$ unit in its CAIR $NO_x$ compliance account for each day of the applicable control period will constitute a separate violation of this Subpart D, the Act, and the CAA.

3) Each CAIR $NO_x$ unit will be subject to the monitoring requirements of subsection (c)(1) of this Section starting on the later of January 1, 2009, or the deadline for meeting the unit's monitoring certification requirements pursuant to 40 CFR 96.170(b)(1) or (b)(2) and for each control period thereafter.

4) CAIR $NO_x$ allowances must be held in, deducted from, or transferred among allowance accounts in accordance with this Subpart and 40 CFR 96, subparts FF and GG.

5) In order to comply with the requirements of subsection (d)(1) of this Section, a CAIR $NO_x$ allowance may not be deducted for compliance according to subsection (d)(1) of this Section, for a control period in a year before the calendar year for which the allowance is allocated.

6) A CAIR $NO_x$ allowance allocated by the Agency or USEPA pursuant to the CAIR $NO_x$ Annual Trading Program is a limited authorization to emit one ton of $NO_x$ in accordance with the CAIR $NO_x$ Trading Program. No provision of the CAIR $NO_x$ Trading Program, the CAIR $NO_x$ permit application, the CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.105, and no provision of law, will be construed to limit the authority of the United States or the State to terminate or limit this authorization.

7) A CAIR $NO_x$ allowance allocated by the Agency or USEPA pursuant to the CAIR $NO_x$ Annual Trading Program does not constitute a property right.

8) Upon recordation by USEPA pursuant to 40 CFR 96, subpart FF or 40

CFR 96, subpart GG, every allocation, transfer, or deduction of a CAIR $NO_x$ allowance to or from a CAIR $NO_x$ source compliance account is deemed to amend automatically, and become a part of, any CAIR $NO_x$ permit of the CAIR $NO_x$ source. This automatic amendment of the CAIR permit will be deemed an operation of law and will not require any further review.

e) Recordkeeping and reporting requirements:

1) Unless otherwise provided, the owner or operator of the CAIR $NO_x$ source and each CAIR $NO_x$ unit at the source must keep on site at the source each of the documents listed in subsections (e)(1)(A) through (e)(1)(E) of this Section for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Agency or USEPA.

A) The certificate of representation for the CAIR designated representative for the source and each CAIR $NO_x$ unit at the source, all documents that demonstrate the truth of the statements in the certificate of representation, provided that the certificate and documents must be retained on site at the source beyond such five-year period until the documents are superseded because of the submission of a new certificate of representation pursuant to 40 CFR 96.113, changing the CAIR designated representative.

B) All emissions monitoring information, in accordance with 40 CFR 96, subpart HH.

C) Copies of all reports, compliance certifications, and other submissions and all records made or required pursuant to the CAIR $NO_x$ Annual Trading Program or documents necessary to demonstrate compliance with the requirements of the CAIR $NO_x$ Annual Trading Program or with the requirements of this Subpart D.

D) Copies of all documents used to complete a CAIR $NO_x$ permit application and any other submission or documents used to demonstrate compliance pursuant to the CAIR $NO_x$ Annual Trading Program.

E) Copies of all records and logs for gross electrical output and useful thermal energy required by Section 225.450.

2) The CAIR designated representative of a CAIR $NO_x$ source and each CAIR $NO_x$ unit at the source must submit to the Agency and USEPA the reports and compliance certifications required pursuant to the CAIR $NO_x$

Annual Trading Program, including those pursuant to 40 CFR 96, subpart HH.

f) Liability:

1) No revision of a permit for a CAIR $NO_x$ unit may excuse any violation of the requirements of this Subpart D or the requirements of the CAIR $NO_x$ Annual Trading Program.

2) Each CAIR $NO_x$ source and each CAIR $NO_x$ unit must meet the requirements of the CAIR $NO_x$ Annual Trading Program.

3) Any provision of the CAIR $NO_x$ Annual Trading Program that applies to a CAIR $NO_x$ source (including any provision applicable to the CAIR designated representative of a CAIR $NO_x$ source) will also apply to the owner and operator of the CAIR $NO_x$ source and to the owner and operator of each CAIR $NO_x$ unit at the source.

4) Any provision of the CAIR $NO_x$ Annual Trading Program that applies to a CAIR $NO_x$ unit (including any provision applicable to the CAIR designated representative of a CAIR $NO_x$ unit) will also apply to the owner and operator of the CAIR $NO_x$ unit.

5) The CAIR designated representative of a CAIR $NO_x$ unit that has excess emissions in any control period must surrender the allowances as required for deduction pursuant to 40 CFR 96.154(d)(1).

6) The owner or operator of a CAIR $NO_x$ unit that has excess $NO_x$ emissions in any control period must pay any fine, penalty, or assessment or comply with any other remedy imposed pursuant to the Act and 40 CFR 96.154(d)(2).

g) Effect on other authorities. No provision of the CAIR $NO_x$ Annual Trading Program, a CAIR permit application, a CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.105 will be construed as exempting or excluding the owner and operator and, to the extent applicable, the CAIR designated representative of a CAIR $NO_x$ source or a CAIR $NO_x$ unit, from compliance with any other regulation promulgated pursuant to the CAA, the Act, any State regulation or permit, or a federally enforceable permit.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.415 Appeal Procedures

The appeal procedures for decisions of USEPA pursuant to the CAIR $NO_x$ Annual Trading

Program are set forth in 40 CFR 78, as incorporated by reference in Section 225.140.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.420 Permit Requirements

a) Permit requirements:

1) The owner or operator of each source with a CAIR $NO_x$ unit is required to submit:

A) A complete permit application addressing all applicable CAIR $NO_x$ Annual Trading Program requirements for a permit meeting the requirements of this Section 225.420, applicable to each CAIR $NO_x$ unit at the source. Each CAIR permit must contain elements required for a complete CAIR permit application pursuant to subsection (b)(2) of this Section.

B) Any supplemental information that the Agency determines necessary in order to review a CAIR permit application and issue any CAIR permit.

2) Each CAIR permit will be issued pursuant to Section 39 and 39.5 of the Act, must contain federally enforceable conditions addressing all applicable CAIR $NO_x$ Annual Trading Program requirements and must be a complete and segregable portion of the source's entire permit pursuant to subsection (a)(1) of this Section.

3) No CAIR permit may be issued, and no CAIR $NO_x$ compliance account may be established for a CAIR $NO_x$ source, until the Agency and USEPA have received a complete certificate of representation for a CAIR designated representative pursuant to 40 CFR 96, subpart BB, for the CAIR $NO_x$ source and the CAIR $NO_x$ unit at the source.

4) For all CAIR $NO_x$ units that commenced operation before July 1, 2007, the owner or operator of the unit must submit a CAIR permit application meeting the requirements of this Section 225.420 on or before July 1, 2007.

5) For all CAIR $NO_x$ units that commence operation on or after July 1, 2007, the owner or operator of these units must submit applications for construction and operating permits pursuant to the requirements of Sections 39 and 39.5 of the Act, as applicable, and 35 Ill. Adm. Code 201 and the applications must specify that they are applying for CAIR permits, and must address the CAIR permit application requirements of this

Section 225.420.

b) Permit applications:

1) Duty to apply. The owner or operator of any source with one or more CAIR $NO_x$ units must submit to the Agency a CAIR permit application for the source covering each CAIR $NO_x$ unit pursuant to subsection (b)(2) of this Section by the applicable deadline in subsection (a)(4) or (a)(5) of this Section. The owner or operator of any source with one or more CAIR $NO_x$ units must reapply for a CAIR permit for the source as required by this Subpart, 35 Ill. Adm. Code 201, and, as applicable, Sections 39 and 39.5 of the Act.

2) Information requirements for CAIR permit applications. A complete CAIR permit application must include the following elements concerning the source for which the application is submitted:

A) Identification of the source, including plant name. The ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the Energy Information Administration must also be included, if applicable;

B) Identification of each CAIR $NO_x$ unit at the source; and

C) The compliance requirements applicable to each CAIR $NO_x$ unit as set forth in Section 225.410.

3) An application for a CAIR permit will be treated as a modification of the CAIR $NO_x$ source's existing federally enforceable permit, if such a permit has been issued for that source, and will be subject to the same procedural requirements. When the Agency issues a CAIR permit pursuant to the requirements of this Section 225.420, it will be incorporated into and become part of that source's existing federally enforceable permit.

c) Permit content. Each CAIR permit is deemed to incorporate automatically the definitions and terms pursuant to Section 225.120 and, upon recordation of USEPA under 40 CFR 96, Subparts FF and GG as incorporated by reference in Section 225.140, every allocation, transfer, or deduction of a CAIR $NO_x$ allowance to or from the compliance account of the CAIR $NO_x$ source covered by the permit.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.425 Annual Trading Budget

The CAIR $NO_x$ Annual Trading budget available for allowance allocations for each control period will be determined as follows:

a) The total base CAIR $NO_x$ Annual Trading budget is 76,230 tons per control period for the years 2009 through 2014, subject to a reduction for two set-asides, the New Unit Set-Aside (NUSA) and the Clean Air Set-Aside (CASA). Five percent of the budget will be allocated to the NUSA and 25 percent will be allocated to the CASA, resulting in a CAIR $NO_x$ Annual Trading budget of 53,361 tons available for allocation per control period pursuant to Section 225.440. The requirements of the NUSA are set forth in Section 225.445, and the requirements of the CASA are set forth in Sections 225.455 through 225.470.

b) The total base CAIR $NO_x$ Annual Trading budget is 63,525 tons per control period for the year 2015 and thereafter, subject to a reduction for two set-asides, the NUSA and the CASA. Five percent of the budget will be allocated to the NUSA and 25 percent will be allocated to the CASA, resulting in a CAIR $NO_x$ Annual Trading budget of 44,468 tons available for allocation per control period pursuant to Section 225.440.

c) If USEPA adjusts the total base CAIR $NO_x$ Annual Trading budget for any reason, the Agency will adjust the base CAIR $NO_x$ Annual Trading budget and the CAIR $NO_x$ Annual Trading budget available for allocation, accordingly.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.430 Timing for Annual Allocations

a) No later than July 31, 2007, the Agency will submit to USEPA the CAIR $NO_x$ allowance allocations, in accordance with Sections 225.435 and 225.440, for the 2009, 2010, and 2011 control periods.

b) By October 31, 2008, and October 31 of each year thereafter, the Agency will submit to USEPA the CAIR $NO_x$ allowance allocations in accordance with Sections 225.435 and 225.440, for the control period four years after the year of the applicable deadline for submission pursuant to this Section 225.430. For example, on October 31, 2008, the Agency will submit to USEPA the allocations for the 2012 control period.

c) The Agency will allocate allowances from the NUSA to CAIR $NO_x$ units that commence commercial operation on or after January 1, 2006. The Agency will report these allocations to USEPA by October 31 of the applicable control period. For example, on October 31, 2009, the Agency will submit to USEPA the allocations from the NUSA for the 2009 control period.

d) The Agency will allocate allowances from the CASA to energy efficiency,

renewable energy, and clean technology projects pursuant to the criteria in Sections 225.455 through 225.470. The Agency will report these allocations to USEPA by October 1 of each year. For example, on October 1, 2009, the Agency will submit to USEPA the allocations from the CASA for the 2009 control period, based on reductions made in the 2008 control period.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.435 Methodology for Calculating Annual Allocations

The Agency will calculate converted gross electrical output, in MWh, for each CAIR $NO_x$ unit that has operated during at least one calendar year prior to the calendar year in which the Agency reports the allocations to USEPA as follows:

a) For control periods 2009, 2010, and 2011, the owner or operator of the unit must submit in writing to the Agency by June 1, 2007, a statement that either gross electrical output data or heat input data is to be used to calculate the unit's converted gross electrical output. The data shall be used to calculate converted gross electrical output pursuant to either subsection (a)(1) or (a)(2) of this Section:

1) Gross electrical output. If the unit has four or five control periods of data, then the gross electrical output (GO) will be the average of the unit's three highest gross electrical outputs from the 2001, 2002, 2003, 2004, or 2005 control periods. If the unit has three or fewer control periods of gross electrical output data, the gross electrical output will be the average of those control periods. If the unit does not have gross electrical output for the 2004 and 2005 control periods, the gross electrical output will be the gross electrical output data from the 2005 control period. If a generator is served by two or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of these units for the control period. The unit's converted gross electrical output will be calculated as follows:

A) If the unit is coal-fired:
CGO (in MWh) = GO × MWh × 1.0;

B) If the unit is oil-fired:
CGO (in MWh) = GO × MWh × 0.6; or

C) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = GO × MWh × 0.4

2) Heat input (HI). If the unit has four or five control periods of data, the average of the unit's three highest heat input from the 2001, 2002, 2003, 2004 or 2005 control period, will be used. If the unit has heat inputs from

the 2003, 2004, or 2005 control period, the heat input will be the average of those years. If the unit does not have heat input from the 2004 and 2005 control periods, the heat input from the 2005 control period will be used. The unit's converted gross electrical output will be calculated as follows:

A) If the unit is coal-fired:
CGO (in MWh) = HI (in mmBtu) × 0.0967;

B) If the unit is oil-fired:
CGO (in MWh) = HI (in mmBtu) × 0.0580; or

C) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = HI (in mmBtu) × 0.0387.

b) For control periods 2012 and 2013, the owner or operator of the unit must submit in writing to the Agency by June 1, 2008, a statement that either gross electrical output data or heat input data be used to calculate the unit's converted gross electrical output. The unit's converted gross electrical output shall be calculated pursuant to either subsection (b)(1) or (b)(2) of this Section:

1) Gross electrical output. The average of the unit's two most recent years of control period gross electrical output, if available; otherwise it will be the unit's most recent control period's gross electrical output. If a generator is served by two or more units, the gross electrical output of the generator shall be attributed to each unit in proportion to the unit's share of the total control period heat input of such units for the control period. The unit's converted gross electrical output shall be calculated as follows:

A) If the unit is coal-fired:
CGO (in MWh) = GO × MWh × 1.0;

B) If the unit is oil-fired:
CGO (in MWh) = GO × MWh × 0.6;

C) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = GO × MWh × 0.4.

2) Heat input. The average of the unit's two most recent years of control period heat input; otherwise the unit's most recent control period's heat input, e.g. for the 2012 control period the average of the unit's heat input from the 2006 and 2007 control periods. If the unit does not have heat input from the 2006 and 2007 control periods, the heat input from the 2007 control period shall be used. The unit's converted gross electrical output shall be calculated as follows:

A) If the unit is coal-fired:
CGO (in MWh) = HI (in mmBtu) × 0.0967;

B) If the unit is oil-fired:
CGO (in MWh) = HI (in mmBtu) × 0.0580; or

C) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = HI (in mmBtu) × 0.0387.

c) For control period 2014 and thereafter, the unit's gross electrical output will be the average of the unit's two most recent years of control period gross electrical output, if available; otherwise it will be the unit's most recent control period's gross electrical output. If a generator is served by two or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of these units for the control period. The unit's converted gross electrical output will be calculated as follows:

1) If the unit is coal-fired:
CGO (in MWh) = GO × 1.0;

2) If the unit is oil-fired:
CGO (in MWh) = GO ×0.6; or

3) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = GO × 0.4.

d) For a unit that is a combustion turbine or boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the Agency will add the converted gross electrical output calculated for electricity pursuant to subsections (a), (b), or (c) of this Section to the converted useful thermal energy (CUTE) to determine the total converted gross electrical output for the unit (TCGO). The Agency will determine the converted useful thermal energy by using the average of the unit's control period useful thermal energy for the prior two control periods, if available, otherwise the unit's control period useful thermal output for the prior year will be used. The converted useful thermal energy will be determined using the following equations:

1) If the unit is coal-fired:
CUTE (in MWh) = UTE (in mmBtu) × 0.2930;

2) If the unit is oil-fired:
CUTE (in MWh) = UTE (in mmBtu) × 0.1758; or

3) If the unit is neither coal-fired nor oil-fired:
CUTE (in MWh) = UTE (in mmBtu) × 0.1172.

e) The CAIR $NO_x$ unit's converted gross electrical output and converted useful thermal energy in subsections (a)(1), (b)(1), (c) and (d) of this Section for each control period will be based on the best available data reported or available to the Agency for the CAIR $NO_x$ unit pursuant to the provisions of Section 225.450.

f) The CAIR $NO_x$ unit's heat input in subsections (a)(2) and (b)(2) of this Section for each control period will be determined in accordance with 40 CFR 75, as incorporated by reference in Section 225.140.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.440 Annual Allocations

a) For the 2009 control period, and each control period thereafter, the Agency will allocate CAIR $NO_x$ allowances to all CAIR $NO_x$ units in Illinois for which the Agency has calculated the total converted gross electrical output pursuant to Section 225.435, a total amount of CAIR $NO_x$ allowances equal to tons of $NO_x$ emissions in the CAIR $NO_x$ Annual Trading budget available for allocation as determined in Section 225.425 and allocated pursuant to this Section 225.440.

b) The Agency will allocate CAIR $NO_x$ allowances to each CAIR $NO_x$ unit on a pro-rata basis using the unit's total converted gross electrical output calculated pursuant to Section 225.435. If there are insufficient allowances to allocate whole allowances pro rata, these unallocated allowances will be retained by the Agency and will be available for allocation in later control periods.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.445 New Unit Set-Aside (NUSA)

For the 2009 control period and each control period thereafter, the Agency will allocate CAIR $NO_x$ allowances from the NUSA to CAIR $NO_x$ units that commenced commercial operation on or after January 1, 2006, and do not yet have an allocation for the particular control period pursuant to Section 225.440, in accordance with the following procedures:

a) Beginning with the 2009 control period and each control period thereafter, the Agency will establish a separate NUSA for each control period. Each NUSA will be allocated CAIR $NO_x$ allowances equal to 5 percent of the amount of tons of $NO_x$ emissions in the base CAIR $NO_x$ Annual Trading budget in Section 225.425.

b) The CAIR designated representative of a new CAIR $NO_x$ unit may submit to the Agency a request, in a format specified by the Agency, to be allocated CAIR $NO_x$ allowances from the NUSA starting with the first control period after the control

period in which the new unit commences commercial operation and until the first control period for which the unit may use CAIR $NO_x$ allowances allocated to the unit pursuant to Section 225.440. The NUSA allowance allocation request may only be submitted after a new unit has operated during one control period, and no later than March 1 of the control period for which allowances from the NUSA are being requested.

c) In a NUSA allowance allocation request pursuant to subsection (b) of this Section, the CAIR designated representative must provide in its request information for gross electrical output and useful thermal energy, if any, for the new CAIR $NO_x$ unit for that control period.

d) The Agency will allocate allowances from the NUSA to a new CAIR $NO_x$ unit using the following procedures:

1) For each new CAIR $NO_x$, the unit's gross electrical output for the most recent control period will be used to calculate the unit's gross electrical output. If a generator is served by two or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of these units for the control period. The new unit's converted gross electrical output will be calculated as follows:

A) If the unit is coal-fired:
CGO (in MWh) = GO × 1.0;

B) If the unit is oil-fired:
CGO (in MWh) = GO × 0.6; or

C) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = GO × 0.4.

2) If the unit is a combustion turbine or boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the Agency will add the converted gross electrical output calculated for electricity pursuant to subsection (d)(1) of this Section to the converted useful thermal energy to determine the total converted gross electrical output for the unit. The Agency will determine the converted useful thermal energy using the unit's useful thermal energy for the most recent control period. The converted useful thermal energy will be determined using the following equations:

A) If the unit is coal-fired:
CUTE (in MWh) = UTE (in mmBtu) × 0.2930;

B) If the unit is oil-fired:
CUTE (in MWh) = UTE (in mmBtu) × 0.1758; or

C) If the unit is neither coal-fired nor oil-fired:
CUTE (in MWh) = UTE (in mmBtu) × 0.1172.

3) The gross electrical output and useful thermal energy in subsections (d)(1) and (d)(2) of this Section for each control period will be based on the best available data reported or available to the Agency for the CAIR $NO_x$ unit pursuant to the provisions of Section 225.450.

4) The Agency will determine a unit's unprorated allocation ($UA_y$) using the unit's converted gross electrical output plus the unit's converted useful thermal energy, if any, calculated in subsections (d)(1) and (d)(2) of this Section, converted to approximate $NO_x$ tons (the unit's unprorated allocation), as follows:

$$UA_y = \frac{TCGO_y * (1.0 lbs/MWh)}{2000 lbs/ton}$$

Where:

$UA_y$ = unprorated allocation to a new CAIR $NO_x$ unit.

$TCGO_y$ = total converted gross electrical output for a new CAIR $NO_x$ unit.

5) The Agency will allocate CAIR $NO_x$ allowances from the NUSA to new CAIR $NO_x$ units as follows:

A) If the NUSA for the control period for which CAIR $NO_x$ allowances are requested has a number of allowances greater than or equal to the total unprorated allocations for all new units requesting allowances, the Agency will allocate the number of allowances using the unprorated allocation determined for that unit pursuant to subsection (d)(4) of this Section.

B) If the NUSA for the control period for which the allowances are requested has a number of CAIR $NO_x$ allowances less than the total unprorated allocation to all new CAIR $NO_x$ units requesting allocations, the Agency will allocate the available allowances for new CAIR $NO_x$ units on a pro-rata basis, using the unprorated allocation determined for that unit pursuant to subsection (d)(4) of this Section. If there are insufficient allowances to allocate whole

allowances, the unallocated allowances will be retained by the Agency and will be available for allocation in a later control period.

C) If the gross electrical output or useful thermal energy reported to the Agency in subsection (d) of this Section is later determined to be greater than the unit's actual gross electrical output or useful thermal energy for the applicable control period, the Agency will reduce the unit's allocation from the NUSA for the current control period to account for the excess allowances allocated in the prior control period or periods.

e) The Agency will review each NUSA allowance allocation request pursuant to subsection (b) of this Section. The Agency will accept a NUSA allowance allocation request only if the request meets, or is adjusted by the Agency as necessary to meet, the requirements of this Section 225.445.

f) By June 1 of the applicable control period, the Agency will notify each CAIR designated representative that submitted a NUSA allowance request of the amount of CAIR $NO_x$ allowances from the NUSA, if any, allocated for the control period to the new unit covered by the request.

g) The Agency will allocate CAIR $NO_x$ allowances to new units from the NUSA no later than October 31 of the applicable control period.

h) After a new CAIR $NO_x$ unit has operated in one control period, it becomes an existing unit for the purposes of Section 225.440 only, and the Agency will allocate CAIR $NO_x$ allowances for that unit, for the control period commencing four years in the future pursuant to Section 225.440. For example, if a unit commences commercial operation in 2009, in 2010, the Agency will allocate to that unit allowances pursuant to Section 225.440 for the 2014 control period. The new CAIR $NO_x$ unit will continue to receive CAIR $NO_x$ allowances from the NUSA according to this Section until the unit is eligible to use the CAIR $NO_x$ allowances allocated to the unit pursuant to Section 225.440.

i) If, after the completion of the procedures in subsection (c) of this Section for a control period, any unallocated CAIR $NO_x$ allowances remain in the NUSA for the control period, the Agency will, at a minimum, accrue those CAIR $NO_x$ allowances for future control period allocations to new CAIR $NO_x$ units. The Agency may from time to time elect to retire CAIR $NO_x$ allowances in the NUSA that are in excess of 15,881 for the purposes of continued progress toward attainment and maintenance of National Ambient Air Quality Standards pursuant to the CAA.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.450 Monitoring, Recordkeeping and Reporting Requirements for Gross Electrical Output and Useful Thermal Energy

a) By January 1, 2008, or by the date of commencing commercial operation, whichever is later, the owner or operator of the CAIR $NO_x$ unit must operate a system for measuring gross electrical output that is consistent with the requirements of either 40 CFR 60 or 75; must measure gross electrical output in MW-hrs using such a system; and must record the output of the measurement system. If a generator is served by two or more units, the information to determine each unit's heat input for that control period must also be recorded, so as to allow each unit's share of the gross electrical output to be determined. If heat input data is used, the owner or operator must comply with the applicable provisions 40 CFR 75, as incorporated by reference in Section 225.140.

b) For a CAIR $NO_x$ unit that is a cogeneration unit by January 1, 2008, or by the date the CAIR $NO_x$ unit commences to produce useful thermal energy, whichever is later, the owner or operator of a CAIR $NO_x$ unit with cogeneration capabilities must install, calibrate, maintain, and operate meters for steam flow in lbs/hr, temperature in degrees Fahrenheit, and pressure in PSI, to measure and record the useful thermal energy that is produced, in mmBtu/hr, on a continuous basis. Owners and operators of a CAIR $NO_x$ unit that produces useful thermal energy but uses an energy transfer medium other than steam, e.g., hot water or glycol, must install, calibrate, maintain, and operate the necessary meters to measure and record the necessary data to express the useful thermal energy produced, in mmBtu/hr, on a continuous basis. If the CAIR $NO_x$ unit ceases to produce useful thermal energy, the owner or operator may cease operation of the meters, provided that operation of these meters must be resumed if the CAIR $NO_x$ unit resumes production of useful thermal energy.

c) The owner or operator of a CAIR $NO_x$ unit must either report gross electrical output data to the Agency or comply with the applicable provisions for providing heat input data as follows:

1) By June 1, 2007, the gross electrical output for control periods 2001, 2002, 2003, 2004 and 2005, if available, and, the unit's useful thermal energy data, if applicable. If a generator is served by two or more units, the documentation needed to determine each unit's share of the heat input of such units for that control period must also be submitted. If heat input data is used, the owner or operator must comply with the applicable provisions 40 CFR 75, as incorporated by reference in Section 225.140.

2) By June 1, 2008, the gross electrical output for control periods 2006 and 2007, if available, and the unit's useful thermal energy data, if applicable. If a generator is served by two or more units, the documentation needed to determine each unit's share of the heat input of such units for that control

period must also be submitted. If heat input data is used, the owner or operator must comply with the applicable provisions of 40 CFR 75, as incorporated by reference in Section 225.140.

d) Beginning with year 2008, the CAIR designated representative of the CAIR $NO_x$ unit must submit to the Agency quarterly, by no later than April 30, July 31, October 31, and January 31 of each year, information for the CAIR $NO_x$ unit's gross electrical output, on a monthly basis for the prior quarter, and, if applicable, the unit's useful thermal energy for each month.

e) The owner or operator of a CAIR $NO_x$ unit must maintain on-site the monitoring plan detailing the monitoring system, maintenance of the monitoring system, including quality assurance activities pursuant to the requirements of 40 CFR 60 and 75, including the applicable provisions for the measurement of gross electrical output for the CAIR $NO_x$ trading program and, if applicable, for new units. The monitoring plan must include, but is not limited to:

1) A description of the system to be used for the measurement of gross electrical output pursuant to Section 225.450(a), including a list of any data logging devices, solid-state kW meters, rotating kW meters, electromechanical kW meters, current transformers, transducers, potential transformers, pressure taps, flow venturi, orifice plates, flow nozzles, vortex meters, turbine meters, pressure transmitters, differential pressure transmitters, temperature transmitters, thermocouples, resistance temperature detectors, and any equipment or methods used to accurately measure gross electrical output.

2) A certification statement by the CAIR designated representative that all components of the gross electrical output system have been tested to be accurate within three percent and that the gross electrical output system is accurate to within ten percent.

f) The owner or operator of a CAIR $NO_x$ unit must retain records for at least 5 years from the date the record is created or the data collected in subsections (a) and (b) of this Section, and the reports submitted to the Agency and USEPA in accordance with subsections (c) and (d) of this Section. The owner or operator of a CAIR $NO_x$ unit must retain the monitoring plan required in subsection (e) of this Section for at least five years from the date that it is replaced by a new or revised monitoring plan.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.455 Clean Air Set-Aside (CASA)

a) A project sponsor may apply for allowances from the CASA for sponsoring an energy efficiency and conservation, renewable energy, or clean technology project as set forth in Section 225.460 by submitting the application required by Section 225.470.

b) Notwithstanding subsection (a) of this Section, a project sponsor with a CAIR $NO_x$ source that is out of compliance with this Subpart for a given control period may not apply for allowances from the CASA for that control period. If a source receives CAIR $NO_x$ allowances from CASA and then is subsequently found to have been out of compliance with this Subpart for the applicable control period or periods, the project sponsor must restore the CAIR $NO_x$ allowances that it received pursuant to its CASA request or an equivalent number of CAIR $NO_x$ allowances to the CASA within six months of receipt of an Agency notice that $NO_x$ allowances must be restored. These allowances will be assigned to the fund from which they were distributed.

c) CAIR $NO_x$ allowances from CASA will be allocated in accordance with the procedures in Section 225.475.

d) The project sponsor may submit an application that aggregates two or more projects under a CASA project category that would individually result in less than one allowance, but that equal at a minimum one whole allowance when aggregated.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.460 Energy Efficiency and Conservation, Renewable Energy, and Clean Technology Projects

a) Energy efficiency and conservation project means any of the following projects implemented and located in Illinois:

1) Demand side management projects that reduce overall power demand by using less energy, include:

A) Smart building management software that more efficiently regulates power flows.

B) The use of or replacement to high efficiency motors, pumps, compressors, or steam systems.

C) Lighting retrofits.

2) Energy efficient new building construction projects include:

A) ENERGY STAR-qualified new home projects.

B) Measures to reduce or conserve energy consumption beyond the requirements of the Illinois Energy Conservation Code for Commercial Buildings (20 ILCS 687/6-3).

C) New residential construction projects that qualify for Energy Efficient Tax Incentives pursuant to the Energy Policy Act of 2005, 42 U.S.C. 15801 (2005).

3) Supply-side energy efficiency projects include projects implemented to improve the efficiency in electricity generation by coal-fired power plants, and the efficiency of electrical transmission and distribution systems.

4) Highly efficient power generation projects, such as, but not limited to, combined cycle projects, combined heat and power, and microturbines. To be considered a highly efficient power generation project pursuant to this subsection (a)(4), a project must meet the applicable thresholds and criteria listed below:

A) For combined heat and power projects generating both electricity and useful thermal energy for space, water, or industrial process heat, a rated-energy efficiency of at least 60 percent and is not a CAIR $NO_x$ unit.

B) For combined cycle projects rated at greater than 0.50 MW, a rated-energy efficiency of at least 50 percent.

C) For microturbine projects rated at or below 0.50 MW and all other projects, rated-energy efficiency of at least 40 percent.

b) Renewable energy project means any of the following projects implemented and located in Illinois:

1) Zero-emission electric generating projects, including wind, solar (thermal or photovoltaic), and hydropower projects. Eligible hydropower plants are restricted to new generators, that are not replacements of existing generators, that commence operation on or after January 1, 2006, and do not involve the significant expansion of an existing dam or the construction of a new dam.

2) Renewable energy units are those units that generate electricity using more than 50 percent of the heat input, on an annual basis, from dedicated crops grown for energy production or the capture systems for methane gas from landfills, water treatment plants or sewage treatment plants, and organic waste biomass, and other similar sources of non-fossil fuel energy.

Renewable energy projects do not include energy from incineration by burning or heating of waste wood, tires, garbage, general household, institutional lunchroom or office waste, landscape waste, or construction or demolition debris.

c) Clean technology project for reducing emissions from producing electricity and useful thermal energy means any of the following projects implemented and located in Illinois:

1) Air pollution control equipment upgrades at existing coal-fired EGUs, as follows: installation of flue gas desulfurization (FGD) for control of $SO_2$ emissions; installation of a baghouse for control of particulate matter emissions; and installation of selective catalytic reduction (SCR), selective non-catalytic reduction (SNCR), or other add-on control devices for control of $NO_x$ emissions. Air pollution control upgrade projects do not include the addition of low $NO_x$ burners, overfired air techniques or gas reburning techniques for control of $NO_x$ emissions; projects involving flue gas conditioning techniques or upgrades, or replacement of electrostatic precipitators; or addition of activated carbon injection or other sorbent injection system for control of mercury. For this purpose, a unit will be considered "existing" after it has been in commercial operation for at least eight years.

2) Clean coal technologies projects include:

A) Integrated gasification combined cycle (IGCC) plants.

B) Fluidized bed coal combustion.

d) In addition to those projects excluded in subsections (a) through (c) of this Section, the following projects are also not energy efficiency and conservation, renewable energy, or clean technology projects:

1) Nuclear power projects.

2) Projects required to meet emission standards or technology requirements under State or federal law or regulation, except that allowances may be allocated for:

A) The installation of a baghouse.

B) Projects undertaken pursuant to Section 225.233.

3) Projects used to meet the requirements of a court order or consent decree, except that allowances may be allocated for:

A) Emission rates or limits achieved that are lower than what is required to meet the emission rates or limits for $SO_2$ or $NO_x$, or for installing a baghouse as provided for in a court order or consent decree entered into before May 30, 2006.

B) Projects used to meet the requirements of a court order or consent decree entered into on or after May 30, 2006, if the court order or consent decree does not specifically preclude such allocations.

4) A Supplemental Environmental Project (SEP).

e) Applications for projects implemented and located in Illinois that are not specifically listed in subsections (a) through (c) of this Section, and that are not specifically excluded by definition in subsections (a) through (c) of this Section or by specific exclusion in subsection (d) of this Section, may be submitted to the Agency. The application must designate which category or categories from those listed in subsections (a)(1) through (c)(2)(A) of this Section best fits the proposed project and the applicable formula pursuant to Section 225.465(b) to calculate the number of allowances that it is requesting. The Agency will determine whether the application is approvable based on a sufficient demonstration by the project sponsor that the project is a new type of energy efficiency, renewable energy, or clean technology project, similar in its effects as the projects specifically listed in subsection (a) through (c)(2)(A) of this Section.

f) Early adopter projects include projects that meet the criteria for any energy efficiency and conservation, renewable energy, or clean technology projects listed in subsections (a), (b), (c), and (e) of this Section and commence construction between July 1, 2006, and December 31, 2012.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.465 Clean Air Set-Aside (CASA) Allowances

a) The CAIR $NO_x$ allowances for the CASA for each control period will be assigned to the following categories of projects:

| | Phase I (2009-2014) | Phase II (2015 and thereafter) |
|---|---|---|
| 1) Energy Efficiency and Conservation/ Renewable Energy | 9149 | 7625 |
| 2) Air Pollution Control Equipment Upgrades | 3811 | 3175 |

| | | | |
|---|---|---|---|
| 3) | Clean Coal Technology | 4573 | 3810 |
| 4) | Early Adopters | 1525 | 1271 |

b) The following formulas must be used to determine the number of CASA allowances that may be allocated to a project per control period:

1) For an energy efficiency and conservation project pursuant to Sections 225.460(a)(1) through (a)(4)(A), the number of allowances must be calculated using the number of megawatt hours of electricity that was not consumed during a control period and the following formula:

$$A = (MWh_c) \times (1.5 \text{ lb/MWh}) / 2000 \text{ lb}$$

Where:

| | | |
|---|---|---|
| A | = | The number of allowances for a particular project. |
| $MWh_c$ | = | The number of megawatt hours of electricity conserved or generated during a control period by a project. |

2) For a zero emission electric generating projects pursuant to Section 225.460(b)(1), the number of allowances must be calculated using the number of megawatt hours of electricity generated during a control period and the following formula:

$$A = (MWh_g) \times (2.0 \text{ lb/MWh}) / 2000 \text{ lb}$$

Where:

| | | |
|---|---|---|
| A | = | The number of allowances for a particular project |
| $MWh_g$ | = | The number of megawatt hours of electricity generated during a control period by a project. |

3) For a renewable energy emission unit pursuant to Section 225.460(b)(2), the number of allowances must be calculated using the number of MWhs of electricity generated during a control period and the following formula:

$$A = (MWh_g) \times (0.5 \text{ lb/MWh}) / 2000 \text{ lb}$$

Where:

| | | |
|---|---|---|
| A | = | The number of allowances for a particular project. |
| $MWh_g$ | = | The number of MW hours of electricity generated during a control period by a project. |

4) For an air pollution control equipment upgrade project pursuant to Section 225.460(c)(1), the number of allowances will be calculated as follows:

A) For $NO_x$ or $SO_2$ control projects, by determining the difference in emitted $NO_x$ or $SO_2$ per control period using the emission rate before and after replacement or improvement, and the following formula:

$A = (MWh_g) \times K \times (ER_B \text{ lb/MWh} - ER_A \text{ lb/MWh}) / 2000 \text{ lb}$

Where:

| | | |
|---|---|---|
| A | = | The number of allowances for a particular project. |
| $MWh_g$ | = | The number of megawatt hours of electricity generated during a control period by a project. |
| K | = | The pollutant factor: for $NO_x$, K= 0.1; and for $SO_2$, K = 0.05. |
| $ER_B$ | = | Average $NO_x$ or $SO_2$ emission rate based on CEMS data from the most recent two control periods prior to the replacement or improvement of the control equipment in lb/MWh, unless subject to a court order or consent decree. For units subject to a court order or consent decree entered into before May 30, 2006, $ER_B$ is limited to emission rates that are lower than the emission rate required in the consent decree or court order. For a court order or consent decree entered into after May 30, 2006, $ER_B$ is limited to the lesser of the emission rate specified in the court order or consent decree or the actual average emission rate during the control period. If such limit is not expressed in lb/MWh, the limit must be converted into lb/MWh using a heat rate of 10 mmBtu/1 MW. |
| $ER_A$ | = | Annual $NO_x$ or $SO_2$ average emission rate for the applicable control period data based on CEMS data in lb/MWh. |

B) For a baghouse project:

$A = (MWh_g) \times (Q \text{ lb/MWh}) / 2000 \text{ lb}$

Where:

A = The number of allowances for a particular project.

$MWh_g$ = The number of MWh of electricity generated during a control period or the portion of a control period that the units were controlled by the baghouse.

Q =

1) If a baghouse was not installed pursuant to a consent decree or court order, Q shall equal 0.2.

2) If a baghouse was installed pursuant to a consent decree or court order which assigns a Q factor, then Q equals the factor established in the consent decree or court order but must not exceed a factor of 0.2.

3) If a baghouse was installed pursuant to a consent decree or court order which does not assign a Q factor then Q shall equal:

$Q = 0.25 - (P \times ER_q)$

Where:
P = If the most recent control period's average PM emission rate was based on PM CEMS data, P equals 1.0; otherwise P = 1.1.

$ER_q$ = The magnitude of most recent control period's average PM emission rate in lb/MWh exiting the baghouse, subject to the following limits:
If P = 1.0, then $1/10 \leq ER_q \leq 2/10$
If P = 1.1, then $1/11 \leq ER_q \leq 2/11$

If the $ER_q$ is less than the lower limit, the lower limit shall be used. If $ER_q$ is greater than the upper limit, the upper limit shall be used. If $ER_q$ is not expressed in lb/MWh, the number must be converted to lb/MWh using a heat ratio of 10 mmBtu/1 MW.

5) For highly efficient power generation and clean technology projects pursuant to Sections 225.460(a)(4)(B), (a)(4)(C), and (c)(2), the number of

allowances must be calculated using the number of megawatt hours of electricity the project generates during a control period and the following formula:

$A = (MWh_g) \times (1.0 \text{ lb/MWh} - ER \text{ lb/MWh}) / 2000 \text{ lb}$

Where:

A = The number of allowances for a particular project.
$MWh_g$ = The number of megawatt hours of electricity generated during a control period by a project.
ER = Annual average $NO_x$ emission rate based on CEMS data in 1b/MWh.

6) For a CASA project that commences construction before December 31, 2012, in addition to the allowances allocated pursuant to subsections (b)(1) through (b)(5) of this Section, a project sponsor may also request additional allowances pursuant to the early adopter project category pursuant to Section 225.460(e) based on the following formula:

$A = 1.0 + 0.10 \times \Sigma A_i$

Where:

A = The number of allowances for a particular project as determined in subsections (b)(1) through (b)(5) of this Section.
$A_i$ = The number of allowances as determined in subsection (b)(1), (b)(2), (b)(3), (b)(4) or (b)(5) of this Section for a given project.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.470 Clean Air Set-Aside (CASA) Applications

a) A project sponsor may request allowances if the project commenced construction on or after the dates listed below. The project sponsor may request and be allocated allowances from more than one CASA category for a project, if applicable.

1) Demand side management, energy efficient new construction, and supply side energy efficiency and conservation projects that commenced construction on or after January 1, 2003;

2) Fluidized bed coal combustion projects, highly efficient power generation operations projects, or renewable energy emission units, which commenced construction on or after January 1, 2001; and

3) All other projects on or after July 1, 2006.

b) Beginning with the 2009 control period and each control period thereafter, a project sponsor may request allowances from the CASA. The application must be submitted to the Agency by May 1 of the control period for which the allowances are being requested.

c) The allocation will be based on the electricity conserved or generated in the control period preceding the calendar year in which the application is submitted. To apply for a CAIR $NO_x$ allocation from the CASA, project sponsors must provide the Agency with the following information:

1) Identification of the project sponsor, including name, address, type of organization, certification that the project sponsor has met the definition of "project sponsor" as set forth in Section 225.130,and name(s) of the principals or corporate officials.

2) The number of the CAIR $NO_x$ general or compliance account for the project and the name of the associated CAIR account representative.

3) A description of the project or projects, location, the role of the project sponsor in the projects, and a general explanation of how the amount of energy conserved or generated was measured, verified, and calculated, and the number of allowances requested with the supporting calculations. The number of allowances requested will be calculated using the applicable formula from Section 225.470(b).

4) Detailed information to support the request for allowances, including the following types of documentation for the measurement and verification of the $NO_x$ emissions reductions, electricity generated, or electricity conserved using established measurement verification procedures, as applicable. The measurement and verification required will depend on the type of project proposed.

A) As applicable, documentation of the project's base and control period conditions and resultant base and control period energy data, using the procedures and methods included in *M&V Guidelines: Measurement and Verification for Federal Energy Projects*, incorporated by reference in Section 225.140, or other method approved by the Agency. Examples include:

i) Energy consumption and demand profiles;

ii) Occupancy type;

iii) Density and periods;

iv) Space conditions or plant throughput for each operating period and season. (For example, in a building this would include the light level and color, space temperature, humidity and ventilation);

v) Equipment inventory, nameplate data, location, condition; and

vi) Equipment operating practices (schedules and set points, actual temperatures/pressures).

B) Emissions data, including, if applicable, CEMS data;

C) Information for rated–energy efficiency including supporting documentation and calculations; and

D) Electricity, in MWh generated or conserved for the applicable control period.

5) Notwithstanding the requirements of subsections (c)(4) of this Section, applications for fewer than five allowances may propose other reliable and applicable methods of quantification acceptable to the Agency.

6) Any additional information requested by the Agency to determine the correctness of the requested number of allowances, including site information, project specifications, supporting calculations, operating procedures, and maintenance procedures.

7) The following certification by the responsible official for the project sponsor and the applicable CAIR account representative for the project:

"I am authorized to make this submission on behalf of the project sponsor and the holder of the CAIR $NO_x$ general account or compliance account for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with the statements and information submitted in this application and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information."

d) A project sponsor may request allowances from the CASA for each project a total number of control periods not to exceed the number of control periods listed below. After a project has been allocated allowances from CASA, subsequent requests for the project from the project sponsor must include the information required by subsections (c)(1), (c)(2), (c)(3) and (c)(7) of this Section, a description of any changes, or further improvements made to the project, and information specified in subsections (c)(5) and (c)(6) as specifically requested by the Agency.

1) For energy efficiency and conservation projects (except for efficient operation and renewable energy projects), for a total of eight control periods.

2) For early adopter projects, for a total of ten control periods.

3) For air pollution control equipment upgrades for a total of 15 control periods.

4) For renewable energy projects, clean coal technology, and highly efficient power generation projects, for each year that the project is in operation.

e) A project sponsor must keep copies of all CASA applications and the documentation used to support the application for at least five years.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.475 Agency Action on Clean Air Set-Aside (CASA) Applications

a) By September 1, 2009, and each September 1 thereafter, the Agency will determine the total number of allowances that are approvable for allocation to project sponsors based upon the applications submitted pursuant to Section 225.470.

1) The Agency will determine the number of CAIR $NO_x$ allowances that are approvable based on the formulas and the criteria for these projects. The Agency will notify a project sponsor within 90 days after receipt of an application if the project is not approvable, the number of allowances requested is not approvable, or additional information is needed by the Agency to complete its review of the application.

2) If the total number of CAIR $NO_x$ allowances requested for approved projects is less than or equal to the number of CAIR $NO_x$ allowances in the CASA project category, the number of allowances that are approved will be allocated to each CAIR $NO_x$ compliance or general account.

3) If more CAIR $NO_x$ allowances are requested than the number of CAIR $NO_x$ allowances in a given CASA project category, allowances will be allocated on a pro-rata basis based on the number of allowances available, subject to further adjustment as provided for by subsection (b) of this Section. CAIR $NO_x$ allowances will be allocated, transferred, or used as whole allowances. The number of whole allowances will be determined by rounding down for decimals less than 0.5 and rounding up for decimals of 0.5 or greater.

b) For control periods 2011 and thereafter, if there are, after the completion of the procedures in subsection (a) of this Section for a control period, any CAIR $NO_x$ allowances not allocated to a CASA project for the control period:

1) The remaining allowances will accrue in each CASA project category up to twice the number of allowances that are assigned to the project category each control period as set forth in Section 225.465.

2) If any allowances remain after allocations pursuant to subsection (a) of this Section, the Agency will allocate these allowances pro rata to projects that received fewer allowances than requested, based on the number of allowances not allocated but approved by the Agency for the project under CASA. No project may be allocated more allowances than approved by the Agency for the applicable control period.

3) If any allowances remain after the allocation of allowances pursuant to subsection (b)(2) of this Section, the Agency will then distribute pro rata the remaining allowances to project categories that have fewer than twice the number of allowances assigned to that project category. The pro rata distribution will be based on the difference between two times the project category and the number of allowances that remain in the project category.

4) If allowances still remain undistributed after the allocations and distributions in the above subsections are completed, the Agency may elect to retire the CAIR $NO_x$ allowances that have not been distributed to any CASA category to continue progress toward attainment or maintenance of the National Ambient Air Quality Standards pursuant to the CAA.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.480 Compliance Supplement Pool

In addition to the CAIR $NO_x$ allowances allocated pursuant to Section 225.425, the USEPA has provided an additional 11,299 CAIR $NO_x$ allowances from the federal compliance supplement

pool to Illinois for the control period in 2009. On January 1, 2009, the Agency will retire all 11,299 $NO_x$ allowances for public health and air quality improvements.

(Source: Added at 31 Ill. Reg. _____, effective _____)

SUBPART E: CAIR $NO_x$ OZONE SEASON TRADING PROGRAM

Section 225.500 Purpose

The purpose of this Subpart E is to control the seasonal emissions of nitrogen oxides ($NO_x$) from EGUs by determining allocations and implementing the CAIR $NO_x$ Ozone Season Trading Program.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.505 Applicability

a) Except as provided in subsections (b)(1), (b)(3), and (b)(4) of this Section:

1) The following units are CAIR $NO_x$ Ozone Season units, and any source that includes one or more such units is a CAIR $NO_x$ source subject to the requirements of this Subpart E: any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

2) If a stationary boiler or stationary combustion turbine that, pursuant to subsection (a)(1) of this Section, is not a CAIR $NO_x$ Ozone Season unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit will become a CAIR $NO_x$ Ozone Season unit as provided in subsection (a)(1) of this Section on the first date on which it both combusts fossil fuel and serves such generator.

b) The units that meet the requirements set forth in subsections (b)(1), (b)(3), and (b)(4) of this Section will not be CAIR $NO_x$ units and units that meet the requirements of subsections (b)(2) and (b)(5) of this Section are CAIR $NO_x$ Ozone Season units:

1) Any unit that is a CAIR $NO_x$ Ozone Season unit pursuant to subsection (a)(1) or (a)(2) of this Section and:

A) Qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit; and

B) Does not serve at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe supplying any calendar year more than one-third of the of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution for sale.

2) If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and meets the requirements of subsection (b)(1) of this Section for at least one calendar year, but subsequently no longer meets all such requirements, the unit shall become a CAIR $NO_x$ Ozone Season unit starting on the earlier of January 1 after the first calendar year during which the unit no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of subsection (b)(1)(B) of this Section.

3) Any unit that is a CAIR $NO_x$ Ozone Season unit pursuant to subsection (a)(1) or (a)(2) of this Section commencing operation before January 1, 1985 and:

A) Qualifies as a solid waste incineration unit; and

B) With an average annual fuel consumption of non-fossil fuel for 1985-1987 exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).

4) Any unit that is a CAIR $NO_x$ Ozone Season unit under subsection (a)(1) or (a)(2) of this Section commencing operation on or after January 1, 1985: and

A) Qualifies as a solid waste incineration unit; and

B) With an average annual fuel consumption of non-fossil fuel the first three years of operation exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).

5) If a unit qualifies as a solid waste incineration unit and meets the requirements of subsection (b)(3) or (b)(4) of this Section for at least three consecutive years, but subsequently no longer meets all such requirements, the unit shall become a CAIR $NO_x$ Ozone Season unit starting on the earlier of January 1 after the first three consecutive calendar years after 1990 for which the unit has an average annual fuel consumption of fuel of 20 percent or more.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.510 Compliance Requirements

a) The owner or operator of a CAIR $NO_x$ Ozone Season unit must comply with the requirements of the CAIR $NO_x$ Ozone Season Trading Program for Illinois as set forth in this Subpart E and 40 CFR 96, subpart AAAA (CAIR $NO_x$ Ozone Season Trading Program General Provisions) (excluding 40 CFR 96.304, 96.305(b)(2), and 96.306); 40 CFR 96, subpart BBBB (CAIR Designated Representative for CAIR $NO_x$ Ozone Season Sources); 40 CFR 96, subpart FFFF (CAIR $NO_x$ Ozone Season Allowance Tracking System); 40 CFR 96, subpart GGGG (CAIR $NO_x$ Ozone Season Allowance Transfers); and 40 CFR 96, subpart HHHH (Monitoring and Reporting); as incorporated by reference in Section 225.140.

b) Permit requirements:

1) The owner or operator of each source with one or more CAIR $NO_x$ Ozone Season units at the source must apply for a permit issued by the Agency with federally enforceable conditions covering the CAIR $NO_x$ Ozone Season Trading Program ("CAIR permit") that complies with the requirements of Section 225.520 (Permit Requirements).

2) The owner or operator of each CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ Ozone Season unit at the source must operate the CAIR $NO_x$ Ozone Season unit in compliance with its CAIR permit.

c) Monitoring requirements:

1) The owner or operator of each CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ Ozone Season unit at the source must comply with the monitoring requirements of 40 CFR 96, subpart HHHH; 40 CFR 75; and Section 225.550. The CAIR designated representative of each CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ Ozone Season unit at the source must comply with those sections of the monitoring, reporting and recordkeeping requirements of 40 CFR 6, subpart HHHH, applicable to a CAIR designated representative.

2) The compliance of each CAIR $NO_x$ Ozone Season source with the CAIR $NO_x$ Ozone Season emissions limitation pursuant to subsection (d) of this Section will be determined by the emissions measurements recorded and reported in accordance with 40 CFR 96, subpart HHHH.

d) Emission requirements:

1) By the allowance transfer deadline, November 30, 2009, and by November 30, of each subsequent year, the owner or operator of each CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ Ozone Season unit at the source must hold allowances available for compliance deductions pursuant to 40 CFR 96.354(a) in the CAIR $NO_x$ Ozone Season source's compliance account. The allowance transfer deadline means by midnight of November 30 (if it is business day) or midnight of the first business day thereafter. The number of allowances held may not be less than the tons of $NO_x$ emissions for the control period from all CAIR $NO_x$ Ozone Season units at the CAIR $NO_x$ Ozone Season source, as determined in accordance with 40 CFR 96, subpart HHHH.

2) Each ton of $NO_x$ emitted in excess of the number of CAIR $NO_x$ Ozone Season allowances held by the owner or operator for each CAIR $NO_x$ Ozone Season unit in its CAIR $NO_x$ Ozone Season compliance account for each day of the applicable control period will constitute a separate violation of this Subpart E, the Act, and the CAA.

3) Each CAIR $NO_x$ Ozone Season unit will be subject to the monitoring requirements of subsection (c)(1) of this Section starting on the later of May 1, 2009, or the deadline for meeting the unit's monitoring certification requirements pursuant to 40 CFR 96.370(b)(1), (b)(2) or (b)(3) and for each control period thereafter.

4) CAIR $NO_x$ Ozone Season allowances must be held in, deducted from, or transferred into among allowance accounts in accordance with this Subpart and 40 CFR 96, subparts FFFF and GGGG.

5) In order to comply with the requirements of subsection (d)(1) of this Section, a CAIR $NO_x$ Ozone Season allowance may not be deducted for compliance according to subsection (d)(1) of this Section, for a control period in a calendar year before the year for which the CAIR $NO_x$ Ozone Season allowance is allocated.

6) A CAIR $NO_x$ Ozone Season allowance allocated by the Agency or USEPA pursuant to the CAIR $NO_x$ Ozone Season Trading Program is a limited authorization to emit one ton of $NO_x$ in accordance with the CAIR $NO_x$ Ozone Season Trading Program. No provision of the CAIR $NO_x$ Ozone Season Trading Program, the CAIR permit application, the CAIR

permit, or a retired unit exemption pursuant to 40 CFR 96.305, and no provision of law, will be construed to limit the authority of the United States or the State to terminate or limit this authorization.

7) A CAIR $NO_x$ Ozone Season allowance allocated by the Agency or USEPA pursuant to the CAIR $NO_x$ Ozone Season Trading Program does not constitute a property right.

8) Upon recordation by USEPA pursuant to 40 CFR 96, subpart FFFF or subpart GGGG, every allocation, transfer, or deduction of an allowance to or from a CAIR $NO_x$ Ozone Season source compliance account is deemed to amend automatically, and become a part of, any CAIR $NO_x$ Ozone Season permit of the CAIR $NO_x$ Ozone Season source. This automatic amendment of the CAIR permit will be deemed an operation of law and will not require any further review.

e) Recordkeeping and reporting requirements:

1) Unless otherwise provided, the owner or operator of the CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ Ozone Season unit at the source must keep on site at the source each of the documents listed in subsections (e)(1)(A) through (e)(1)(E) of this Section for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Agency or USEPA.

A) The certificate of representation for the CAIR designated representative for the source and each CAIR $NO_x$ Ozone Season unit at the source, all documents that demonstrate the truth of the statements in the certificate of representation, provided that the certificate and documents must be retained on site at the source beyond such five-year period until the documents are superseded because of the submission of a new certificate of representation pursuant to 40 CFR 96.313, changing the CAIR designated representative.

B) All emissions monitoring information, in accordance with 40 CFR 96, subpart HHHH.

C) Copies of all reports, compliance certifications, and other submissions and all records made or required pursuant to the CAIR $NO_x$ Ozone Season Trading Program or documents necessary to demonstrate compliance with the requirements of the CAIR $NO_x$ Ozone Season Trading Program or with the requirements of this Subpart E.

D) Copies of all documents used to complete a CAIR $NO_x$ Ozone Season permit application and any other submission or documents used to demonstrate compliance pursuant to the CAIR $NO_x$ Ozone Season Trading Program.

E) Copies of all records and logs for gross electrical output and useful thermal energy required by Section 225.550.

2) The CAIR designated representative of a CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ Ozone Season unit at the source must submit to the Agency and USEPA the reports and compliance certifications required pursuant to the CAIR $NO_x$ Ozone Season Trading Program, including those pursuant to 40 CFR 96, subpart HHHH and Section 225.550.

f) Liability:

1) No revision of a permit for a CAIR $NO_x$ Ozone Season unit may excuse any violation of the requirements of this Subpart E or the requirements of the CAIR $NO_x$ Ozone Season Trading Program.

2) Each CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ Ozone Season unit must meet the requirements of the CAIR $NO_x$ Ozone Season Trading Program.

3) Any provision of the CAIR $NO_x$ Ozone Season Trading Program that applies to a CAIR $NO_x$ Ozone Season source (including any provision applicable to the CAIR designated representative of a CAIR $NO_x$ Ozone Season source) will also apply to the owner and operator of the CAIR $NO_x$ Ozone Season source and to the owner and operator of each CAIR $NO_x$ Ozone Season unit at the source.

4) Any provision of the CAIR $NO_x$ Ozone Season Trading Program that applies to a CAIR $NO_x$ Ozone Season unit (including any provision applicable to the CAIR designated representative of a CAIR $NO_x$ Ozone Season unit) will also apply to the owner and operator of the CAIR $NO_x$ Ozone Season unit.

5) The CAIR designated representative of a CAIR $NO_x$ Ozone Season unit that has excess emissions in any control period must surrender the allowances as required for deduction pursuant to 40 CFR 96.354(d)(1).

6) The owner or operator of a CAIR $NO_x$ Ozone Season unit that has excess $NO_x$ emissions in any control period must pay any fine, penalty, or assessment or comply with any other remedy imposed pursuant to the Act and 40 CFR 96.354(d)(2).

g) Effect on other authorities. No provision of the CAIR $NO_x$ Ozone Season Trading Program, a CAIR permit application, a CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.305 will be construed as exempting or excluding the owner and operator and, to the extent applicable, the CAIR designated representative of a CAIR $NO_x$ Ozone Season source or a CAIR $NO_x$ Ozone Season unit, from compliance with any other regulation promulgated pursuant to the CAA, the Act, any State regulation or permit, or a federally enforceable permit.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.515 Appeal Procedures

The appeal procedures for decisions of USEPA pursuant to the CAIR $NO_x$ Ozone Season Trading Program are set forth in 40 CFR 78, as incorporated by reference in Section 225.140.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.520 Permit Requirements

a) Permit requirements:

1) The owner or operator of each source with a CAIR $NO_x$ Ozone Season unit is required to submit:

A) A complete permit application addressing all applicable CAIR $NO_x$ Ozone Season Trading Program requirements for a permit meeting the requirements of this Section 225.520, applicable to each CAIR $NO_x$ Ozone Season unit at the source. Each CAIR permit must contain elements required for a complete CAIR permit application pursuant to subsection (b)(2) of this Section.

B) Any supplemental information that the Agency determines necessary in order to review a CAIR permit application and issue any CAIR permit.

2) Each CAIR permit will be issued pursuant to Section 39 of 39.5 of the Act and will contain federally enforceable conditions addressing all applicable CAIR $NO_x$ Ozone Season Trading Program requirements and will be a complete and segregable portion of the source's entire permit pursuant to subsection (a)(1) of this Section.

3) No CAIR permit may be issued, and no CAIR $NO_x$ Ozone Season compliance account may be established for a CAIR $NO_x$ Ozone Season,

until the Agency and USEPA have received a complete certificate of representation for a CAIR designated representative pursuant to 40 CFR 96, subpart BBBB, for the CAIR $NO_x$ Ozone Season source and the CAIR $NO_x$ Ozone Season unit at the source.

4) For all CAIR $NO_x$ Ozone Season units that commenced operation before July 1, 2007, the owner or operator of the unit must submit a CAIR permit application meeting the requirements of this Section 225.520 on or before July 1, 2007.

5) For all units that commence operation on or after July 1, 2007, the owner or operator of these units must submit applications for construction and operating permits pursuant to the requirements of Sections 39 and 39.5 of the Act, as applicable, and 35 Ill. Adm. Code 201, and the applications must specify that they are applying for CAIR permits, and must address the CAIR permit application requirements of this Section 225.520.

b) Permit applications:

1) Duty to apply. The owner or operator of any source with one or more CAIR $NO_x$ Ozone Season units must submit to the Agency a CAIR permit application for the source covering each CAIR $NO_x$ Ozone Season unit pursuant to subsection (b)(2) of this Section by the applicable deadline in subsection (a)(4) or (a)(5) of this Section. The owner or operator of any source with one or more CAIR $NO_x$ Ozone Season units must reapply for a CAIR permit for the source as required by this Subpart, 35 Ill. Adm. Code 201, and, as applicable, Sections 39 and 39.5 of the Act.

2) Information requirements for CAIR permit applications. A complete CAIR permit application must include the following elements concerning the source for which the application is submitted:

A) Identification of the source, including plant name. The ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the Energy Information Administration must also be included, if applicable;

B) Identification of each CAIR $NO_x$ Ozone Season unit at the source; and

C) The compliance requirements applicable to each CAIR $NO_x$ Ozone Season unit as set forth in Section 225.510.

3) An application for a CAIR permit will be treated as a modification of the CAIR $NO_x$ Ozone Season source's existing federally enforceable permit, if such a permit has been issued for that source, and will be subject to the

same procedural requirements. When the Agency issues a CAIR permit pursuant to the requirements of this Section 225.520, it will be incorporated into and become part of that source's existing federally enforceable permit.

c) Permit content. Each CAIR permit is deemed to incorporate automatically the definitions and terms pursuant to Section 225.120 and, upon recordation of USEPA under 40 CFR 96, Subparts FFFF and GGGG as incorporated by reference in Section 225.140, every allocation, transfer, or deduction of a CAIR $NO_x$ Ozone Season allowance to or from the compliance account of the CAIR $NO_x$ Ozone Season source covered by the permit.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.525 Ozone Season Trading Budget

The CAIR $NO_x$ Ozone Season Trading budget available for allowance allocations for each control period will be determined as follows:

a) The total base CAIR $NO_x$ Ozone Season Trading budget is 30,701 tons per control period for the years 2009 through 2014, subject to a reduction for two set-asides, the NUSA and the CASA. Five percent of the budget will be allocated to the NUSA and 25 percent will be allocated to the CASA, resulting in a CAIR $NO_x$ Ozone Season Trading budget available for allocation of 21,491 tons per control period pursuant to Section 225.540. The requirements of the NUSA are set forth in Section 225.545, and the requirements of the CASA are set forth in Sections 225.555 through 225.570.

b) The total base CAIR $NO_x$ Ozone Season Trading budget is 28,981 tons per control period for the year 2015 and thereafter, subject to a reduction for two set-asides, the NUSA and the CASA. Five percent of the budget will be allocated to the NUSA and 25 percent will be allocated to the CASA, resulting, in a CAIR $NO_x$ Ozone Season Trading budget available for allocation of 20,287 tons per control period pursuant to Section 225.540.

c) If USEPA adjusts the total base CAIR $NO_x$ Ozone Season Trading budget for any reason, the Agency will adjust the base CAIR $NO_x$ Ozone Season Trading budget CAIR $NO_x$ Ozone Season Trading budget available for allocation, accordingly.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.530 Timing for Ozone Season Allocations

a) No later than July 31, 2007, the Agency will submit to USEPA the CAIR $NO_x$

Ozone Season allowance allocations, in accordance with Sections 225.535 and 225.540 for the 2009, 2010, and 2011 control periods.

b) By October, 2008, and October 31 of each year thereafter, the Agency will submit to USEPA the CAIR $NO_x$ Ozone Season allowance allocations in accordance with Sections 225.535 and 225.540, for the control period four years after the year of the applicable deadline for submission pursuant to this Section 225.530. For example, on July 31, 2008, the Agency will submit to USEPA the allocation for the 2012 control period.

c) The Agency will allocate allowances from the NUSA to CAIR $NO_x$ Ozone Season units that commence commercial operation on or after May 1, 2006. The Agency will report these allocations to USEPA by July 31 of the applicable control period. For example, on July 31, 2009, the Agency will submit to USEPA the allocations from the NUSA for the 2009 control period.

d) The Agency will allocate allowances from the CASA to energy efficiency, renewable energy, and clean technology projects pursuant to the criteria in Sections 225.555 through 225.570. The Agency will report these allocations to USEPA by October 1 of each year. For example, on October 1, 2009, the Agency will submit to USEPA the allocations from the CASA for the 2009 control period, based on reductions made in the 2008 control period.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.535 Methodology for Calculating Ozone Season Allocations

The Agency will calculate converted gross electrical output, in MWh, for each CAIR $NO_x$ Ozone Season unit that has operated during at least one control period prior to the calendar year in which the Agency reports the allocations to USEPA as follows:

a) For control periods 2009, 2010, and 2011, the owner or operator of the unit must submit in writing to the Agency by June 1, 2007, a statement that either gross electrical output data or heat input is to be used to calculate converted gross electrical output. The data shall be used calculate converted gross electrical output pursuant to either subsection (a)(1) or (a)(2) of this Section:

1) Gross electrical output. If the unit has four or five control periods of data, then the gross electrical output (GO) will be the average of the unit's three highest gross electrical outputs from the 2001, 2002, 2003, 2004, or 2005 control periods. If the unit has three or fewer control periods of gross electrical outputs, the gross electrical output will be the average of those control periods. If the unit does not have gross electrical output for the 2004 and 2005 control periods, the gross electrical output will be the gross electrical output from the 2005 control period. If a generator is served by

two or more units, then the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of these units for the control period. The unit's converted gross electrical output will be calculated as follows:

A) If the unit is coal-fired:
CGO (in MWh) = GO × MWh × 1.0;

B) If the unit is oil-fired:
CGO (in MWh) = GO × MWh × 0.6; or

C) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = GO × MWh × 0.4.

2) If heat input. If the unit has four or five control periods of data, the average of the unit's three highest control period heat inputs from 2001, 2002, 2003, 2004 or 2005 will be used. If the unit has heat input from the 2003, 2004, or 2005 control periods, the heat input shall be the average of those control periods. If the unit does not have heat input from the 2004 and 2005 control periods, the heat input from the 2005 control period will be used. The unit's converted gross electrical output will be calculated as follows:

A) If the unit is coal-fired:
CGO (in MWh) = HI (in mmBtu) × 0.0967;

B) If the unit is oil-fired:
CGO (in MWh) = HI (in mmBtu) × 0.0580; or

C) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = HI (in mmBtu) × 0.0387.

b) For control periods 2012 and 2013, the owner or operator of the unit must submit in writing to the Agency by June 1, 2008, a statement that either gross electrical output data or heat input data be used to calculate the unit's converted gross electrical output. The unit's converted gross electrical output shall be calculated pursuant to either subsection (b)(1) or (b)(2) of this Section:

1) Gross electrical output. The average of the unit's two most recent years of control period gross electrical output, if available; otherwise it will be the unit's most recent control period's gross electrical output. If a generator is served by two or more units, the gross electrical output of the generator shall be attributed to each unit in proportion to the unit's share of the total control period heat input of such units for the control period. The unit's converted gross electrical output shall be calculated as follows:

A) If the unit is coal-fired:
CGO (in MWh) = GO × MWh × 1.0;

B) If the unit is oil-fired:
CGO (in MWh) = GO × MWh × 0.6;

C) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = GO × MWh × 0.4.

2) Heat input. The average of the unit's two most recent years of control period heat input; otherwise the unit's most recent control period's heat input, e.g. for the 2012 control period the average of the unit's heat input from the 2006 and 2007 control periods. If the unit does not have heat input from the 2006 and 2007 control periods, the heat input from the 2007 control period shall be used. The unit's converted gross electrical output shall be calculated as follows:

A) If the unit is coal-fired:
CGO (in MWh) = HI (in mmBtu) × 0.0967;

B) If the unit is oil-fired:
CGO (in MWh) = HI (in mmBtu) × 0.0580; or

C) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = HI (in mmBtu) × 0.0387.

c) For control period 2014 and thereafter, the unit's gross electrical output will be the average of the unit's two most recent control period's gross electrical output, if available, otherwise it will be the unit's most recent control period gross electrical output. If a generator is served by two or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of these units for the control period. The unit's converted gross electrical output will be calculated as follows:

1) If the unit is coal-fired:
CGO (in MWh) = GO × 1.0;

2) If the unit is oil-fired:
CGO (in MWh) = GO × 0.6; or

3) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = GO × 0.4.

d) For a unit that is a combustion turbine or boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the Agency will add the

converted gross electrical output calculated for electricity pursuant to subsections (a), (b), or (c) of this Section to the converted useful thermal energy (CUTE) to determine the total converted gross electrical output for the unit (TCGO). The Agency will determine the converted useful thermal energy by using the average of the unit's control period useful thermal energy for the prior two control periods, if available, otherwise the unit's control period useful thermal output for the prior year will be used. The converted useful thermal energy will be determined using the following equations:

1) If the unit is coal-fired:
CUTE (in MWh) = UTE (in mmBtu) × 0.2930;

2) If the unit is oil-fired:
CUTE (in MWh) = UTE (in mmBtu) × 0.1758; or

3) If the unit is neither coal-fired nor oil-fired:
CUTE (in MWh) = UTE (in mmBtu) × 0.1172.

e) The CAIR $NO_x$ Ozone Season unit's converted gross electrical output and converted useful thermal energy in subsections (a)(1), (b)(1), (c), and (d) of this Section for each control period will be based on the best available data reported or available to the Agency for the CAIR $NO_x$ Ozone Season unit pursuant to the provisions of Section 225.550.

f) The CAIR $NO_x$ Ozone Season unit's heat input in subsections (a)(2) and (b)(2) of this Section for each control period will be determined in accordance with 40 CFR 75, as incorporated by reference in Section 225.140.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.540 Ozone Season Allocations

a) For the 2009 control period, and each control period thereafter, the Agency will allocate CAIR $NO_x$ Ozone Season allowances to all CAIR $NO_x$ Ozone Season units in Illinois for which the Agency has calculated the total converted gross electrical output pursuant to Section 225.535, a total amount of CAIR $NO_x$ Ozone Season allowances equal to tons of $NO_x$ emissions in the CAIR $NO_x$ Ozone Season Trading budget available for allocation as determined in Section 225.525 and allocated pursuant to this Section 225.540.

b) The Agency will allocate CAIR $NO_x$ Ozone Season allowances to each CAIR $NO_x$ Ozone Season unit on a pro-rata basis using the unit's total converted gross electrical output calculated pursuant to Section 225.535. If there are insufficient allowances to allocate whole allowances pro rata, these unallocated allowances will be retained by the Agency and will be available for allocation in later control

periods.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.545 New Unit Set-Aside (NUSA)

For the 2009 control period and each control period thereafter, the Agency will allocate CAIR $NO_x$ Ozone Season allowances from the NUSA to CAIR $NO_x$ Ozone Season units that commenced commercial operation on or after May 1, 2006, and do not yet have an allocation for the particular control period pursuant to Section 225.540, in accordance with the following procedures:

a) Beginning with the 2009 control period and each control period thereafter, the Agency will establish a separate NUSA for each control period. Each new unit set-aside will be allocated CAIR $NO_x$ Ozone Season allowances equal to 5 percent of the amount of tons of $NO_x$ emissions in the base CAIR $NO_x$ Ozone Season Trading budget in Section 225.525.

b) The CAIR designated representative of a new CAIR $NO_x$ Ozone Season unit may submit to the Agency a request, in a format specified by the Agency, to be allocated CAIR $NO_x$ Ozone Season allowances from the NUSA starting with the first control period after the control period in which the new unit commences commercial operation and until the first control period for which the unit may use CAIR $NO_x$ Ozone Season allowances allocated to the unit pursuant to Section 225.540. The NUSA allowance allocation request may only be submitted after a new unit has operated during one control period, and no later than March 1 of the control period for which allowances from the NUSA are being requested.

c) In a NUSA allowance allocation request pursuant to subsection (b) of this Section, the CAIR designated representative must provide in its request information for gross electrical output and useful thermal energy, if any, for the new CAIR $NO_x$ Ozone Season unit for that control period.

d) The Agency will allocate allowances from the NUSA to a new CAIR $NO_x$ Ozone Season unit using the following procedures:

1) For each new CAIR $NO_x$ Ozone Season unit, the unit's gross electrical output for the most recent control period, will be used to calculate the unit's gross electrical output. If a generator is served by two or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of these units for the control period. The new unit's converted gross electrical output will be calculated as follows:

A) If the unit is coal-fired:

CGO (in MWh) = GO × 1.0;

B) If the unit is oil-fired:
CGO (in MWh) = GO × 0.6; or

C) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = GO × 0.4.

2) If the unit is a combustion turbine or boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the Agency will add the converted gross electrical output calculated for electricity pursuant to subsection (d)(1) of this Section to the converted useful thermal energy to determine the total converted gross electrical output for the unit. The Agency will determine the converted useful thermal energy using the unit's useful thermal energy for the most recent control period. The converted useful thermal energy will be determined using the following equations:

A) If the unit is coal-fired:
CUTE (in MWh) = UTE (in mmBtu) × 0.2930;

B) If the unit is oil-fired:
CUTE (in MWh) = UTE (in mmBtu) × 0.1758; or

C) If the unit is neither coal-fired nor oil-fired:
CUTE (in MWh) = UTE (in mmBtu) × 0.1172.

3) The gross electrical output and useful thermal energy in subsections (d)(1) and (d)(2) of this Section for the control period in each year will be based on the best available data reported or available to the Agency for the CAIR $NO_x$ Ozone Season unit pursuant to the provisions of Section 225.550 .

4) The Agency will determine a unit's unprorated allocation ($\overline{UA_y}$) using the unit's converted gross electrical output plus the unit's converted useful thermal energy, if any, calculated in subsections (d)(1) and (d)(2) of this Section, converted to approximate $NO_x$ tons (the unit's unprorated allocation), as follows:

$$UA_y = \frac{TCGO_y \times (1.0 lbs/MWh)}{2000 lbs/ton}$$

Where:

$UA_y$ = unprorated allocation to a new CAIR $NO_x$ Ozone Season unit.

$TCGO_y$ = total converted gross electrical output for a new CAIR $NO_x$ Ozone Season unit.

5) The Agency will allocate CAIR $NO_x$ Ozone Season allowances from the NUSA to new CAIR $NO_x$ Ozone Season units as follows:

A) If the NUSA for the control period for which CAIR $NO_x$ Ozone Season allowances are requested has a number of allowances greater than or equal to the total unprorated allocations for all new units requesting allowances, the Agency will allocate the number of allowances using the unprorated allocation determined for that unit pursuant to subsection (d)(4) of this Section.

B) If the NUSA for the control period for which the allowances are requested has a number of CAIR $NO_x$ Ozone Season allowances less than the total unprorated allocation to all new CAIR $NO_x$ Ozone Season units requesting allocations, the Agency will allocate the available allowances for new CAIR $NO_x$ Ozone Season units on a pro-rata basis, using the unprorated allocation determined for that unit pursuant to subsection (d)(4) of this Section. If there are insufficient allowances to allocate whole allowances, the unallocated allowances will be retained by the Agency and will be available for allocation in a later control period.

C) If the gross electrical output or useful thermal energy reported to the Agency pursuant to subsection (d) of this Section is later determined to be greater than the unit's actual gross electrical output or useful thermal energy for the applicable control period, the Agency will reduce the unit's allocation from the NUSA for the current control period to account for the excess allowances allocated in the prior control period or periods.

e) The Agency will review each NUSA allowance allocation request pursuant to subsection (b) of this Section. The Agency will accept a NUSA allowance allocation request only if the request meets, or is adjusted by the Agency as necessary to meet, the requirements of this Section 225.545.

f) By June 1 of the applicable control period, the Agency will notify each CAIR designated representative that submitted a NUSA allowance request of the amount of CAIR $NO_x$ Ozone Season allowances from the NUSA, if any, allocated for the control period to the new unit covered by the request.

g) The Agency will allocate CAIR $NO_x$ Ozone Season allowances to new units from the NUSA no later than July 31 of the applicable control period.

h) After a new CAIR $NO_x$ Ozone Season unit has operated in one control period, it becomes an existing unit for the purposes of Section 225.540 only, and the Agency will allocate CAIR $NO_x$ Ozone Season allowances for that unit, for the control period commencing four years in the future pursuant to Section 225.540 . The new CAIR $NO_x$ Ozone Season unit will continue to receive CAIR $NO_x$ Ozone Season allowances from the NUSA according to this Section until the unit is eligible to use the CAIR $NO_x$ Ozone Season allowances allocated to the unit pursuant to Section 225.540 .

i) If, after the completion of the procedures in subsection (c) of this Section for a control period any unallocated CAIR $NO_x$ Ozone Season allowances remain in the NUSA for the control period, the Agency will, at a minimum, accrue those CAIR $NO_x$ Ozone Season allowances for future control period allocations to new CAIR $NO_x$ Ozone Season units. The Agency may from time to time elect to retire CAIR $NO_x$ Ozone Season allowances in the NUSA that are in excess of 7,245 for the purposes of continued progress toward attainment and maintenance of National Ambient Air Quality Standards pursuant to the CAA.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.550 Monitoring, Recordkeeping and Reporting Requirements for Gross Electrical Output and Useful Thermal Energy

a) By January 1, 2008, or by the date of commencing commercial operation, whichever is later, the owner or operator of the CAIR $NO_x$ unit must operate a system for measuring gross electrical output that is consistent with the requirements of either 40 CFR 60 or 75; must measure gross electrical output in MW-hrs using such a system; and must record the output of the measurement system. If a generator is served by two or more units, the information to determine each unit's heat input for that control period must also be recorded, so as to allow each unit's share of the gross electrical output to be determined. If heat input data is used, the owner or operator must comply with the applicable provisions 40 CFR 75, as incorporated by reference in Section 225.140.

b) For a CAIR $NO_x$ Ozone Season unit that is a cogeneration unit by January 1, 2007, or by the date the CAIR $NO_x$ Ozone Season unit commences to produce useful thermal energy, whichever is later, the owner or operator of a CAIR $NO_x$ Ozone Season unit with cogeneration capabilities must install, calibrate, maintain, and operate meters for steam flow in lbs/hr, temperature in degrees Fahrenheit, and pressure in PSI, to measure and record the useful thermal energy that is produced, in mmBtu/hr, on a continuous basis. Owners and operators of aCAIR $NO_x$ Ozone Season unit that produces useful thermal energy but uses an energy

transfer medium other than steam, e.g., hot water or glycol, must install, calibrate, maintain, and operate the necessary meters to measure and record the necessary data to express the useful thermal energy produced, in mmBtu/hr, on a continuous basis. If the CAIR $NO_x$ Ozone Season unit ceases to produce useful thermal energy, the owner or operator may cease operation of these meters, provided that operation of such meters must be resumed if the CAIR $NO_x$ Ozone Season unit resumes production of useful thermal energy.

c) The owner or operator of a CAIR $NO_x$ unit must either report gross electrical output data to the Agency or comply with the applicable provisions for providing heat input data to USEPA as follows:

1) By June 1, 2007, the gross electrical output for control periods 2001, 2002, 2003, 2004 and 2005, if available, and, the unit's useful thermal energy data, if applicable. If a generator is served by two or more units, the documentation needed to determine each unit's share of the heat input of such units for that control period must also be submitted. If heat input data is used, the owner or operator must comply with the applicable provisions 40 CFR 75, as incorporated by reference in Section 225.140.

2) By June 1, 2008, the gross electrical output for control periods 2006 and 2007, if available, and the unit's useful thermal energy data, if applicable. If a generator is served by two or more units, the documentation needed to determine each unit's share of the heat input of such units for that control period must also be submitted. If heat input data is used, the owner or operator must comply with the applicable provisions of 40 CFR 75, as incorporated by reference in Section 225.140.

d) Beginning with calendar year 2008, the CAIR designated representative of the CAIR $NO_x$ Ozone Season unit must submit to the Agency quarterly, by no later than April 30, July 31, October 31, and January 31 of each year, information for the CAIR $NO_x$ Ozone Season unit's gross electrical output, on a monthly basis for the prior quarter, and, if applicable, the unit's useful thermal energy for each month.

e) The owner or operator of a CAIR $NO_x$ Ozone Season unit must maintain on-site the monitoring plan detailing the monitoring system, maintenance of the monitoring system, including quality assurance activities pursuant to the requirements of 40 CFR 60 and 75, including the applicable provisions for the measurement of gross electrical output for the CAIR $NO_x$ Ozone Season trading program and, if applicable, for new units. The monitoring plan must include, but is not limited to:

1) A description of the system to be used for the measurement of gross electrical output pursuant to Section 225.450(a), including a list of any data logging devices, solid-state kW meters, rotating kW meters,

electromechanical kW meters, current transformers, transducers, potential transformers, pressure taps, flow venturi, orifice plates, flow nozzles, vortex meters, turbine meters, pressure transmitters, differential pressure transmitters, temperature transmitters, thermocouples, resistance temperature detectors, and any equipment or methods used to accurately measure gross electrical output.

2) A certification statement by the CAIR designated representative that all components of the gross electrical output system have been tested to be accurate within three percent and that the gross electrical output system is accurate to within ten percent.

f) The owner or operator of a CAIR $NO_x$ Ozone Season unit must retain records for at least 5 years from the date the record is created or the data collected in subsections (a) and (b) of this Section, and the reports submitted to the Agency and USEPA in accordance with subsections (c) and (d) of this Section. The owner or operator of a CAIR $NO_x$ Ozone Season unit must retain the monitoring plan required in subsection (e) of this Section for at least five years from the date that it is replaced by a new or revised monitoring plan.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.555 Clean Air Set-Aside (CASA)

a) A project sponsor may apply for allowances from the CASA for sponsoring an energy efficiency and conservation, renewable energy, or clean technology project as set forth in Section 225.560 by submitting the application required by Section 225.570.

b) Notwithstanding subsection (a) of this Section, a project sponsor with a CAIR $NO_x$ Ozone Season source that is out of compliance with this Subpart for a given control period may not apply for allowances from the CASA for that control period. If a source receives CAIR $NO_x$ allowances from CASA and then is subsequently found to have been out of compliance with this Subpart for the applicable control period or periods, the project sponsor must restore the CAIR $NO_x$ allowances that it received pursuant to its CASA request or an equivalent number of CAIR $NO_x$ allowances to the CASA within six months of receipt of an Agency notice that $NO_x$ allowances must be restored. These allowances will be assigned to the fund from which they were distributed.

c) CAIR $NO_x$ allowances from CASA will be allocated in accordance with the procedures in Section 225.575.

d) The project sponsor may submit an application that aggregates two or more projects under a CASA project category that would individually result in less than

one allowance, but that equal at a minimum one whole allowance when aggregated.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.560 Energy Efficiency and Conservation, Renewable Energy, and Clean Technology Projects

a) Energy efficiency and conservation project means any of the following projects implemented and located in Illinois:

1) Demand side management projects that reduce the overall power demand by using less energy include:

A) Smart building management software that more efficiently regulates power flows.

B) The use of or replacement to high efficiency motors, pumps, compressors, or steam systems.

C) Lighting retrofits.

2) Energy efficient new building construction projects include:

A) ENERGY STAR-qualified new home projects.

B) Measures to reduce or conserve energy consumption beyond the requirements of the Illinois Energy Conservation Code for Commercial Buildings (20 ILCS 687/6-3).

C) New residential construction projects that qualify for Energy Efficient Tax Incentives pursuant to the Energy Policy Act of 2005, 42 U.S.C. 15801 (2005).

3) Supply-side energy efficiency projects include projects implemented to improve the efficiency in electricity generation by coal-fired power plants, and the efficiency of electrical transmission and distribution systems.

4) Highly efficient power generation project, such as, but not limited to, combined cycle projects, combined heat and power, and microturbines. To be considered a highly efficient power generation project pursuant to this subsection (a)(4), a project must meet the thresholds and criteria listed below:

A) For combined heat and power projects generating both electricity and useful thermal energy for space, water, or industrial process heat, a rated-energy efficiency of at least 60 percent and is not a CAIR $NO_x$ Ozone Season unit.

B) For combined cycle projects rated at greater than 0.50 MW, a rated-energy efficiency of at least 50 percent.

C) For microturbine projects rated at or below 0.50 MW and all other projects rated-energy efficiency of at least 40 percent.

b) Renewable energy unit means any of the following projects implemented and located in Illinois:

1) Zero-emission electric generating units, including wind, solar (thermal or photovoltaic), and hydropower projects. Eligible hydropower plants are restricted to new generators, that are not replacements of existing generators, that commence operation on or after January 1, 2006, and do not involve the significant expansion of an existing dam or the construction of a new dam.

2) Renewable energy units are those units that generate electricity using more than 50 percent of the heat input, on an annual basis, from dedicated crops grown for energy production or the capture systems for methane gas from landfills, water treatment plants or sewage treatment plants, and organic waste biomass, and other similar sources of non-fossil fuel energy. Renewable energy projects do not include energy from incineration by burning or heating of waste wood, tires, garbage, general household, institutional lunchroom or office waste, landscape waste, or construction or demolition debris.

c) Clean technology project for reducing emissions from producing electricity and useful thermal energy means any of the following projects implemented and located in Illinois:

1) Air pollution control equipment upgrades for control of $NO_x$ emissions at existing coal-fired EGUs, as follows: installation of a selective catalytic reduction (SCR) or selective non-catalytic reduction (SNCR) system, or other emission control technologies. Air pollution control upgrades do not include the addition of low $NO_x$ burners, overfired air techniques, gas reburning techniques, flue gas conditioning techniques for the control of $NO_x$ emissions, projects involving upgrades or replacement of electrostatic precipitators, or addition of activated carbon injection, or other sorbent injection for control of mercury. For this purpose, a unit will be considered "existing" after it has been in commercial operation for at least eight years.

2) Clean coal technologies projects include:

A) Integrated gasification combined cycle (IGCC) plants.

B) Fluidized bed coal combustion.

d) In addition to those projects excluded in subsections (a) through (c) of this Section, the following projects are also not energy efficiency and conservation, renewable energy, or clean technology projects:

1) Nuclear power projects.

2) Projects required to meet emission standards or technology requirements under State or federal law or regulation, except that allowances may be allocated for projects undertaken pursuant to Section 225.233.-

3) Projects used to meet the requirements of a court order or consent decree, except that allowances may be allocated for:

A) Emission rates or limits achieved that are lower than what is required to meet the emission rates or limits for $SO_2$ or $NO_x$, or for installing a baghouse as provided for in a court order or consent decree entered into before May 30, 2006.

B) Projects used to meet the requirements of a court order or consent decree entered into on or after May 30, 2006, if the court order or consent decree does not specifically preclude such allocations.

4) A Supplemental Environmental Project (SEP).

e) Applications for projects implemented and located in Illinois that are not specifically listed in subsections (a) through (c) of this Section, and that are not specifically excluded by definition in subsections (a) through (c) of this Section or by specific exclusion in subsection (d) of this Section, may be submitted to the Agency. The application must designate which category or categories from those listed in subsections (a)(1) through (c)(2)(B) of this Section best fits the proposed project and the applicable formula pursuant to Section 225.565(b) to calculate the number of allowances that it is requesting. The Agency will determine whether the application is approvable based on a sufficient demonstration by the project sponsor that the project is a new type of energy efficiency, renewable energy, or clean technology project, similar in its effects as the projects specifically listed in subsection (a) through (c) of this Section.

f) Early adopter projects include projects that meet the criteria for any energy efficiency and conservation, renewable energy, or clean technology projects listed

in subsections (a) , (b), (c), and (e) of this Section and commence construction between July 1, 2006, and December 31, 2012.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.565 Clean Air Set-Aside (CASA) Allowances

a) The CAIR $NO_x$ allowances for the CASA for each control period will be assigned to the following categories of projects:

| | | Phase I (2009-2014) | Phase II (2015 and thereafter) |
|---|---|---|---|
| 1) | Energy Efficiency and Conservation/ Renewable Energy | 3684 | 3479 |
| 2) | Air Pollution Control Equipment Upgrades | 1535 | 1448 |
| 3) | Clean Coal Technology Projects | 1842 | 1738 |
| 4) | Early Adopters | 614 | 580 |

b) The following formulas must be used to determine the number of CASA allowances that may be allocated to a project per control period:

1) For an energy efficiency and conservation project pursuant to Sections 225.560(a)(1) through (a)(4)(A), the number of allowances must be calculated using the number of megawatt hours of electricity that was not consumed during a control period and the following formula:

$$A = (MWh_c) \times (1.5 \text{ lb/MWh}) / 2000 \text{ lb}$$

Where:

A = The number of allowances for a particular project.
$MWh_c$ = The number of megawatt hours of electricity conserved or generated during a control period by a project.

2) For a zero emission electric generating projects pursuant to Section 225.560(b)(1), the number of allowances must be calculated using the number of megawatt hours of electricity generated during a control period and the following formula:

A = $(MWh_g) \times (2.0\ lb/MWh) / 2000\ lb$

Where:

A = The number of allowances for a particular project
$MWh_g$ = The number of megawatt hours of electricity generated during a control period by a project.

3) For a renewable energy emission unit pursuant to Section 225.560(b)(2), the number of allowances must be calculated using the number of megawatt hours of electricity generated during a control period and the following formula:

A = $(MWh_g) \times (0.5\ lb/MWh) / 2000\ lb$

Where:

A = The number of allowances for a particular project.
$MWh_g$ = The number of MW hours of electricity generated during a control period by a project.

4) For an air pollution control equipment upgrade project pursuant to Section 225.560(c)(1), the number of allowances must be calculated using the emission rate before and after replacement or improvement, and the following formula:

A = $(MWh_g) \times 0.10 \times (ER_B\ lb/MWh - ER_A\ lb/MWh) / 2000\ lb$

Where:

A = The number of allowances for a particular project.
$MWh_g$ = The number of MWhs of electricity generated during a control period by a project.
$ER_B$ = Average $NO_x$ emission rate based on CEMS data from the most recent two control periods prior to the replacement or improvement of the control equipment in lb/MWh, unless subject to a consent decree or court order. For units subject to a consent decree or court order, entered into before May 30, 2006, $ER_B$ is limited to emission rates or limits that are lower than the emission rate or limit required in the consent decree or court order. On or after May 30, 2006, $ER_B$ is limited to emission rates or limits specified in the consent decree or court order. If such limit is not expressed in lb/MWh, the limit

shall be converted into lb/MWh using a heat rate of 10 mmBtu/1 MW.

$ER_A$ = Average $NO_x$ emission rate for the applicable control period data based on CEMS data in lb/MWh.

5) For highly efficient power generation and clean technology projects pursuant to Sections 225.560(a)(4)(B), (a)(4)(C) and (c)(2), the number of allowances must be calculated using the number of megawatt hours of electricity the project generates during a control period and the following formula:

$$A = (MWh_g) \times (1.0 \text{ lb/MWh} - ER \text{ lb/MWh}) / 2000 \text{ lb}$$

Where:

A = The number of allowances for a particular project.

$MWh_g$ = The number of megawatt hours of electricity generated during a control period by a project.

ER = Average $NO_x$ emission rate for the control period based on CEMS data in 1b/MWh.

6) For a CASA project that commences construction before December 31, 2012, in addition to the allowances allocated pursuant to subsections (b)(1) through (b)(5) of this Section, a project sponsor may also request additional allowances under the early adopter project category pursuant to Section 225.460(e) based on the following formula:

$$A = 1.0 + 0.10 \times \Sigma A_i$$

Where:

A = The number of allowances for a particular project as determined in subsections (b)(1) through (b)(5) of this Section.

$A_i$ = The number of allowances as determined in subsection (b)(1), (b)(2), (b)(3), (b)(4) or (b)(5) of this Section for a given project.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.570 Clean Air Set-Aside (CASA) Applications

a) A project sponsor may request allowances if the project commenced construction on or after the dates listed below. The project sponsor may request and be

allocated allowances from more than one CASA category for a project, if applicable.

1) Demand side management, energy efficient new construction, and supply side energy efficiency and conservation projects that commenced construction on or after January 1, 2003;

2) Fluidized bed coal combustion projects, highly efficient power generation operations projects, or renewable energy emission units, which commenced construction on or after January 1, 2001; and

3) All other projects on or after July 1, 2006.

b) Beginning with the 2009 control period and each control period thereafter, a project sponsor may request allowances from the CASA. The application must be submitted to the Agency by May 1 of the control period for which the allowances are being requested.

c) The allocation will be based on the electricity conserved or generated in the control period preceding the calendar year in which the application is submitted. To apply for a CAIR $NO_x$ allocation from the CASA, project sponsors must provide the Agency with the following information:

1) Identification of the project sponsor, including name, address, type of organization, certification that the project sponsor has met the definition of "project sponsor" as set forth in Section 225.130, and name(s) of the principals or corporate officials.

2) The number of the CAIR $NO_x$ general or compliance account for the project and the name of the associated CAIR account representative.

3) A description of the project or projects, location, the role of the project sponsor in the projects, and a general explanation of how the amount of energy conserved or generated was measured, verified, and calculated, and the number of allowances requested with the supporting calculations. The number of allowances requested will be calculated using the applicable formula from Section 225.570(b).

4) Detailed information to support the request for allowances, including the following types of documentation for the measurement and verification of the $NO_x$ emissions reductions, electricity generated, or electricity conserved using established measurement verification procedures, as applicable. The measurement and verification required will depend on the type of project proposed.

A) As applicable, documentation of the project's base and control

period conditions and resultant base and control period energy data, using the procedures and methods included in *M&V Guidelines: Measurement and Verification for Federal Energy Projects*, incorporated by reference in Section 225.140 , or other method approved by the Agency. Examples include:

i) Energy consumption and demand profiles;

ii) Occupancy type;

iii) Density and periods;

iv) Space conditions or plant throughput for each operating period and season. (For example, in a building this would include the light level and color, space temperature, humidity and ventilation);

v) Equipment inventory, nameplate data, location, condition; and

vi) Equipment operating practices (schedules and set points, actual temperatures/pressures).

B) Emissions data, including, if applicable, CEMS data;

C) Information for rated–energy efficiency including supporting documentation and calculations; and

D) Electricity, in MWh, generated or conserved for the applicable control period.

5) Notwithstanding the requirements of subsections (c)(4) of this Section, applications for fewer than five allowances may propose other reliable and applicable methods of quantification acceptable to the Agency.

6) Any additional information requested by the Agency to determine the correctness of the requested number of allowances, including site information, project specifications, supporting calculations, operating procedures, and maintenance procedures.

7) The following certification by the responsible official for the project sponsor and the applicable CAIR account representative for the project:

"I am authorized to make this submission on behalf of the project sponsor and the holder of the CAIR $NO_x$ general account or compliance account for which the submission is made. I certify under penalty of law that I

have personally examined, and am familiar with the statements and information submitted in this application and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information."

d) A project sponsor may request allowances from the CASA for each project a total number of control periods not to exceed the number of control periods listed below. After a project has been allocated allowances from CASA, subsequent requests for the project from the project sponsor must include the information required by subsections (c)(1), (c)(2), (c)(3) and (c)(7) of this Section, a description of any changes, or further improvements made to the project, and information specified in subsections (c)(5) and (c)(6) as specifically requested by the Agency.

1) For energy efficiency and conservation projects (except for efficient operation and renewable energy projects), for a total of eight control periods.

2) For early adopter projects, for a total of ten control periods.

3) For air pollution control equipment upgrades for a total of 15 control periods.

4) For renewable energy projects, clean coal technology, and highly efficient power generation projects, for each year that the project is in operation.

e) A project sponsor must keep copies of all CASA applications and the documentation used to support the application for at least five years.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.575 Agency Action on Clean Air Set-Aside (CASA) Applications

a) By September 1, 2009, and each September 1 thereafter, the Agency will determine the total number of allowances that are approvable for allocation to project sponsors based upon the applications submitted pursuant to Section 225.570.

1) The Agency will determine the number of CAIR $NO_x$ allowances that are approvable based on the formulas and the criteria for such projects. The Agency will notify a project sponsor within 90 days after receipt of an application if the project is not approvable, the number of allowances

requested is not approvable, or additional information is needed by the Agency to complete its review of the application.

2) If the total number of CAIR $NO_x$ allowances requested for approved projects is less than or equal to the number of CAIR $NO_x$ allowances in the CASA project category, the number of allowances that are approved shall be allocated to each CAIR $NO_x$ compliance or general account.

3) If more CAIR $NO_x$ allowances are requested than the number of CAIR $NO_x$ allowances in a given CASA project category, allowances will be allocated on a pro-rata basis based on the number of allowances available, subject to further adjustment as provided for by subsection (b) of this Section. CAIR $NO_x$ allowances will be allocated, transferred, or used as whole allowances. The number of whole allowances will be determined by rounding down for decimals less than 0.5 and rounding up for decimals of 0.5 or greater.

b) For control periods 2011 and thereafter, if there are, after the completion of the procedures in subsection (a) of this Section for a control period, any CAIR $NO_x$ allowances not allocated to a CASA project for the control period:

1) The remaining allowances will accrue in each CASA project category up to twice the number of allowances that are assigned to the project category each control period as set forth in Section 225.565 .

2) If any allowances remain after allocations pursuant to subsection (a) of this Section, the Agency will allocate these allowances pro-rata to projects that received fewer allowances than requested, based on the number of allowances not allocated but approved by the Agency for the project under CASA. No project may be allocated more allowances than approved by the Agency for the applicable control period.

3) If any allowances remain after the allocation of allowances pursuant to subsection (b)(2) of this Section the Agency will then distribute pro rata the remaining allowances to project categories that have fewer than twice the number of allowances assigned to the project category. The pro-rata distribution will be based on the difference between two times the project category and the number of allowances that remain in the project category.

4) If allowances still remain undistributed after the allocations and distributions in the above subsections are completed, the Agency may elect to retire any CAIR $NO_x$ allowances that have not been distributed to any CASA category, to continue progress toward attainment or maintenance of the National Ambient Air Quality Standards pursuant to the CAA.

(Source: Added at 31 Ill. Reg. _____, effective _____)

SUBPART F: COMBINED POLLUTANT STANDARDS

Section 225.600 Purpose

The purpose of this Subpart F is to allow an alternate means of compliance with the emissions standards for mercury in Section 225.230(a) for Specified EGUs through permanent shut-down, installation of ACI, and the application of pollution control technology for $NO_x$, PM, and $SO_2$ emissions that also reduce mercury emissions as a co-benefit and to establish permanent emissions standards for those Specified EGUs. Unless otherwise provided for in this Subpart F, owners and operators of those Specified EGUs are not excused from compliance with other applicable requirements of Subparts B, C, D, and E.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.605 Applicability

a) As an alternative to compliance with the emissions standards of Section 225.230(a), the owner or operator of specified EGUs in this Subpart F located at Fisk, Crawford, Joliet, Powerton, Waukegan, and Will County power plants may elect for all of those EGUs as a group to demonstrate compliance pursuant to this Subpart F, which establishes control requirements and emissions standards for $NO_x$, PM, $SO_2$, and mercury. For this purpose, ownership of a Specified EGU is determined based on direct ownership, by holding a majority interest in a company that owns the EGU or EGUs, or by the common ownership of the company that owns the EGU, whether through a parent-subsidiary relationship, as a sister corporation, or as an affiliated corporation with the same parent corporation, provided that the owner or operator has the right or authority to submit a CAAPP application on behalf of the EGU.

b) A Specified EGU is a coal-fired EGU listed in Appendix A, irrespective of any subsequent changes in ownership of the EGU or power plant, changes in the operator, unit designation, or name of unit.

c) The owner or operator of each of the Specified EGUs electing to demonstrate compliance with Section 225.230(a) pursuant to this Subpart must submit an application for a CAAPP permit modification to the Agency, as provided for in Section 225.220, that includes the information specified in Section 225.610 that clearly states the owner's or operator's election to demonstrate compliance with Section 225.230(a) pursuant to this Subpart F.

d) If an owner or operator of one or more Specified EGUs elects to demonstrate compliance with Section 225.230(a) pursuant to this Subpart F, then all Specified EGUs owned or operated in Illinois by the owner or operator as of December 31, 2006, as defined in subsection (a) of this Section, are thereafter subject to the standards and control requirements of this Subpart F. Such EGUs are referred to as a Combined Pollutant Standard (CPS) group.

e) If an EGU is subject to the requirements of this Section, then the requirements apply to all owners and operators of the EGU, and to the CAIR designated representative for the EGU.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.610 Notice of Intent

The owner or operator of one or more Specified EGUs that intends to comply with Section 225.230(a) by means of this Subpart F must notify the Agency of its intention on or before December 31, 2007. The following information must accompany the notification:

a) The identification of each EGU that will be complying with Section 225.230(a) pursuant to this Subpart F, with evidence that the owner or operator has identified all Specified EGUs that it owned or operated in Illinois as of December 31, 2006, and which commenced commercial operation on or before December 31, 2004;

b) If an EGU identified in subsection (a) of this Section is also owned or operated by a person different than the owner or operator submitting the notice of intent, a demonstration that the submitter has the right to commit the EGU or authorization from the responsible official for the EGU submitting the application; and

c) A summary of the current control devices installed and operating on each EGU and identification of the additional control devices that will likely be needed for each EGU to comply with emission control requirements of this Subpart F.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.615 Control Technology Requirements and Emissions Standards for Mercury

a) Control Technology Requirements for Mercury.

1) For each EGU in a CPS group other than an EGU that is addressed by subsection (b) of this Section, the owner or operator of the EGU must install, if not already installed, and properly operate and maintain, by the dates set forth in subsection (a)(2) of this Section, ACI equipment

complying with subsections (g), (h), (i), (j), and (k) of this Section, as applicable.

2) By the following dates, for the EGUs listed below, which include hot and cold side ESPs, the owner or operator must install, if not already installed, begin operating ACI equipment or the Agency must be given written notice that the EGU will be shutdown on or before the dates below:

A) Fisk 19, Crawford 7, Crawford 8, Waukegan 7, and Waukegan 8 on or before July 1, 2008; and

B) Powerton 5, Powerton 6, Will County 3, Will County 4, Joliet 6, Joliet 7, and Joliet 8 on or before July 1, 2009.

b) Notwithstanding subsection (a) of this Section, the following EGUs are not required to install ACI equipment because they will be permanently shut-down, as addressed by Section 225.630, by the date specified:

1) EGUs that are required to permanently shut-down:

A) On or before December 31, 2007, Waukegan 6; and

B) On or before December 31, 2010, Will County 1 and Will County 2.

2) Any other Specified EGU that is permanently shut down by December 31, 2010.

c) Beginning on January 1, 2015, and continuing thereafter, and measured on a rolling 12-month basis (the initial period is January 1, 2015, through December 31, 2015, and, then, for every 12-month period thereafter), each Specified EGU, except Will County 3, shall achieve one of the following emissions standards:

1) An emissions standard of 0.0080 lbs mercury/GWh gross electrical output; or

2) A minimum 90 percent reduction of input mercury.

d) Beginning on January 1, 2016, and continuing thereafter, Will County 3 shall achieve the mercury emissions standards of subsection (c) of this Section measured on a rolling 12-month basis (the initial period is January 1, 2016, through December 31, 2016, and, then, for every 12-month period thereafter).

e) At any time prior to the dates required for compliance in subsections (c) and (d) of this Section, the owner or operator of a Specified EGU, upon notice to the Agency, may elect to comply with the emissions standards of subsection (c) of

this Section measured on a rolling 12-month basis for one or more EGUs. Once an EGU is subject to the mercury emissions standards of subsection (c) of this Section, it shall not be subject to the requirements of subsections (g), (h), (i), (j) and (k) of this Section.

f) Compliance with the mercury emissions standards or reduction requirement of this Section must be calculated in accordance with Section 225.230(a) or (b).

g) For each EGU for which injection of halogenated activated carbon is required by subsection (a)(1) of this Section, the owner or operator of the EGU must inject halogenated activated carbon in an optimum manner, which, except as provided in subsection (h) of this Section, is defined as all of the following:

1) The use of an injection system for effective absorption of mercury, considering the configuration of the EGU and its ductwork;

2) The injection of halogenated activated carbon manufactured by Alstom, Norit, or Sorbent Technologies, or the injection of any other halogenated activated carbon or sorbent that the owner or operator of the EGU has demonstrated to have similar or better effectiveness for control of mercury emissions; and

3) The injection of sorbent at the following minimum rates, as applicable:

A) For an EGU firing subbituminous coal, 5.0 lbs per million actual cubic feet or, for any cyclone-fired EGU that will install a scrubber and baghouse by December 31, 2012, and which already meets an emission rate of 0.020 lb mercury/GWh gross electrical output or at least 75 percent reduction of input mercury, 2.5 lbs million actual cubic feet;

B) For an EGU firing bituminous coal, 10.0 lbs per million actual cubic feet or, for any cyclone-fired EGU that will install a scrubber and baghouse by December 31, 2012, and which already meets an emission rate of 0.020 lb mercury/GWh gross electrical output or at least 75 percent reduction of input mercury, 5.0 lbs million actual cubic feet;

C) For an EGU firing a blend of subbituminous and bituminous coal, a rate that is the weighted average of the above rates, based on the blend of coal being fired; or

D) A rate or rates set lower by the Agency, in writing, than the rate specified in any of subsections (g)(3)(A), (g)(3)(B), or (g)(3)(C) of this Section on a unit-specific basis, provided that the owner or operator of the EGU has demonstrated that such rate or rates are

needed so that carbon injection will not increase particulate matter emissions or opacity so as to threaten noncompliance with applicable requirements for particulate matter or opacity.

2) For purposes of subsection (g)(3) of this Section, the flue gas flow rate must be determined for the point sorbent injection; provided that this flow rate may be assumed to be identical to the stack flow rate if the gas temperatures at the point of injection and the stack are normally within 100º F, or the flue gas flow rate may otherwise be calculated from the stack flow rate, corrected for the difference in gas temperatures.

h) The owner or operator of an EGU that seeks to operate an EGU with an activated carbon injection rate or rates that are set on a unit-specific basis pursuant to subsection (g)(3)(D) of this Section must submit an application to the Agency proposing such rate or rates, and must meet the requirements of subsections (h)(1) and (h)(2) of this Section, subject to the limitations of subsections (h)(3) and (h)(4) of this Section:

1) The application must be submitted as an application for a new or revised federally enforceable operation permit for the EGU, and it must include a summary of relevant mercury emissions data for the EGU, the unit-specific injection rate or rates that are proposed, and detailed information to support the proposed injection rate or rates; and

2) This application must be submitted no later than the date that activated carbon must first be injected. For example, the owner or operator of an EGU that must inject activated carbon pursuant to subsection (a)(1) of this Section must apply for unit-specific injection rate or rates by July 1, 2008. Thereafter, the owner or operator may supplement its application; and

3) Any decision of the Agency denying a permit or granting a permit with conditions that set a lower inject rate or rates may be appealed to the Board pursuant to Section 39 of the Act.

4) The owner or operator of an EGU may operate at the injection rate or rates proposed in its application until a final decision is made on the application including a final decision on any appeal to the Board.

i) During any evaluation of the effectiveness of a listed sorbent, alternative sorbent, or other technique to control mercury emissions, the owner or operator of an EGU need not comply with the requirements of subsection (g) of this Section for any system needed to carry out the evaluation, as further provided as follows:

1) The owner or operator of the EGU must conduct the evaluation in accordance with a formal evaluation program submitted to the Agency at least 30 days prior to commencement of the evaluation;

2) The duration and scope of the evaluation may not exceed the duration and scope reasonably needed to complete the desired evaluation of the alternative control techniques, as initially addressed by the owner or operator in a support document submitted with the evaluation program; and

3) The owner or operator of the EGU must submit a report to the Agency no later 30 days after the conclusion of the evaluation that describes the evaluation conducted and which provides the results of the evaluation; and

4) If the evaluation of the alternative control techniques shows less effective control of mercury emissions from the EGU than was achieved with the principal control techniques, the owner or operator of the EGU must resume use of the principal control techniques. If the evaluation of the alternative control technique shows comparable effectiveness to the principal control technique, the owner or operator of the EGU may either continue to use the alternative control technique in a manner that is at least as effective as the principal control technique or it may resume use of the principal control techniques. If the evaluation of the control techniques shows more effective control of mercury emissions than the control technique, the owner or operator of the EGU must continue to use the alternative control technique in a manner that is more effective than the principal control technique, so long as it continues to be subject to this Section 225.615.

j) In addition to complying with the applicable recordkeeping and monitoring requirements in Sections 225.240 through 225.290, the owner or operator of an EGU that elects to comply with Section 225.230(a) by means of this Subpart F must also comply with the following additional requirements:

1) For the first 36 months that injection of sorbent is required, it must maintain records of the usage of sorbent, the exhaust gas flow rate from the EGU, and the sorbent feed rate, in pounds per million actual cubic feet of exhaust gas at the injection point, on a weekly average;

2) After the first 36 months that injection of sorbent is required, it must monitor activated sorbent feed rate to the EGU, flue gas temperature at the point sorbent injection, and exhaust gas flow rate from the EGU, automatically recording this data and the sorbent carbon feed rate, in pounds per million actual cubic feet of exhaust gas at the injection point, on an hourly average; and

3) If a blend of bituminous and subbituminous coal is fired in the EGU, it must keep records of the amount of each type of coal burned and the required injection rate for injection of activated carbon, on a weekly basis.

k) In addition to complying with the applicable reporting requirements in Sections 225.240 through 225.290, the owner or operator of an EGU that elects to comply with Section 225.230(a) by means of this Subpart F must also submit quarterly reports for the recordkeeping and monitoring conducted pursuant to subsection (j) of this Section.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.620 Emissions Standards for $NO_x$ and $SO_2$

a) Emissions Standards for $NO_x$ and Reporting Requirements.

1) Beginning with calendar year 2012 and continuing in each calendar year thereafter, the CPS group, which includes all Specified EGUs that have not been permanently shut-down by December 31 before the applicable calendar year, must comply with a CPS group average annual $NO_x$ emissions rate of no more than 0.11 lbs/mmBtu.

2) Beginning with ozone season control period 2012 and continuing in each ozone season control period (May 1 through September 30) thereafter, the CPS group, which includes all Specified EGUs that have not been permanently shut-down by December 31 before the applicable ozone season, must comply with a CPS group average ozone season $NO_x$ emissions rate of no more than 0.11 lbs/mmBtu.

3) The owner or operator of the Specified EGUs in the CPS group must file not later than one year after startup of any selective SNCR on such EGU, a report with the Agency describing the $NO_x$ emissions reductions that the SNCR has been able to achieve.

b) Emissions Standards for $SO_2$. Beginning in calendar year 2013 and continuing in each calendar year thereafter, the CPS group must comply with the applicable CPS group average annual $SO_2$ emissions rate listed below:

| year | lbs/mmBtu |
|---|---|
| 2013 | 0.44 |
| 2014 | 0.41 |
| 2015 | 0.28 |
| 2016 | 0.195 |
| 2017 | 0.15 |
| 2018 | 0.13 |
| 2019 | 0.11 |

c) Compliance with the $NO_x$ and $SO_2$ emissions standards must be demonstrated in accordance with Sections 225.310, 225.410, and 225.510. The owner or operator of the Specified EGUs must complete the demonstration of compliance pursuant to Section 225.635(c) before March 1 of the following year for annual standards and before November 30 of the particular year for ozone season control periods (May 1 through September 30) standards, by which date a compliance report must be submitted to the Agency.

d) The CPS group average annual $SO_2$ emission rate, annual $NO_x$ emission rate and ozone season $NO_x$ emission rates shall be determined as follows:

$$ER_{avg} = \sum_{i=1}^{n} (SO_{2i} \text{ or } NO_{xi} \text{ tons}) \Big/ \sum_{i=1}^{n} (HI_i)$$

Where:

| | | |
|---|---|---|
| $ER_{avg}$ | = | average annual or ozone season emission rate in lbs/mmBbtu of all EGUs in the CPS group. |
| $HI_i$ | = | heat input for the annual or ozone control period of each EGU, in mmBtu. |
| $SO_{2i}$ | = | actual annual $SO_2$ tons of each EGU in the CPS group. |
| $NO_{xi}$ | = | actual annual or ozone season $NO_x$ tons of each EGU in the CPS group. |
| n | = | number of EGUs that are in the CPS group |
| i | = | each EGU in the CPS group. |

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.625 Control Technology Requirements for $NO_x$, $SO_2$, and PM Emissions

a) Control Technology Requirements for $NO_x$ and $SO_2$.

1) On or before December 31, 2013, the owner or operator must either permanently shutdown or install and have operational FGD equipment on Waukegan 7:

2) On or before December 31, 2014, the owner or operator must either permanently shutdown or install and have operational FGD equipment on Waukegan 8;

3) On or before December 31, 2015, the owner or operator must either permanently shutdown or install and have operational FGD equipment on Fisk 19:

4) If Crawford 7 will be operated after December 31, 2018, and not permanently shutdown by this date, the owner or operator must

A) On or before December 31, 2015, install and have operational SNCR or equipment capable of delivering essentially equivalent $NO_x$ reductions on Crawford 7; and

B) On or before December 31, 2018, install and have operational FGD equipment on Crawford 7;

5) If Crawford 8 will be operated after December 31, 2017 and not permanently shutdown by this date, the owner or operator must:

A) On or before December 31, 2015, install and have operational SNCR or equipment capable of delivering essentially equivalent $NO_x$ emissions reductions on Crawford 8; and

B) On or before December 31, 2017, install and have operational FGD equipment on Crawford 8.

b) Other Control Technology Requirements for $SO_2$. Owners or operators of Specified EGUs must either permanently shutdown or install FGD equipment on each Specified EGU (except Joliet 5), on or before December 31, 2018, unless an earlier date is specified in subsection (a) of this Section.

c) Control technology requirements for PM. The owner or operator of the two Specified EGUs listed below that are equipped with a hot-side ESP must either replace the hot-side ESPs with a cold-side ESP, install an appropriately designed fabric filter, or permanently shut-down the EGU by the dates specified below. Hot-side ESP means an ESP on a coal-fired boiler that is installed before the boiler's air-preheater where the operating temperature is typically at least 550º F, as distinguished from a cold-side ESP that is installed after the air pre-heater where the operating temperature is typically no more than 350º F.

1) Waukegan 7 on or before December 31, 2013; and

2) Will County 3 on or before December 31, 2015.

d) Beginning on December 31, 2008, and annually thereafter up to and including December 31, 2015, the owner or operator of the Fisk power plant must submit in writing to the Agency a report on any technology or equipment designed to affect air quality that has been considered or explored for the Fisk power plant in the preceding 12 months. This report will not obligate the owner or operator to install any equipment described in the report.

e) Notwithstanding 35 Ill. Adm. Code 201.146(hhh), until an EGU has complied with the applicable requirements of Sections 225.625(a), (b), and (c), the owner or operator of the EGU must obtain a construction permit for any new or modified air pollution control equipment that it proposes to construct for control of emissions of mercury, $NO_x$, PM, or $SO_2$.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.630 Permanent Shut-Downs

a) The owner or operator of the following EGUs must permanently shut-down the EGU by the dates specified:

1) Waukegan 6 on or before December 31, 2007; and

2) Will County 1 and Will County 2 on or before December 31, 2010.

b) No later than 8 months before the date that a Specified EGU will be permanently shut-down, the owner or operator must submit a report to the Agency that includes a description of the actions that have already been taken to allow the shut-down of the EGU and a description of the future actions that must be accomplished to complete the shut-down of the EGU, with the anticipated schedule for those actions and the anticipated date of permanent shut-down of the unit.

c) No later than six months before a Specified EGU will be permanently shut-down, the owner or operator shall apply for revisions to the operating permits for the EGU to include provisions that terminate the authorization to operate the unit on that date.

d) If after applying for or obtaining a construction permit to install required control equipment, the owner or operator decides to permanently shut-down a Specified EGU rather than install the required control technology, the owner or operator must immediately notify the Agency in writing and thereafter submit the information required by subsections (b) and (c) of this Section.

e) Failure to permanently shut-down a Specified EGU by the required date shall be considered separate violations of the applicable emissions standards and control technology requirements of this Subpart F for $NO_x$, PM, $SO_2$, and mercury.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.635 Requirements for CAIR $SO_2$, CAIR $NO_x$, and CAIR $NO_x$ Ozone Season Allowances

a) The following requirements apply to the owner, the operator and the designated representative with respect to CAIR $SO_2$, CAIR $NO_x$, and CAIR $NO_x$ Ozone Season allowances:

1) The owner, operator, and CAIR designated representative of Specified EGUs in a CPS group is permitted to sell, trade, or transfer $SO_2$ and $NO_x$ emissions allowances of any vintage owned, allocated to, or earned by the Specified EGUs (the "CPS Allowances") to its affiliated Homer City, Pennsylvania generating station ("Homer City Station") for as long as the Homer City Station needs the CPS Allowances for compliance.

2) When and if the Homer City Station no longer requires all of the CPS Allowances, the owner, operator, or CAIR designated representative of Specified EGUs in CPS group may sell any and all remaining CPS Allowances, without restriction, to any person or entity located anywhere, except that the owner or operator may not directly sell, trade, or transfer CPS Allowances to a CAIR $NO_x$ or CAIR $SO_2$ unit located in Ohio, Indiana, Illinois, Wisconsin, Michigan, Kentucky, Missouri, Iowa, Minnesota, or Texas.

3) In no event shall this subsection (a) require or be interpreted to require any restriction whatsoever on the sale, trade, or exchange of the CPS Allowances by persons or entities who have acquired the CPS Allowances from the owner, operator, or CAIR designated representative of Specified EGUs in a CPS group.

b) The owner, operator, and CAIR designated representative of EGUs in a CPS group comprised of is prohibited from purchasing or using CAIR $SO_2$, CAIR $NO_x$, and CAIR $NO_x$ Ozone Season allowances for the purposes of meeting the $SO_2$ and $NO_x$ emissions standards set forth in Section 225.620.

c) Before March 1, 2010, and continuing each year thereafter, the CAIR designated representative of the EGUs in a CPS group must submit a report to the Agency that demonstrates compliance with the requirements of this Section 225.635 for the previous calendar year and ozone season control period (May 1 through September 30), and includes identification of any CAIR allowances that have been used for compliance with the CAIR trading programs as set forth in Subparts C, D, and E, and any CAIR allowances that were sold, gifted, used, exchanged, or traded. A final report must be submitted to the Agency by August 31 of each year, providing either verification that the actions described in the initial report have taken place, or, if such actions have not taken place, an explanation of the changes that have occurred and the reasons for such changes.

(Source: Added at 31 Ill. Reg. _____, effective _____)

Section 225.640 Clean Air Act Requirements

The $SO_2$ emissions rates set forth in this Subpart F shall be deemed to be best available retrofit technology ("BART") under the Visibility Protection provisions of the CAA, 42 U.S.C. 7491, reasonably available control technology ("RACT") and reasonably available control measures ("RACM") for achieving fine particulate matter ("$PM_{2.5}$") requirements under NAAQS in effect on the effective date of this Subpart F, as required by the CAA, 42 U.S.C. 7502. The Agency may use the $SO_2$ and $NO_x$ emissions reductions required under this Subpart F in developing attainment demonstrations and demonstrating reasonable further progress for $PM_{2.5}$ and 8 hour ozone standards, as required under the CAA. Furthermore, in developing rules, regulations, or state implementation plans designed to comply with $PM_{2.5}$ and 8 hour ozone NAAQS, the Agency, taking into account all emission reduction efforts and other appropriate factors, will use best efforts to seek $SO_2$ and $NO_x$ emissions rates from other EGUs that are equal to or less than the rates applicable to the CPS Group and will seek $SO_2$ and $NO_x$ reductions from other sources before seeking additional emissions reductions from any EGU in the CPS Group.

(Source: Added at 31 Ill. Reg. _____, effective _____)

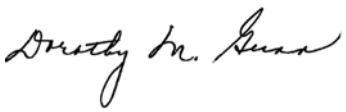
225.Appendix A Specified EGUs for Purposes of Subpart F (Midwest Generation's Coal-Fired Boilers as of July 1, 2006)

| Plant | Permit Number | Boiler | Permit designation | Subpart F Designation |
|---|---|---|---|---|
| Crawford | 031600AIN | 7 | Unit 7 Boiler BLR1 | Crawford 7 |
| | | 8 | Unit 8 Boiler BLR2 | Crawford 8 |
| Fisk | 031600AMI | 19 | Unit 19 Boiler BLR19 | Fisk 19 |
| Joliet | 197809AAO | 71 | Unit 7 Boiler BLR71 | Joliet 7 |
| | | 72 | Unit 7 Boiler BLR72 | Joliet 7 |
| | | 81 | Unit 8 Boiler BLR81 | Joliet 8 |
| | | 82 | Unit 8 Boiler BLR82 | Joliet 8 |
| | | 5 | Unit 6 Boiler BLR5 | Joliet 6 |
| Powerton | 179801AAA | 51 | Unit 5 Boiler BLR 51 | Powerton 5 |
| | | 52 | Unit 5 Boiler BLR 52 | Powerton 5 |
| | | 61 | Unit 6 Boiler BLR 61 | Powerton 6 |
| | | 62 | Unit 6 Boiler BLR 62 | Powerton 6 |
| Waukegan | 097190AAC | 17 | Unit 6 Boiler BLR17 | Waukegan 6 |
| | | 7 | Unit 7 Boiler BLR7 | Waukegan 7 |
| | | 8 | Unit 8 Boiler BLR8 | Waukegan 8 |
| Will County | 197810AAK | 1 | Unit 1 Boiler BLR1 | Will County 1 |
| | | 2 | Unit 2 Boiler BLR2 | Will County 2 |
| | | 3 | Unit 3 Boiler BLR3 | Will County 3 |
| | | 4 | Unit 4 Boiler BLR4 | Will County 4 |

(Source: Added at 31 Ill. Reg. _____, 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 April 19, 2007, by a vote of 3-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board