ILLINOIS POLLUTION CONTROL BOARD
July 26, 2007

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. Second Notice.

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

Today the Board proposes the Clean Air Interstate Rule (CAIR) for second-notice review by the Joint Committee on Administrative Rules (JCAR) under the Illinois Administrative Procedure Act (5 ILCS 100/1-1 *et seq.* (2006)). On April 19, 2007, the Board adopted its first-notice proposal, which was published in the *Illinois Register* on May 11, 2007. *See* 31 Ill. Reg. 6769 (May 11, 2007). The Board received five public comments during the 45-day first-notice public comment period, which ended on June 25, 2007. In this second-notice decision, the Board amends its first-notice rule language to reflect a number of clarifying changes and corrections recommended by the Illinois Environmental Protection Agency (IEPA) in its public comment.

This rulemaking was initiated by IEPA in part because the State of Illinois must meet federal Clean Air Act (42 U.S.C. §§ 7401 *et seq.*) requirements for controlling fine particulate matter ($PM_{2.5}$) and ozone in the greater Chicago and Metro East/St. Louis nonattainment areas. The United States Environmental Protection Agency (USEPA) has determined that most eastern states, including Illinois, will not be able to timely meet the National Ambient Air Quality Standards (NAAQS) largely because individual states cannot effectively address the interstate transport of airborne pollution from upwind areas. To address this regional problem, USEPA promulgated federal CAIR. Under federal CAIR, states like Illinois are given the option of complying with emission budgets set by USEPA or, as proposed here for nitrogen oxides (NO_x) and sulfur dioxide (SO_2) emissions from fossil fuel-fired electric generating units, adopting federal "cap and trade" programs.

Specifically, by adopting the CAIR SO_2 trading program, the CAIR NO_x annual trading program, and the CAIR NO_x ozone season trading program, with specific allocations for NO_x and retirement ratios for SO_2, this rulemaking is designed to reduce the intra- and interstate transport of SO_2 and NO_x emissions from fossil fuel-fired electric generating units. The Board proposes four new subparts (C, D, E, F), a new appendix, and revisions to existing Subpart A of Part 225 of the Board's regulations for controlling emissions from large combustion sources (35 Ill. Adm. Code 225).

In today's opinion, the Board first provides background and procedural history on this rulemaking proposal. Next, for continuity and because many of the issues raised in first-notice public comments were initially posed before first notice, the Board discusses the pre-first notice public comments filed in this proceeding and describes how the Board ruled on the contested issues at first notice. The Board then summarizes the public comments received during the first-notice public comment period. Those summaries are followed by the Board's analysis and disposition of the issues remaining in dispute after the Board's first-notice decision. The second-notice rules themselves are set forth in the order following this opinion.

BACKGROUND

IEPA states that the proposal is intended to satisfy Illinois' obligations under USEPA's "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] According to IEPA, the rule is also designed to address, in part, IEPA's obligation to meet certain federal Clean Air Act (CAA) requirements, including:

- Adopting control strategies necessary to demonstrate attainment of the fine particulate matter ($PM_{2.5}$) and 8-hour ozone NAAQS in the greater Chicago and Metro East/St. Louis nonattainment areas;

- Adopting an implementation plan addressing visibility; and

- Adopting an implementation plan addressing the interstate transport of air pollution. *Id.* at 2.

In the federal CAIR, USEPA states that 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). USEPA proposed the federal CAIR emission reductions for SO_2 and NO_x that apply to upwind states based on that assessment. *Id.* USEPA gave three primary reasons for addressing interstate pollution transport in a timely manner. First, 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, according to 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 cleanup costs 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 NAAQS in downwind areas to revise their SIPs to include control measures on SO_2 and NO_x. The federal CAIR also requires

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

[2] IEPA's "Statement of Reasons" included in the rulemaking proposal is cited as "Stat. at _."

that 25 states must reduce: (1) annual SO_2 and NO_x emissions for the purposes of the $PM_{2.5}$ NAAQS; and (2) seasonal NO_x emissions for purposes of the 8-hour ozone NAAQS.

In the federal CAIR, 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 USEPA or adopting a federal "cap and trade" program covering its electric generating units (EGUs). IEPA, in its proposal, chose the latter option, and the Board has adopted that approach at first notice and second notice.

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).

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 8-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 the 8-hour ozone NAAQS for those two nonattainment areas. Section 169(A) of the CAA requires the adoption of an implementation plan addressing visibility. Section 110(a)(2)(D) of the CAA requires adoption of a SIP addressing the interstate transport of air pollution. Stat. at 2.

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). USEPA believes that a major reason for this failure is that states are not able to address the 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 emission 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 federal 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. Because 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 reductions will be implemented in two phases. Phase I for NO_x reductions will start in 2009 (covering 2009-2014). Phase I for 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 USEPA's 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.

For the CAIR NO_x trading programs, a state is given a pool of allowances equal to its NO_x budgets to distribute as it chooses. For 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.

This rulemaking proposal, which amends Subpart A and proposes new Subparts C, D, E, and F of Part 225, adopts the CAIR SO_2, CAIR NO_x annual, and CAIR NO_x ozone season trading programs to reduce the intrastate and interstate transport of SO_2 and 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. *Id*. 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. *Id*. 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. *Id*. 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. *Id*. 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 HISTORY

Rulemaking Proposal

IEPA filed this rulemaking proposal on May 30, 2006. The Board accepted this matter for hearing on June 15, 2006. As required by Section 27(b) of the Environmental Protection Act (Act) (415 ILCS 5/27(b) (2006)), the Board requested that the Department of Commerce and Economic Opportunity (DCEO) conduct an economic impact study (EcIS) on this rulemaking. The Board's EcIS request, dated June 28, 2006, was placed in this rulemaking's docket. DCEO did not respond to the Board's request. The Board has received no testimony or comment regarding the DCEO's lack of response.

Hearings

The Board has held five days of hearings. 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.[3]

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

At the first hearing, the hearing officer entered into the record and accepted as hearing exhibits the pre-filed testimony of the following witnesses submitted on behalf of IEPA: 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.

At the second hearing, the hearing officer entered into the record and accepted as hearing exhibits the pre-filed testimony of the following witnesses: 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 ELPC (Kubert Exh. 1). Robert B. Asplund testified on behalf of Kincaid. A total of seven exhibits were offered and accepted at the second hearing.

[3] Hearing transcripts are cited as "Tr. at [page] ([hearing date])."

Motions to Dismiss and Amend

On November 30, 2006, Dynegy, Midwest Generation, LLC (Midwest Generation), and SIPC moved to dismiss the rulemaking proposal. On January 5, 2007, SIPC and Midwest Generation moved to withdraw as parties to the motion to dismiss.

On March 13, 2007, IEPA 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 Motion at 1, 3. Dynegy also requested that the Board stay action on the motion to dismiss:

> In order to expedite the Board's action on the proposed rule, Dynegy hereby suggests that the Board stay action on Dynegy's Motion to Dismiss. Dynegy and the Agency have agreed that, if the Board grants this Motion and includes the language in this Joint Motion to Amend in the Board's First Notice of the Illinois Clean Air Interstate Rule, Dynegy will withdraw its Motion to Dismiss. *Id*. at 4.

The Board received two other motions to amend the rule. Motions to amend were submitted by IEPA on November 27, 2006, and by Midwest Generation and IEPA jointly on February 16, 2007.

In its April 19, 2007 first-notice opinion and order, the Board granted the three motions to amend and incorporated the requested amendments. The Board also granted Dynegy's request to stay ruling on Dynegy's motion to dismiss pending Dynegy's filing of a withdrawal of that dismissal motion. To date, however, despite the Board's granting of the Dynegy/IEPA motion to amend and inclusion of the Dynegy/IEPA-proposed amendments at first notice, Dynegy has not filed the promised withdrawal of its motion to dismiss. Having fulfilled the conditions precedent to withdrawal articulated by Dynegy, the Board on its own motion strikes Dynegy's motion to dismiss. The Board accordingly will not address the substance of the motion to dismiss or any of the responsive pleadings.

Pre-First-Notice Public Comments

Sixteen public comments were filed before first notice. IEPA filed post-hearing comments to the first set of hearings on October 27, 2006 (PC 1). On December 15, 2006, Kincaid filed a Dominion NO_x Compliance Strategy and the resumé of Andy Yaros (PC 2). On December 21, 2006, the Board received the post-hearing comments to the second set of hearings from of Jason M. Goodwin for Zion (PC 3). On January 5, 2007, post-hearing comments were received from Ameren (PC 4); IEPA (PC 5); Dynegy and SIPC (PC 6); ELPC, the American Lung Association of Metropolitan Chicago, Environment Illinois, and the Sierra Club (PC 7); Midwest Generation (PC 8); Midwest Generation and IEPA (PC 9); and Kincaid (PC 10). On January 10, 2007, IEPA filed a motion for leave to file *instanter* a revised joint comment (granted April 19, 2007), attaching the revised joint comment (PC 11) of IEPA and Midwest

Generation. Finally, on February 5, 2007, the Sierra Club submitted 85 clean air questionnaires from Harold Washington College (PC 12).

First Notice

The Board adopted its first-notice opinion and order on April 19, 2007. First notice was published in the *Illinois Register* on May 11, 2007 (31 Ill. Reg. 6769 (May 11, 2007)), which began the 45-day first-notice public comment period, ending on June 25, 2007.

First-Notice Public Comments

The Board received five first-notice public comments: PC 13 from SIPC; PC 14 from Midwest Generation; PC 15 from IEPA; PC 16 from Zion; and PC 17 from Kincaid and Dominion.

SUMMARY OF PRE-FIRST-NOTICE PUBLIC COMMENTS

Public Comment 2: Kincaid and Dominion

Kincaid and Dominion assert that the most economical means to NO_x compliance is to install high capital cost selective catalytic reduction (SCR) equipment on their largest units with the highest NO_x rates. PC 2 at 1. Dominion has put SCRs on 12 of its largest coal units. *Id.* 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.*

Public Comment 3: Zion

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 IEPA's proposal. Zion suggests a compromise factor of 0.7 for both gas-fired and oil-fired units. PC 3 at 2. 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, according to Zion. *Id.* Zion adds that 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.*

Zion proposes a CASA set-aside 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. Zion also 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

Ameren requests that the Board allow the use of CASA allowances to support advanced over-fired air (OFA) NO_x reduction strategies. PC 4 at 1. Ameren proposes language 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. 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: IEPA

IEPA maintains that fuel-weighting as proposed is appropriate. PC 5 at 4. IEPA rejects a proposal on behalf of Christian County Generation to eliminate *pro rata* reduction of CASA allocations for early adopters. IEPA maintains its support for the 25% CASA as proposed. *Id*. at 7. IEPA disagrees with allowing OFA projects to receive allowances from the CASA. *Id*. at 10.

IEPA agrees to allow the only remaining fluidized bed combustion (FBC) boiler in Illinois to receive CASA allowances. The single existing FBC boiler is the SIPC 123 boiler in Marion, Williamson County. IEPA, however, opposes allowing any future FBC boilers to receive CASA allowances. PC 5 at 11.

IEPA agrees to revise the allocation method 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. The new subsections include a factor change from 1.0 to 1.4. *Id*. The factor change will compensate for SIPC's direct measurements and provide the same level of incentive IEPA was attempting to achieve. *Id.*

IEPA proposes several additional changes to the rule language suggested by USEPA. PC 5 at 21. IEPA contends that the three most significant suggested amendments were: (1) deleting Subsection (d)(5)(C) in Sections 225.445 and 225.545 that required IEPA to reduce a unit's allocation from the new unit set-aside (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 IEPA 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 SIPC

Dynegy and SIPC state they have consistently expressed their position that a set-aside of 25% for the CASA is not justifiable and will merely displace the location of the emissions. PC 6 at 3. Dynegy and SIPC state that IEPA has not identified projects that justify the size of the set-aside, and fear that a significant, and perhaps inequitable, portion of the CASA allowances could go to Ameren.

Dynegy and SIPC also dispute IEPA's economic analysis of the CASA as highly cost-effective. Further, state 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. PC 6 at 12. The companies take issue with the structure of the CASA and state that providing carve-out "incentives" for those who reduce early and subsidizing the costs of more expensive pollution control equipment is inconsistent, and skews how CASA allowances are allocated. *Id*. at 18. The companies argue that the CASA does not treat all EGUs equally and offers examples as to how CASA subsidizes the construction of pollution control equipment by some companies at the expense of others. The companies also oppose Ameren's proposal to add "advanced" OFA to the CASA.

The companies contend that the Governor's energy plans are no bases to justify the size of the energy efficiency and renewable energy (EE/RE) portion of the CASA and that IEPA does not bear the responsibility for developing CAIR to accommodate the Governor's energy plan. PC 6 at 13.

The companies oppose IEPAs proposal that allowance allocations be based upon gross electrical output rather than heat input. PC 6 at 24. The companies state that the efficiency assumed in IEPA's heat input to gross electrical output formula is not representative of actual efficiencies at the plants and disadvantages the vast majority of the regulated entities. Dynegy and SIPC state that industry wants an appropriate conversion formula to be applied. *Id*. at 25. With respect to encouraging efficiency, the companies note that high efficiency does not equate to lower emissions and greater environmental benefit. The companies use SIPC's circulating fluidized bed (CFB) as an example. *Id*. at 25-26.

The companies support IEPA's proposal regarding weights assigned to fuel types and oppose Zion's request that the Board remove the fuel-weighting or, alternatively, assign a factor of 1.0 for coal and 0.6 for all other fuels. PC 6 at 27.

Finally, Dynegy and SIPC have concerns about the two-year "look-back." The companies oppose IEPA's approach to annual allowance allocations, and support use of USEPA's approach of using a permanent baseline. PC 6 at 28-29. The companies favor 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 35 Ill. Adm. Code 217, Subpart W). *Id*. at 31.

Public Comment 7: ELPC, American Lung Association of Metropolitan Chicago, Environment Illinois, and Sierra Club

ELPC, by itself and on behalf of American Lung Association of Metropolitan Chicago, Environment Illinois, and the Sierra Club urge the Board to amend IEPA's proposed CAIR rule in three principle ways. PC 7 at 1. First, the renewable energy and energy efficiency set-asides should be increased from 12% to 15%, with an annual increase of 1% to a maximum of 20%, to better meet the rule's own renewable energy goals. *Id.* Second, the CASA proposed for FBC boilers should be eliminated because 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.* According to these environmental groups, a fuel-neutral allocation system that does not differentiate between coal and non-coal units is even-handed, treating all units the same and allowing the trading program to do a more effective job of determining the most cost-effective compliance combination. *Id*. at 10.

Public Comment 8: 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 that IEPA proposed. PC 8 at 1. This approach will help to make level the allowances for EGUs in Illinois and will avoid a skewed distribution of allowances or penalties associated with unexpected or extended outages. *Id.* 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.* 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.

Public Comment 10: Kincaid

Kincaid does not support the 25% CASA. Kincaid states that IEPA 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 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, easing the burden once the requirements take effect, but also benefit the environment by providing emission reductions sooner. PC 10 at 2-3.

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.

Public Comment 11: IEPA and Midwest Generation

IEPA and Midwest Generation 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 11 at 2. IEPA and Midwest Generation ask the Board to include a new Subpart F entitled "Combined Pollutant Standards," 35 Ill. Adm. Code Section 225.600 – 225.640, along with a new Appendix A to Part 225, in the proposed CAIR rulemaking that reflects the parties' agreement. *Id*. Under Subpart F, the agreement provides that Midwest Generation will achieve reductions in mercury, NO_x, Particulate Matter (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 installation of pollution control equipment for NO_x, PM, and SO_2 emissions that will also reduce mercury emissions. *Id*.

BOARD FIRST-NOTICE DISCUSSION

As the Board stated in its first-notice opinion of April 19, 2007, the majority of participants in this rulemaking support the majority of the IEPA-proposed rule, as amended during this proceeding. The Board noted, however, that significant contested issues remained: (1) whether 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 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 IEPA in its Technical Support Document (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 Subpart F, Combined Pollutant Standards (CPS), should be included in the proposal. The Board at first notice addressed each of these contested issues in turn, as described below.

Size of the Clean Air Set-Aside (CASA)

The CASA, and particularly the 25% set-aside, has been widely addressed during this rulemaking proceeding. IEPA asserts that USEPA left the authority to the individual states to distribute their allocations as necessary to meet each state's individual goals. PC 5 at 7. IEPA contends that a financial analysis of the impact of the worst-case scenario (retiring the 30% set-aside (CASA plus NUSA) and relying solely on a 70% main pool) showed that 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 (Testimony of Saladino) at 13. Kincaid argues that the IEPA 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 because 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 IEPA'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 suggests a CASA set-aside percentage in the 5-10% range. Setting aside 25% of the allowance pool, in Zion's opinion, unjustifiably increases the compliance burden on facilities that already face significant emission reduction obligations through an artificial reduction in allowances available for allocations. *Id*. at 4. Zion also proposes 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. Ameren requests the Board to adopt those portions of the amended proposal that allow Ameren and other companies seeking to utilize the Multi-Pollutant Strategy (MPS) to obtain CASA allowances. PC 4 at 3.

Dynegy and SIPC 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 megawatt (MW) EGU, and that this amounts to not allocating allowances to the entirety of Dynegy's system, plus City Water Light & Power and SIPC, with 102 MW "still not accounted for." PC 6 at 10-11.

Conversely, ELPC provided testimony recommending that the EE/RE set-asides be increased to be consistent with the policy goals and policy targets set forth in the Governor Blagojevich's Sustainable Energy Plan. Tr.2 at 138. ELPC testified that increasing the EE/RE 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 found at first notice that the set-aside as proposed by IEPA is appropriate. Kincaid's assertion that it is penalized for previously installing technology is interesting but not persuasive. IEPA 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 at first notice agreed 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/selective non-catalytic NO_x reduction (SNCR), one unit controlled by baghouse, and five units controlled by flue gas desulfurization (FGD). Each of these units is ineligible for CASA as proposed.

Kincaid acknowledged at hearing that installing the SCRs was a voluntary decision made for business purposes. *See* Kincaid Exh. 1 (Testimony 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 Section 217.770 of the Subpart W rules. Thus, CASA aside, Kincaid has already received credit to assist in recovering installation costs for its SCRs. Finally, the Board at first notice agreed with IEPA that, while entities that have previously installed controls may not avail themselves of CASA allocations for those installations, such entities may still earn allowances by participating in a different CASA category.

At first notice, the Board found that ELPC's position, that IEPA should increase the EE/RE 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. IEPA has stated that it did not intend to set its EE/RE allocations predicated on the policy goals of the Governor's Sustainable Energy Plan. Nonetheless, the Board noted that the possibility of under-subscription in CASA categories other than EE/RE may result in allocations eligible for approved EE/RE projects, thereby exceeding the 12% initial design value.

Over-Fired Air (OFA)

The Board observed at first notice that a question exists as to whether OFA projects should be excluded from receiving allowances from the CASA. As proposed by IEPA, Sections 225.460(c)(1) and 225.560(c) specifically exclude OFA from the list of projects eligible for CASA clean technology allowances. IEPA maintains that neither standard OFA nor advanced OFA should be an eligible project for the CASA. IEPA 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. According to IEPA, 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 requested 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 that are included as part of a comprehensive NO_x reduction strategy with other listed technologies be allowed to receive CASA allowances. *Id*. at 3.

Dynegy and SIPC argued 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 SIPC 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. *Id*. 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. IEPA'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, IEPA contends that the more costly controls generally result in the greatest reductions in emissions. PC 5 at 10.

At first notice, the Board agreed with IEPA in that no evidence exists that advanced OFA would result in significantly higher costs than standard OFA. IEPA'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.*, Ameren Exh. 1 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**

IEPA 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 IEPA. IEPA specifically determined 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 in support of eliminating *pro rata* reductions of CASA allocations for early adopters, primarily to reduce the uncertainty in allocations introduced by a *pro rata* allotment. Christian County Exh. 1 (Testimony of Kunkel) at 6. As an alternative, Christian County Generation suggested a "first-come first-served" basis. Tr.2 at 156.

The Board at first notice found that a proportionate sharing of allowances among all eligible applications is appropriate. The Board agreed with IEPA that a system using fixed portions could lead to difficulties in execution because 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 IEPA's perspective.

Fluidized Bed Combustion (FBC) Boilers

In its in initial proposal, IEPA proposed that FBC boilers be allowed to receive CASA allowances in the clean coal technology category. However, IEPA committed to review its stance on this issue after the first hearing and proposed before first notice that Illinois' single existing FBC boiler be allowed to receive CASA allowances, but that allowances to any future

FBC boilers be denied. PC 5 at 11. The Board agreed with IEPA and at first notice adopted the revisions proposed by IEPA to Sections 225.460 and 225.465 with some minor changes.

ELPC argued that allowances should not be available as proposed for FBC boilers. PC 7 at 2. ELPC argued 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 integrated gasification combined cycle (IGCC) plants do; and (3) they emit more greenhouse gases than PC boilers. *Id*. at 4.

ELPC argued 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, according to ELPC. *Id*. Further, ELPC argued 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 SIPC FBC boiler in Marion. The other boilers are all pulverized coal combustion (PCC) boilers and cyclone-fired boilers (which burn crushed coal). The SIPC FBC boiler was constructed in 2001 and began operating in 2003. PC 5 at 11.

The SIPC 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 SIPC 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 SIPC's FBC boiler has reached as low as 0.06 lbs/mmBtu during the third 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 SIPC decide to more fully use 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 SIPC FBC boiler, the Board at first notice agreed with IEPA that it is appropriate to recognize SIPC's prior initiative to invest in a cleaner technology and allow SIPC 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 SIPC FBC boiler's actual emissions between 2003 and 2005 averaged 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 IEPA, the FBC boiler emission rates could be lower should SIPC 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 SIPC FBC to receive CASA allowances provides an incentive for SIPC to further reduce NO_x emissions because the number of CASA allowances received is proportional to the amount of NO_x emitted.

The Board additionally found at first notice that it was proper to deny access to CASA allowances for any new FBC boiler. At the time of construction, SIPC's FBC boiler was considered a more current technology for utility boilers. PC 5 at 11. Since the installation of SIPC's FBC boiler, however, IGCC facilities have become commercially viable and the number of applications for IGCC permits has increased nationwide. *Id*. at 13. The record is clear, and IEPA acknowledges, that FBC boilers result in higher NO_x emissions than IGCC plants. IGCC have become commercially viable. The Board at first notice found that CASA allowances for clean coal technology must be available only for the most promising commercially available technology, *i.e*., IGCC.

The Board also found persuasive ELPC's argument that it is inappropriate to allow "other" technologies that achieve emission rates comparable to FBC boilers to receive CASA allowance. PC 7 at 6. To further IEPA's intent and implement ELPC's suggestion, the Board amended Section 225.460(e) to exclude FBC boilers from the list of comparable technologies. The Board therefore amended Section 225.460(e) to limit the comparison only to projects similar in effect as the projects listed in Sections 225.460(a), (b), (c)(1) and (c)(2)(A).

IEPA proposed revisions to the allocation method 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 SIPC directly measures its emission rate in pound per megawatt (lb/MW) rather than converting from pound per million Btu (lb/mmBtu). PC 5 at 17-18. IEPA 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 SIPC's direct measurements and provide the same level of incentive that IEPA was previously attempting to achieve. *Id*.

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

By focusing on the most promising technology, IGCC, IEPA's proposal accomplishes CASA intentions while not penalizing SIPC 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 only recently that have IGCC facilities been recognized and accepted as commercially viable. Thus, the Board found that IEPA'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"

IEPA'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 SIPC are troubled by IEPA's approach to annual allowance allocations. 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 SIPC 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 IEPA's past failure to timely allocate allowances, it becomes critical that the updating occur annually and timely. PC 6 at 29.

Dynegy and SIPC argue that 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 SIPC 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 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.

The Board found at first notice that, mindful of the issues concerning a two-year look-back, the benefits of relative short look-back period outweigh any potential difficulties. IEPA 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 agreed with this general principle.

In addition, the concerns raised by Midwest Generation, SIPC, and Dynegy were also raised with IEPA prior to the proposal being filed with the Board. In response, IEPA 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. IEPA 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 found IEPA'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 adopted the rule for first notice as proposed in this regard.

Heat Input vs. Gross Electrical Output

IEPA 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 requested 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 SIPC asserts that the two companies generally prefer that allocations be based upon heat input rather than gross electrical output as proposed by IEPA. 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 SIPC assert that the efficiency assumed in IEPA'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 SIPC assert that it is their understanding is that IEPA 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 SIPC 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 SIPC asked the Board to ensure that the language included in the rule reflects the parties' intent. *Id.*

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

The Board found at first notice that IEPA's proposal to use gross electrical output as a basis for distributing allowances is reasonable. IEPA'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 Board found at first notice 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 IEPA to conduct a thorough modeling demonstration to determine the level of reductions that may be necessary to resolve any residual non-attainment problems following implementation of the CAIR reductions. 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.

IEPA 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 noted at first notice that in March 2005, USEPA presented a document entitled: "Technical Support Document for the Final Clean Air Interstate Rule – Air Quality Modeling." TSD at 35. IEPA summarized 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.

IEPA 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. 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.

At first notice, the Board found that modeling submitted by IEPA in the TSD is appropriate and supportive of the emissions standards in the proposal. The record indicates 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 found 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 IEPA 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 IEPA's current proposal, and suggests a compromise factor of 0.7 for both gas-fired and oil-fired units. PC 3 at 2.

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 IEPA seeks. PC 7 at 10.

Dynegy and SIPC support IEPA's proposal regarding weights assigned to fuel types, noting that USEPA retained the fuel factors. Dynegy and SIPC encouraged the Board to retain them as proposed by IEPA. 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 USEPA for not employing a fuel-neutral allocation methodology in the CAIR model rule.

The Board agreed at first notice with IEPA 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 did not modify IEPA's approach to fuel-weighting as proposed.

Proposed Subpart F: Combined Pollutant Standards (CPS)

As noted above, IEPA and Midwest Generation have proposed a new Subpart F, CPS, 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. At first notice, the Board agreed 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 found 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 found at first notice that Subpart F is technically feasible and economically reasonable, and included the Subpart in the proposal the Board adopted.

Technical Feasibility and Economic Reasonableness

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

SO_2

In the federal CAIR and supporting documents, 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*.

IEPA 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 IEPA to use the process at two boilers. TSD 5.1.

IEPA 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. IEPA 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. IEPA 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. IEPA 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, IEPA 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 USEPA. A listing of the technologies can be found in table 5-2 of IEPA'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 IEPA, 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.

IEPA used an integrated planning model (IPM) to evaluate the economic impact of the CASA and NUSA provisions included in this proposal. According to IEPA, the IPM modeling shows that the reduction of allowances only minimally increases the costs discussed above. Stat. at 44. IEPA 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*. IEPA 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. IEPA notes, however, that future projects will more likely be eligible for CASA use and thus further reduce cost. Stat. at 45.

Discussion

Section 27(a) of the Act directs the Board to take into account the "technical feasibility and economic reasonableness of measuring or reducing the particular type of pollution" when conducting a substantive rulemaking. 415 ILCS 5/27(a) (2006). After carefully reviewing the entirety of the record, the Board found at first notice that the proposal as amended is technically feasible and economically reasonable. In making this determination, the Board considered 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 was also persuaded by the IPM modeling provided by IEPA. In addition to the IPM modeling discussed above, IEPA 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 agreed with IEPA that trading will provide EGUs a cost-effective way to comply with CAIR that will minimize the costs passed on to consumers. IEPA estimates that regional retail electricity prices will be 2-3% higher with CAIR. In Illinois, IEPA 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, IEPA expects rates to decrease 2.6%, leaving a net

increase of 1.7%. TSD 6.4.

The Board noted that the SO_2 trading program IEPA proposes is substantially identical to the measurement requirements for the federal CAIR Rule developed by USEPA. Further, the issues concerning NO_x are issues that relate to the underlying federal requirements. The Board therefore found USEPA's decision to adopt the requirements persuasive.

In addition, the Board noted 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 disagreed. The Board considered whether each rulemaking is technically feasible and economically reasonable, and decided affirmatively in both rules.

SUMMARY OF FIRST-NOTICE PUBLIC COMMENTS

Public Comment 13: SIPC

SIPC states that because of special circumstances at its facility during the proposed "look-back" period of 2001 through 2005, SIPC is significantly disadvantaged in calculating initial allowances. PC 13 at 2. SIPC asserts that due to the timing of construction of a CFB at its generating station, it is unique relative to the initial allocations. The CFB began operating in mid-2003 and "went through a shake-down period of a year to a year and a half." *Id*. It was not until 2005 that the CFB experienced "'normal' operation," according to SIPC. *Id*.

For this reason, contends SIPC, averaging the converted gross electrical output of 2005 with the other years puts SIPC at a disadvantage for the distribution of initial allocations, compared to the other EGU's in the State. PC 13 at 2. SIPC requests that it be allowed to use only 2005 data, or, alternatively, to average the converted gross electrical output from 2006 with that from 2005 to determine SIPC's initial allocation. *Id*. at 3. SIPC proposes amendments to the first-notice versions of Sections 225.435 and 225.535 as follows:

> Section 225.435/535 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 . . . :
>
> 1) Gross electrical output. . . . 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. The gross electrical output data from the 2005 control period will be used for Unit 123 at SIPC. . . .
>
> 2) Heat input (HI). . . . 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 heat input from the 2005 control period will be used for Unit 123 at SIPC. . . . *Id*.

SIPC states that IEPA does not agree with the above amendment because it would have to adjust initial allocations that it has already calculated and submitted to USEPA to meet early deadlines. SIPC does not believe this is an adequate reason and notes that perhaps IEPA was premature in submitting a rule to USEPA prior to second notice. PC 13 at 4.

SIPC also asks the Board to amend Sections 225.435(a) and 225.535(a), which provide that the owners or operators of EGUs subject to CAIR may tell IEPA whether they want their initial allocations determined on the basis of gross electrical output or heat input converted to gross electrical output. As SIPC points out, however, the June 1, 2007 deadline for the owners or operators to submit their choices has passed. PC 13 at 4-5. Accordingly, without amendment, the rule "improperly contains a deadline that predates the final adoption and effectiveness of the rule." *Id*. at 5

SIPC prefers to have all allocations based upon heat input. SIPC states that any efficiencies from basing allocations on gross electrical output "are not available to SIPC and any other type of unit that has pollution control as part of the boiler." PC 13 at 5. Due to the "pre-adoption deadline contained in the rule," SIPC asks the Board to Sections 225.435(a) and 225.535(a) to reflect that initial allocations will be based only on heat input, with no conversions to gross electrical output. Later in its public comment, SIPC nevertheless requests that the Board amend the date by which sources must notify IEPA of their "choice regarding use of heat input or (converted) electrical output to a date after the rule is adopted." *Id*. at 6-7.

SIPC also points out that IEPA's proposed a revision to the formulae at Sections 225.465(b)(5)(B) and 225.565(b)(5)(B), with which the Board concurred, did not appear in the first-notice language through apparent inadvertent omission. PC 13 at 5-6. SIPC explains that the IEPA-proposed revision accommodates SIPC's CFB by changing the factor of 1.0 to 1.4 in the equation used to determine the number of allowances that SIPC may receive from the CASA. SIPC requests that the amendment be included at second notice. *Id*.

Public Comment 14: Midwest Generation

Midwest Generation seeks to amend the method used in Subpart F, Combined Pollutant Standards (CPS), for determining the flue gas flow rate. PC 14 at 1. According to Midwest Generation, in Section 225.615(g)(4), the flue gas flow rate:

> must be determined for the point of 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 100° F, or it may otherwise be

calculated from the stack flow rate, corrected for the difference in gas temperatures. *Id.*

Midwest Generation proposes to amend Section 225.615(g)(4) to allow for correction of the flue gas flow rate for the amount of "air in-leakage" between the injection location and the stack, in addition to the difference in gas temperatures already allowed under the proposed rule. PC 14 at 1. Midwest Generation maintains that allowing for this additional correction would provide several benefits. For example, the correction would provide a more accurate determination of the flue gas flow rate, resulting in a reduction of unnecessary sorbent use "where the cost of such sorbent is significant and where the supply of sorbent is limited and may be subject to shortfalls." *Id.* According to Midwest Generation, the correction would neither diminish neither the effectiveness of the applied sorbent nor the ability of an affected source to otherwise comply with mercury emissions limits.

Midwest Generation proposes the following amendments to the first-notice version of Section 225.615(g)(4):

(g)(4) For purposes of subsection (g)(3) of this Section, the flue gas flow rate must be determined for the point of 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 and air leakage into the ductwork after the point of injection as determined by measurement of O_2 or CO_2. Unless the Agency approves an alternative procedure, the following equations shall be used to determine the flow rate at the point of injection corrected for air in-leakage into the ductwork:

Corrected Flow Rate (acfm) = Stack Flow Rate (acfm) x (1-Air In-Leakage Factor)

where:

$$\text{Air In-Leakage Factor} = \frac{(\%O_2, \text{Stack, Wet} - \%O_2, \text{ESP Inlet, Wet})}{(20.9 - \%O_2, \text{Stack, Wet})}$$

or

$$\text{Air In-Leakage Factor} = \frac{(\%CO_2, \text{ESP Inlet, Wet} - \%CO_2, \text{Stack, Wet})}{(\%CO_2, \text{Stack, Wet})}$$

For purposes of this subsection, "acfm" shall mean actual cubic feet per minute. PC 14 at 2.

Public Comment 15: IEPA

IEPA stresses the need for expedited adoption of the CAIR proposal. According to IEPA, to avoid having USEPA's Federal Implementation Plan (FIP) allocate NO_x emission allowances in Illinois for the 2009 control period:

> Initial allocations based on a fully adopted state rule are required to be submitted to USEPA no later than September 30, 2007. If Illinois fails to either fully adopt its CAIR proposal by September 25, 2007, or submit final NOx allocations for the Annual and Ozone trading programs by September 30, 2007, USEPA will use the NO_x allocations for Illinois sources as set forth in the FIP. PC 15 at 2-3, citing 71 Fed. Reg. 25328 (Apr. 28, 2006).

Later in its public comment, IEPA emphasizes the "importance and urgency in the Board continuing to handle this rulemaking in an expedited manner such that a final rule is effective before September 2007 if at all possible." *Id*. at 4.

IEPA also responded to the issues raised in the public comments of SIPC and Midwest Generation. IEPA disagrees that the initial allocation methodology significantly disadvantages SIPC. PC 15 at 4. Even if SIPC did not have three years of "normal" operations during the initial look-back period, IEPA maintains that SIPC should not be treated differently from any other regulated source:

> In any regulation of general applicability, there will always be affected sources that say the rule affects them differently than somebody else. However, adding a special provision for SIPC raises the question of what other sources might have issues whereby they did not have "normal" operations during the look-back period – whatever "normal" might mean.
>
> ***
>
> [G]ranting a special, essentially site-specific, change in the regulation for SIPC opens the door to all other affected regulated entities to request special treatment as well. *Id*. at 4-5.

IEPA also maintains that giving SIPC special treatment in the rule would be unfair and harm other sources. Because Illinois has a fixed number of allowances, "[a]ny allowance that is given to SIPC must be removed from the allocation for another source – a source that has demonstrated a need for that allowance using the proper allocation calculation." PC at 5.

Additionally, IEPA asserts that SIPC's unit does not need the extra allowances. Based on SIPC's description of 2005 being its first "normal" year, IEPA estimated the approximate number of allowances SIPC would need for its unit. According to IEPA, the available information indicates that if SIPC:

> runs its control device throughout the year, it will easily have enough allowances, based on the draft allocations sent to USEPA by the Illinois EPA and posted on its website, to cover Unit 123. In addition, SIPC will almost certainly receive

> *additional* allowances from the CASA. This means SIPC should not only have enough allowances to cover emissions from Unit 123, but also have enough allowances to bank or sell. PC 15 at 4-5 (emphasis in original).

IEPA further disagrees with SIPC's call for initial allocations to be based solely on heat input. IEPA is aware that the deadline for submitting gross electrical output data has already passed and therefore needs to be modified in the rule. IEPA's public comment proposes language to remedy that problem. PC 15 at 5. SIPC's concerns about efficiency, continues IEPA, have been addressed at length in this record. Even though one of SIPC's boilers may not be as efficient as others in the State, IEPA explains, CFB boilers were considered in the design of the regulation and:

> Any perceived shortfall in allowances allocated to this unit due to differences in efficiency should be exceeded by additional allowances allocated from the CASA. It should also be noted that virtually all electrical generating utility ("EGU") boilers in Illinois operate pollution control equipment that reduce the overall efficiency of a given unit. This is addressed by the allocation methodology being based on gross electrical output rather than net electrical output. *Id*. at 5-6.

In addition, IEPA disputes SIPC's suggestion that IEPA opposes SIPC's heat input position because IEPA would need to adjust allocations submitted to USEPA. According to IEPA, SIPC has apparently misunderstood IEPA's reasons for opposition, none of which "have anything to do with previous submittal of allocations nor USEPA's parallel processing. PC 15 at 6.

IEPA also disagrees with Midwest Generation's suggestion to add a provision to the CPS designed to correct the determination of the flue gas flow rate for air leaked in between the mercury sorbent injection location and the stack. IEPA notes that the sorbent flow language in the CPS matches equivalent language in the Multi-Pollutant Standard (MPS) at Section 225.233(c)(2)(D). According to IEPA, changing the CPS without likewise changing the MPS would be "inappropriate and unfair to those sources planning to make use of the MPS." PC 15 at 7. Moreover, continues IEPA, Midwest Generation "has only brought this issue to the Illinois EPA's attention one week prior to the end of first notice comment period." *Id*. at 8. IEPA states therefore that it has not had an opportunity to properly review "the implications of such a change." *Id*. IEPA maintains that Midwest Generation's proposal is a "last-minute modification with unforeseeable consequences." *Id*.

Lastly, IEPA proposes a number of clarifications and corrections to the first-notice rule language. According to IEPA, the proposed changes are of four types: (1) changed dates within the CAIR rule to avoid retroactive application; (2) changes based on comments received from USEPA; (3) previously proposed amendments that were inadvertently omitted from first notice; and (4) "some typos that need correction and some clarifications that need to be made." PC 15 at 7; see also PC 15 at 7-34, Attachments.

Public Comment 16: Zion

Zion focuses on two elements of the rule as proposed at first notice: fuel-weighting, and the CASA. Zion contends the "the Board has failed to adequately address or reasonably incorporate comments about" these issues into the proposed rule. PC 16 at 1.

Fuel-Weighting

The first-notice proposed rule includes the fuel-weighting factor recommended by IEPA: 1.0 for coal-fired units, 0.6 for oil fired units, and 0.4 for gas-fired units. This is identical to the federal CAIR model rule.

While still maintaining that fuel neutrality is viable, Zion urges the Board to amend Sections 225.435, 225.445, 225.535, and 225.545 by adopting Zion's previously-recommended compromise alternative fuel-weighting factor of 0.7 for both gas-fired and oil fired units. PC 16 at 2. Zion suggests that IEPA rejection of Zion's positions has two bases, neither of which can withstand scrutiny.

IEPA's first basis, according to Zion, is that because coal-fired sources emit higher rates of NO_x and SO_2, reductions at these sources will have higher benefits, so that these sources are more likely to be controlled. PC 16 at 3, citing PC 5 at 4-5. Zion believes that this basis may sound more logically accurate than is the case. Zion opines that the current allocation of allotments operates as an "emission limit" that results in a less stringent "emission limit" for coal-fired units at the expense of gas and oil-fired units. Zion calculates that as compared to a fuel-neutral allotment approach, under the current proposal, there are approximately 10% more allowances for coal-fired units, while gas-fired units would receive 56% fewer allowances and oil-fired units 34% fewer allowances. PC 16 at 3-4.

Zion suggests that under a cap and trade program such as CAIR, unit owners compare the cost of installing and operating controls versus purchasing allowances. Rather than increasing controls of coal-fired units, Zion predicts that:

> by reducing the gap between allocations and actual emissions for coal fired units, the Proposed Rule will have just the opposite effect—it will create a disincentive to install controls and reduce the financial incentive for units with existing controls to increase their reduction capabilities and "over-control"(footnote omitted). PC 16 at 4-5.

Zion points to IEPA's experience with its own fuel-neutral NO_x Budget Trading Program as an example both of a "highly successful method of achieving reductions," and of how as:

> control installations have allowed companies to over-control and generate excess allowance, the cost of compliance via the 'purchase' [of allocations] route has been significantly reduced, thus making it a more attractive option than installing new or enhancing existing emission control. PC 16 at 5.

Zion concludes that adoption of the proposed rule would reduce the largest emitters' incentive to install controls on their most emitting units. *Id.* at 6.

IEPA's second basis, Zion relates, is that the State's economic analysis found the NO_x policy to be economically reasonable based upon fuel-weighting, and that deviation from it would impact the economic analysis of the proposal. PC 16 at 6. In this context, IEPA noted that the fuel-weighting factors proposed are identical to those in the federal CAIR model rule. *Id*. at 3. Zion believes this basis is faulty as well. According to Zion, IEPA's economic analysis "has been shown during the public hearing process to fail to stand up to scrutiny." *Id.* at 6. Zion also concludes that using the federal CAIR fuel-weighting factors does not support the proposal because the factors' "impact is substantially different on sources like Zion due to other elements of the Proposed Rule that are not included in the federal CAIR model rule (*e.g.* CASA and its size)." *Id.*

Clean Air Set-Aside (CASA)

Zion maintains that the Board should reduce the size of the CASA found in Sections 225.445, 225.460, and 225.465 to more equitably address comments and the evidence in the record. PC 16 at 6. Zion reiterates the position taken before first notice that the CASA should be revised in two ways. *Id*.

First, Zion believes that a smaller portion of the total allowance budget should be made available for non-emitting sources. PC 16 at 6-7. Rather than the proposed 25%, Zion suggests a CASA set-aside of 5 to 10%, which it asserts is more in line with other states including Minnesota. *Id.* at 7. Zion asserts that the 25% CASA "unjustifiably increases the compliance burden on facilities that already face significant emission reduction obligations through an artificial reduction in allowances available for allocations." *Id*.

Second, Zion suggests that applicants for CASA be limited to electric generating units and that non-generating sources (*e.g.*, energy efficiency projects and demand-side management project) not be considered. PC 16 at 7. Zion maintains that allowing non-generating sources to apply for CASA will give "unwarranted financial incentives to non-emitters that have no direct compliance burden," especially as economic incentives are already available. *Id*. Zion believes that failing to restrict CASA applicants will provide even more stringent reduction obligations for affected units. *Id*.

Zion maintains that the record is replete with commenters who support its position on CASA. PC 16 at 7-8. However, Zion opines that despite the evidence in the record, IEPA continues to reject a proposed reduction to the CASA size and the Board "seems to accept the Agency's positions regarding the need for the existing size of CASA." *Id.* at 8. Zion characterizes IEPA's position as consisting of four claims:

1. Illinois 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

efficiencies/renewable energy (EE/RE) efforts for zero emission generation, and a small pool to undertake these projects early on) whose individual contribution will benefit the environment;

2. each of the CASA project categories assists Illinois EPA in their duty to attain the National Ambient Air Quality Standard (NAAQS);

3. results of a financial analysis of the impact, under a worst-case scenario where the entire 30% [set-aside] was retired, showed that the reliability of the grid would be intact and that residential and commercial electric rates would not be greatly impacted; and

4. the positive impacts for Illinois outweigh the concomitant detriment posed by Illinois EPA's choice for a 30% set-aside. *Id.*, citing PC 5 at 7.

As to IEPA's first claim, that CASA is necessary to promote other Illinois interests, Zion believes the position is misplaced. PC 16 at 8. Zion opines that IEPA relied upon the Governor's Sustainable Energy Plan to justify the large size of the CASA; however, IEPA has acknowledged that it is not responsible for implementing the renewable portfolio standard in Governor's Sustainable Energy Plan. *Id.* at 8-9.

Zion also believes IEPA second claim, that the size of CASA is necessary to achieve NAAQS, is without merit. PC 16 at 9. Zion points to IEPA's testimony indicating that CASA will not reduce NO_x emissions in Illinois even if the entire 30% is retired. *Id.* Zion also asserts that IEPA "admitted during the hearing that the Chicago area has already attained the 8-hour ozone standard without the Proposed Rule." *Id.* Zion indicates that Illinois' return to ozone attainment has been confirmed by two recent redesignation proposals, which were possible without this rule. *Id.* Zion further comments that CAIR is an interstate rule and as such "local reductions will not necessarily be tied to improvements in Illinois' air quality or attainment goals." *Id.* Zion argues that, in effect, the proposed CASA will place an increased burden on Illinois, resulting in primarily benefits, if any, in other areas. *Id.* at 9-10.

Zion reiterates that the financial analysis IEPA is relying upon to support the size of CASA did not withstand the scrutiny of the public comment period. PC 16 at 10. Further, Zion maintains that IEPA did not bolster the economic analysis after the attacks upon the analysis and IEPA admitted that the analysis performed was revised before submission to the Board. *Id.*

Finally, Zion maintains that IEPA has no support in the record for its position that the positive impacts of the 30% set-aside outweigh the concomitant detriments. PC 16 at 10. Zion notes that IEPA has not clearly explained what the positive impacts are or whether the same positive impacts would occur with a smaller CASA. *Id.* According to Zion, IEPA and the Board have not fully evaluated the detriment posed by the 30% set-aside. *Id.* Zion further claims that the full evaluation of the detriments is lacking especially when comparing the full economic impact on businesses in Illinois to similar businesses outside Illinois that have "far less reaching or aggressive" CAIR standards. *Id.*

PC 17: Kincaid and Dominion

Kincaid begins its public comment by noting that Dominion owns and operates the 1,250 megawatt coal-fired Kincaid Generation, LLC power plant located in Kincaid, Illinois, and holds a 50% interest in the 1,400 megawatt natural gas-fired Elwood Energy, LLC combustion turbine plant located in Elwood, Illinois. PC 17 at 1.

According to Kincaid and Dominion, Subparts D (CAIR NO_x Annual Trading Program) and E (CAIR NO_x Ozone Season Trading Program) of the first-notice rules "far exceed the federal CAIR requirements and will competitively disadvantage Illinois businesses and electricity ratepayers." PC 17 at 1. Kincaid and Dominion do not support the 25% CASA of NO_x allowances under proposed Sections 225.455 and 225.555. *Id*. They feel that IEPA has failed to justify that the level of the proposed set-aside is necessary from an air quality perspective. They also believe these provisions "will significantly increase compliance costs for Illinois sources and competitively disadvantage the state relative to surrounding states" by denying Illinois the economic advantages of the USEPA trading program that many other surrounding states will realize. *Id*. at 1-2.

Kincaid and Dominion further do not support the proposed withholding of allowances from the Compliance Supplement Pool under Section 225.480 of the CAIR NO_x Annual Trading Program proposal. They argue that these allowances are provided in the USEPA rule to "encourage early reductions during 2007 and 2008." PC 17 at 2. Kincaid and Dominion note that Illinois included early reduction provisions in its NOx SIP Call rules:

> These early reduction incentives not only provide companies added compliance flexibility that ease the burden once the requirements take effect, but benefit the environment as well by providing real emission reductions sooner. *Id*.

Kincaid and Dominion assert that IEPA "should justify any 'beyond CAIR' NO_x reductions with a thorough modeling demonstration." PC 17 at 2. They feel that it is neither reasonable nor environmentally justified to require all Illinois sources subject to CAIR to implement "beyond CAIR" reductions "across-the-board" for the purpose of resolving "local problems" of nonattainment. *Id*. Kincaid and Dominion urge IEPA to conduct a thorough modeling demonstration to determine the "level of reductions that may be necessary to resolve any residual nonattainment problems following implementation of the CAIR reductions." *Id*.

According to Kincaid and Dominion, the 25% NO_x set-aside is "unreasonably burdensome" to Illinois generators and their customers and "has not been demonstrated to be necessary to achieve attainment with the ambient air quality standards." PC17 at 2. Kincaid and Dominion quote USEPA in stating that the program is designed "to balance the burden for achieving attainment between regional-scale and local-scale control programs." *Id*., citing 70 Fed. Reg. 25166 (May 12, 2005). Kincaid and Dominion do not believe it is necessary for Illinois to have "beyond CAIR" NO_x reductions, and instead propose "full adoption of USEPA's federal 'model rule' on the same schedule established by the USEPA." *Id*. at 3.

Kincaid and Dominion state that recent air quality modeling by the Lake Michigan Air Directors Consortium (LADCO) suggests additional NO_x reductions from the EGU sector, beyond the reductions expected from federal CAIR, "will not solve the residual ozone and $PM_{2.5}$ non-attainment problem in the Chicago area." PC 17 at 3. According to Kincaid and Dominion:

> A comprehensive attainment plan should be thoroughly researched and fully developed that clearly and conclusively demonstrates the level of emissions reductions needed and the source categories for which the most efficient and effective reductions can be achieved. Only when this plan has been fully developed will IEPA have the justification to proceed with "beyond CAIR" reductions. *Id*.

Kincaid and Dominion argue that further EGU reductions of SO_2 and NO_x are "unlikely to impact $PM_{2.5}$ concentrations sufficiently to achieve attainment in any residual $PM_{2.5}$ nonattainment areas in Illinois or in other states." PC 17 at 3. They therefore assert that mandated "beyond CAIR" EGU reductions of SO_2 and NO_x "may not be necessary, cost effective or even have any beneficial effect" on reducing monitored $PM_{2.5}$ particle concentrations. *Id*. Kincaid and Dominion feel 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 and Dominion also reference recent modeling funded by the Midwest Ozone Group, the Illinois Environmental Regulatory Group, the Illinois Energy Association, and others, conducted by Alpine Geophysics. This modeling used "a finer, 4 kilometer grid and 2005 as a base year." PC 17 at 4. Kincaid and Dominion state that the modeling results, which they have reviewed with LADCO staff, indicate that:

> all the monitors in the 5-state (Illinois, Indiana, Wisconsin, Ohio and Michigan) region will attain both the ozone and the $PM_{2.5}$ ambient air quality standards by 2015, when Phase 2 of the federal CAIR rules becomes effective. *Id*.

According to Kincaid and Dominion, "[i]t does not appear that further regional reductions by the utility sector will make a significant difference in the attainment status of the Chicago MSA." PC 17 at 4. Instead, based on an analysis presented at an October 18, 2005 meeting of the Indiana Department of Environmental Management Utility Rules Workgroup, further utility emission reductions "actually cause ozone levels to increase in the Chicago MSA." *Id*. Kincaid and Dominion also point out that data presented at the meeting indicate that Illinois EGU NOx emissions contribute approximately 4% of the ozone resulting in Chicago nonattainment, behind ozone contributions from "Boundary Conditions" or sources outside the 5-state region (38% of the ozone from NO_x and VOC), "Illinois On-road" or mobile sources (26% of the ozone), and "Illinois Non-road," "Illinois Non-EGU," and "Indiana On-road" sources. *Id*. Kincaid and Dominion therefore support implementing CAIR as established by USEPA, "and then work with sources in local nonattainment areas to determine the appropriate mix of reductions needed to resolve remaining local nonattainment area issues." *Id*.

BOARD SECOND-NOTICE DISCUSSION

The Board has received five first-notice public comments. In this portion of the opinion, the Board first addresses the remaining contested issues presented in those comments. The Board then discusses amendments proposed to the rule language adopted at first notice.

Contested Issues Analysis

The following contested issues were raised in public comment filed during the first-notice period, though many of these issues were previously posed to the Board and addressed in the Board's first-notice decision: (1) determination of allocations for SIPC for 2009 – 2011; (2) allocations based on gross electrical output instead of heat input; (3) proposal to correct for "air in-leakage"; (4) fuel-weighting factors; (5) aspects of the CASA (size, availability, purpose, economic impact); and (6) withholding allowances from the Compliance Supplement Pool (CSP).

As detailed below, the Board finds at second notice that none of these disagreements warrant any changes to the Board's first-notice proposal. The Board now addresses each of the issues separately.

Determination of Allocations for SIPC for 2009 - 2011

The first-notice rule for allowance trading includes a "look-back" period that would be updated on an annual basis to determine an EGU's allowances. Although the proposal provides for a two-year look-back period, the initial look-back period for the 2009 – 2011 control periods uses data from the three highest control periods of 2001 through 2005. SIPC states that during the look-back period of 2001 – 2005, there were not three years of operation that SIPC considers "normal" for the purposes of calculating a representative number of allocations. PC 13 at 1-2.

As the Board discussed in its first-notice opinion, the initial look-back period was expanded from two years to five in response to concerns presented to IEPA before the proposal was filed with the Board. Stat. at 48. When SIPC reiterated its concerns with the first-notice proposal, IEPA responded that "the calculation methodology is fair and equal to all sources in the program," and that carving out a special provision for SIPC would "open the door" to all other sources that might have similar issues. PC 15 at 4-5.

The Board recognizes that each regulated entity might have factors that would affect their number of allocations if more than just the gross electrical output or heat input data from the look-back period were considered. Because Illinois has a fixed number of allowances, the Board finds that each source's operating history should be treated as equally as possible. The two-year look-back period, updated annually, also provides a means for IEPA to periodically reevaluate the changes in operating patterns and the resulting allocations. As stated at first notice, the short look-back period allows for the quick accounting of high and low usage years. For these reasons, the Board declines to adopt SIPC's recommendation.

Allocations Based on Gross Electrical Output vs. Heat Input

The first-notice proposal bases allocations on converted gross electrical output. In its latest public comment, SIPC maintains that it would prefer that allocations were based upon heat input instead of gross electrical output because SIPC employs pollution control as part of the boiler. PC 13 at 5. IEPA acknowledges that although operating pollution control equipment reduces the overall efficiency of a unit, virtually all EGU boilers in Illinois are similarly affected. PC 15 at 6.

In his prefiled testimony, IEPA's Rory Davis testified that the output-based allocation methodology "encourages greater efficiency from sources by allocating based on output rather than use of fuel, adds a degree of flexibility in compliance strategies for sources, as is true for most trading programs, and is consistent with the allocation methodology used for the Clean Air Set-Aside." Ag. Exh. 9 at 2. Davis explains:

> Many of the categories of the CASA eligible for allowances for environmentally beneficial practices do not include a measure of heat input, and measuring heat input for other eligible categories would be inconsistent with the goals of the CASA. These include zero emission electrical generation, energy efficiency projects, clean coal technology projects, and pollution control technology upgrades. Further, it would not promote the goals of the CASA to allocate a greater number of CASA allowances for a greater measure of heat input. In addition, employing an output-based allocation methodology creates a level playing field where the production or conservation of electricity by the specified means in the CASA is encouraged in the same manner that allowances are allocated to affected CAIR sources. *Id.*

Although USEPA gave the states discretion in choosing their methods of allocation, USEPA had this to say about its own methodology in a discussion referring to cogeneration units:

> The use of modified output, rather than actual heat input, as the basis of determining allowance allocations will promote the development of cleaner more efficient generation of both electricity and process steam . . . . This approach neglects energy losses in the combustion turbine and generator. [US]EPA believes that any efficiency gains made by reducing these losses will be rewarded by [USEPA's] approach, by resulting in greater electricity and/or steam output for a given amount of heat input. 71 Fed. Reg. 25358 (Apr. 28, 2006).

The Board appreciates that different system configurations might detract from allowances allocated to a unit, but understands from IEPA that this affects most all boilers in Illinois similarly: "virtually all electrical generating utility ("EGU") boilers in Illinois operate pollution control equipment that reduce the overall efficiency of a given unit." PC 15 at 5-6. The Board remains convinced that using gross electrical output to determine allocations has the benefit of encouraging efficiency and providing a compatible way to determine allowances for CASA projects that might have no definable heat input.

Correcting for "Air In-Leakage"

Midwest Generation proposes to add a provision to Section 225.615(g)(4) of the Combined Pollutant Standards (CPS) that it claims would correct the determination of the flue gas flow rate for air leaked in between the mercury sorbent injection location and the stack. PC 14 at 1. By adjusting the flue gas flow rate for air leaked in, Midwest Generation states that less sorbent would be wasted without diminishing the effectiveness of the treatment. Midwest Generation estimates the average "air in-leakage" at each unit accounts for 10 to 15% of the total flue gas flow and "air in-leakage does not contain any emissions, let alone additional concentrations of Mercury." *Id*. at 1-2.

The first-notice rule contained only a provision to correct the flue gas flow rate for the difference in gas temperatures between the point of injection and the stack. As noted by IEPA, this provision matches the language in the Multi-Pollutant Standard (MPS) found at Section 225.233(c)(2)(D) of Subpart B on the control of mercury emissions from coal-fired electric generating units. PC 15 at 6. IEPA expressed concern about changing this provision in the CPS without a corresponding change in the MPS and further analysis on the possible consequences. PC 15 at 6.

The Board notes that although Midwest Generation states sorbent costs are significant and supply may be limited, it does not include an economic analysis or cost figures to quantify the sought-after benefit. Midwest Generation's proposal also does not illustrate the derivation of the equations or relate the adjustment to the correction for gas temperature. The Board finds that at this point in the rulemaking process, the justification for the equations proposed by Midwest Generation has not been adequately developed and the Board accordingly declines to adopt the change.

Fuel-Weighting Factors

The first-notice proposal contained fuel-weighting factors for calculating a unit's converted gross electrical output: 1.0 for coal-fired; 0.6 for oil-fired; and 0.4 for other fuels such as natural gas. Zion again argues that the fuel-weighting factors should be revised either to a fuel-neutral position or to reflect a factor of 0.7 for both natural gas-fired and oil-fired units. PC 16 at 2. Zion presents the 0.7 value as representing a compromise alternative fuel-weighting factor to close the gap between the fuel-neutral and fuel-weighted options. According to Zion, the alternative factor is intended to provide additional consideration for reliability when natural gas is unavailable, power demand is high, or reliability is critical. *Id*.

The Board quotes from USEPA's discussion of fuel weighting:

> [US]EPA proposed an allocation methodology based on the example allocation methodology in the CAIR SIP model rules, which included adjustments to heat input by fuel type, using fuel adjustment factors that are based on average historic NO_x emissions rates by 3 fuel types (coal, natural gas, and oil) for the years 1999-2002. These adjustment factors are 1.0 for coal-fired units, 0.6 for oil-fired units,

> and 0.4 for units fired with all other fuels (e.g., natural gas). The factors reflect inherently different emissions rates of different fossil fuel-fired units.
>
> ***
>
> [US]EPA believes that these adjustment factors appropriately consider the inherently higher emissions rate of coal-fired units and the relatively greater burden on these units to control emissions. 71 Fed. Reg. 25357 (Apr. 28, 2006).

The proposal contains fuel-weighting factors that are identical to the federal CAIR model rule and reflect different burdens to control emissions. As stated by USEPA, the factors are based on historic NO_x emissions rates of which natural gas was one of the three fuel types specifically assessed and assigned a factor of 0.4. USEPA used fuel types in determining the state budgets. Stat. at 35. Zion's proposal to use a factor of 0.7 does not appear to be based on historic emissions rates, but rather represents a mid-point between the high 1.0 and low 0.4 factors. PC 3 at 2. Zion intends its alternative factor to account for the burden of reliability problems with natural gas, but USEPA focused on the burden of controlling emissions.

Coal-fired power plants represent the predominant sources of NO_x and SO_2 in Illinois and likewise have higher emission rates for both pollutants. As the Board observed at first notice, reductions at these sources therefore will provide the greatest benefits, and the more feasible controlling these emissions is under the rule, the more likely they are to be controlled. Accordingly, the Board does not modify the first-notice approach to fuel-weighting.

Clean Air Set-Aside (CASA)

Size of the CASA. For energy efficiency and conservation, renewable energy, and clean technology projects, the first-notice proposal contains a CASA of 25% of the federal allocations. The size of the proposed allocations reserved for the CASA continues to concern Kincaid and Zion. Zion believes a smaller allowance budget should be made available, suggesting 5-10% to be more comparable to other states. PC 16 at 7.

IEPA's Statement of Reasons provides that:

> extensive modeling analysis has shown that Illinois will need to go significantly beyond the CAIR NO_x and SO_2 reductions to attain the $PM_{2.5}$ and 8-hour ozone NAAQS. *See*, TSD 3.2. This set-aside, if unused, can be part of a larger plan to reach attainment. Stat. at 50.

IEPA acknowledges that the size of the CASA will not equate to an equal amount of emission reduction, but maintains that "it will lead to an improvement in air quality as it will encourage more efficient and cleaner operating technologies to enter the market place." *Id*. As IEPA expects the demand for energy to increase, ensuring commensurate air quality improvement requires reduced demand for energy from fossil fuel-fired plants, and an increase in renewable energy sources. *Id*. at 51.

USEPA left the decision on using set-asides up to the states, so they may craft their allocation approaches to meet their state-specific policy goals. 70 Fed. Reg. 25279 (May 12,

2005). This flexibility under CAIR allows Illinois to use set-asides, like CASA, as a tool to promote energy efficiency, clean technology, and renewable energy. Stat. at 51. USEPA explains that such tools encourage innovate approaches to generating emission reductions:

> In light of the increasing incremental cost associated with stationary source emission reductions and the difficulty of identifying additional stationary sources of emission reduction, [US]EPA believes that it needs to encourage innovative approaches to generating emission reductions. Consequently, [US]EPA believes that it is appropriate and consistent with the [Clean Air] Act to allow a percentage of the total emission reductions needed to satisfy ROP [Rate of Progress], RFP [Reasonable Further Progress], attainment, and maintenance requirements to come from programs that may not fully meet the traditional requirements [of Sections 110, 172, 182, and 175A of the CAA]. *Incorporating Emerging and Voluntary Measures in a State Implementation Plan*, USEPA (Sept. 2004) at 8.

USEPA also advises that "[i]t is . . . important to encourage and reward greater application of energy efficiency and renewable energy measures and incorporate the emission reductions that these measures will accrue into the air quality planning process." *Guidance on SIP Credits for Emission Reductions from Electric-Sector Energy Efficiency and Renewable Energy Measures*, USEPA (Aug. 5, 2004) (USEPA, Aug. 2004 Guidance) at 1.

The first-notice proposal sets aside percentages for four categories making up the CASA:

- Energy Efficiency and Conservation Projects/Renewable Energy Generation: 12%
- Pollution Control Upgrade: 5%
- Clean Coal Technology: 6%
- Early Adopters: 2%

IEPA explains that a portion of the set-asides comes about from Section 9.10 of the Act (415 ILCS 5/9.10 (2006)), which prescribes a percentage of the State's energy production that should come from renewable energy: 5% by 2010 and 15% by 2020. Stat. at 51. The 12% figure is a combined value representing the renewable energy initiative of Section 9.10 coupled with energy efficiency and conservation. This value is consistent with the USEPA recommendation that a set-aside for the combination of EE/RE range between 5% and 15%. *Id.* at 33. USEPA guidance suggests other types of energy projects can also be encouraged through set-asides. USEPA, Aug. 2004 Guidance at 3-4. IEPA proposes the additional categories above, adding on another 13% of the budget to encourage new air pollution controls, cleaner technology, and early adoption of such projects. Stat. at 51.

As stated at first notice, the Board finds that the set-asides proposed by IEPA are appropriate. The allocations under the CASA categories work toward addressing the Section 9.10 initiative while "encouraging a more diverse universe of energy producers." Stat. at 49.

Availability of the CASA. Zion renews its suggestion that applicants for CASA allowances be restricted to electric-generating sources, eliminating non-generating sources (*e.g.*, energy efficiency projects and demand-side management projects) from applying for CASA

allowances. PC 16 at 7. The restriction, Zion continues, will make more allocations available to affected units for compliance. Without the restrictions, Zion states that IEPA would be offering "unwarranted financial incentives to non-emitters that have no direct compliance burden." *Id*. In support of these restrictions, Zion adds that such efficiency and demand-side management projects already realize economic incentives through "reductions in direct energy costs and tax breaks." *Id*.

Allowing non-generating sources to apply for CASA allowances is consistent with the approach taken with the Emission Reduction Market System (ERMS) for volatile organic material (VOM) trading. 35 Ill. Adm. Code 205. In part like the rules proposed for second notice here today, ERMS was designed to:

> Implement innovative and cost-effective strategies to attain the national ambient air quality standard (NAAQS) for ozone and to meet the requirements of the Clean Air Act. 35 Ill. Adm. Code 205.110(a).

ERMS provides for open trading, specifically allowing "Special Participants":

> c) Special Participants
>
> Any person may purchase ATUs [Allotment Trading Units] to retire for air quality benefit only. Such person shall be a special participant and shall register with the Agency prior to its first ATU purchase. Special participants will not have Transaction Accounts in the Transaction Account database. All ATUs purchased by special participants will be retired effective on the date of purchase and will be listed as retired in the appropriate database. 35 Ill. Adm. Code 205.610(c).

A "Special participant" in ERMS means "any person that registers with the Agency and may purchase and retire ATUs but not sell ATUs, as specified in Section 205.610 of this Part." 35 Ill. Adm. Code 205.130.

The open trading policy is the approach the State took in ERMS, an earlier example of pollution trading. Zion does not cite to the issue of restricting trade in the federal discussion. The Board finds the ability for non-generators to apply for CASA allowances is consistent with the open trading policy of ERMS at the State level and promotes energy efficiency.

Purpose of the CASA. In criticizing the 25% CASA as "unreasonably burdensome," Kincaid and Dominion maintain that IEPA should justify "beyond CAIR" reductions with a modeling demonstration to determine the level of reductions needed to resolve residual nonattainment problems after CAIR is implemented. PC 17 at 2. Kincaid and Dominion also state that "beyond CAIR" reductions may not have any beneficial effect on reducing $PM_{2.5}$. *Id*. at 3. Kincaid and Dominion claim that modeling conducted by Alpine Geophysics, dated March 20, 2007, indicates that Illinois, Indiana, Wisconsin, Ohio, and Michigan will attain both the ozone and $PM_{2.5}$ ambient air quality standards by 2015, when Phase 2 of the CAIR rules becomes effective. *Id*. at 3-4.

To clarify, the Board notes that the 25% CASA set-aside does not equate with emissions reductions. Rather, the CASA represents a portion of the NO_x emissions allowances to be used for particular purposes, *i.e.*, EE/RE, pollution control upgrades, clean coal technology, and early adopters. Accordingly, the CASA itself is not a "beyond CAIR" reduction. That said, in IEPA's Statement of Reasons, IEPA responded to a suggestion that set-asides be retired only if modeling showed an air quality benefit would result. According to IEPA, a "modeling demonstration would not be particularly instructive in this instance. The effect of emissions reductions are incremental and no measure alone will assure attainment." Stat. at 52. IEPA continued by listing several other control measures that it intends to pursue before seeking additional reductions in SO_2 or NO_x from EGUs. *Id*.

Zion reiterates IEPA's testimony at hearing that the proposed CASA and NUSA would not reduce NO_x emissions in Illinois even if the entire 30% were retired, and that the Chicago area has already attained the 8-hour ozone standard without implementation of the proposed rule. PC 16 at 9. Zion observes that local reductions will not necessarily result in improvements in Illinois because CAIR is regional program, and Illinois will experience a burden from CASA that will have primary benefits in other areas. *Id*.

Again, the Board emphasizes that the allowances in the CASA are not simply being retired. This contrasts with the Compliance Supplement Pool, discussed below. At hearing, James R. Ross, Manager of the Division of Air Pollution Control in IEPA's Bureau of Air, testified in response to the question of whether the "primary purpose behind the proposal of the CASA in its form [is] to result in reduced emissions, or was there a different purpose that was driving the Agency's proposal?" (Tr. at 91 (Oct. 10, 2006, a.m.):

> The primary purpose was to encourage energy efficiency, renewable energy, clean technology and early adopters, and as I stated, to the extent that those result in additional NO_x reductions, we would expect corresponding improvements to public health and air quality (*id*.).

The Board further notes that neither of Illinois' ozone nonattainment areas has been redesignated as having attained the 8-hour ozone NAAQS. Moreover, in its Statement of Reasons, IEPA stated that it:

> presented modeling indicating that neither the greater Chicago nor Metro-East nonattainment areas will attain the $PM_{2.5}$ NAAQS by the attainment dates nor will the greater Chicago area attain the 8-hour ozone NAAQS by the attainment date. Moreover these areas will not reach attainment in 2018, 3 ½ years after the implementation of Phase II of the CAIR SO_2 and NO_x trading programs. *See*, TSD 3.2. Illinois will need between 30 and 35 percent reductions of NO_x beyond the CAIR to achieve the current $PM_{2.5}$ NAAQS. Stat. at 51-52.

Finally, the Board finds it useful here to keep in mind the regional nature of CAIR, as described by USEPA:

> The [US]EPA conducted extensive air modeling to determine the extent to which emissions from certain upwind States were impacting downwind nonattainment areas. All States found to contribute significantly to downwind $PM_{2.5}$ [and 8-hour ozone] nonattainment and maintenance problems are included in the CAIR region . . . . 71 Fed. Reg. 25304 (Apr. 28. 2006).

> In addition, the CAIR will improve $PM_{2.5}$ and 8-hour ozone air quality in the areas that would remain in nonattainment for those two NAAQS after implementation of the CAIR. Because of CAIR, the States with those remaining nonattainment areas will find it less burdensome and less expensive to reach attainment by adopting additional local controls. 71 Fed. Reg. 25333 (Apr. 28, 2006).

Economic Impact of the CASA. Zion expressed reservations over the reliance on the "Analysis of Illinois NOx Budget Reductions by ICF Resource Incorporated using the Integrated Planning Model [IPM]." PC 16 at 10. Zion associates the size of the CASA with a detrimental economic impact to Illinois businesses when compared to businesses in other states that will be subject to less aggressive CAIR standards. *Id*. Kincaid and Dominion follow this idea, stating that the proposed CASA provisions will competitively disadvantage Illinois businesses and electricity ratepayers relative to surrounding states. PC 17 at 1.

Although Zion, Kincaid, and Dominion express concern regarding the economic implications of the rule, the companies do not provide for the rulemaking record a comparative economic analysis of the predicted retail electricity rates in surrounding states to demonstrate or quantify a competitive disadvantage for Illinois businesses or electricity ratepayers.

USEPA gives a regional perspective on the economics of the rule, stating that:

> incentives provided by cap-and-trade encourage economically efficient compliance over the entire region . . . . The economically efficient outcome will not depend on the relative levels of individual unit allowance allocations. 71 Fed. Reg. 25357 (Apr. 28, 2006).

As to the potential benefits to the economy from the approaches like CASA, USEPA states:

> [Energy efficiency and renewable energy] measures can save money, have other economic benefits, reduce dependence on foreign sources of fuel, increase the reliability of the electricity grid, enhance energy security, and, most importantly for air quality purposes, reduce air emissions from electric generating power plants. USEPA, Aug. 2004 Guidance at 1.

As stated at first notice, the Board considered the USEPA findings on CAIR NO_x and SO_2 control technology costs, the IPM modeling provided by IEPA, and IEPA modeling used to determine the cost impact of CASA on Illinois electricity rates. The modeling projects that retail electricity rates will not change, and there was a slight change in average production costs. TSD Table 7.6. The Board finds that no new information has been presented in this rulemaking

record to warrant the Board altering its first-notice finding that the proposal is economically reasonable.

Compliance Supplement Pool (CSP)

USEPA created a Compliance Supplement Pool (CSP) for the first year of the CAIR program that states may elect to distribute through early reduction credits or through direct distribution for a demonstrated hardship or disruption in the electricity supplied to the grid. Illinois received 11,299 CAIR NO_x allowances in the CSP for the 2009 control period. Stat. at 31. IEPA has proposed retiring the allowances in the CSP in the interest of "working toward a timely attainment of [the 8-hour ozone and $PM_{2.5}$] NAAQS." Stat. at 36; *see* proposed 35 Ill. Adm. Code 225.480.

Kincaid, Dominion, Dynegy, and SIPC do not support IEPA's plan to withhold the allowances from the CSP. PC 6 at 35; PC 17 at 2. Kincaid and Dominion state that the CSP allowances used as early reduction incentives provide compliance flexibility and "real emission reductions sooner." PC 17 at 2. IEPA views the CSP as counter-productive:

> Given the difficulty that the State will face in attaining the $PM_{2.5}$ and 8-hour ozone NAAQS, to have an additional 11,299 tons (for the annual NOx program) emitted during the critical years that are being used to determine attainment is counter productive. Further, the State may take SIP credit for retirement of these allowances. Stat. at 36.

Although different than having a CSP for early reduction incentives, the Board notes that for early adopters, the 2% CASA would provide 1,525 and 614 allowances for Phase I (2009 – 2014) NO_x annual and ozone season trading, respectively. The Board agrees with IEPA that distributing the one-time allowances in the CSP for the 2009 control period would be counter-productive to Illinois' attainment efforts.

Rule Language Changes from First to Second Notice

In its first-notice public comment, IEPA proposed a number of "clarifications and corrections" to the rules proposed at first notice. PC 15 at 7. IEPA further describes its proposed revisions:

> a number of dates in the proposal, if left unchanged, would require retroactive compliance. The Illinois EPA has also received a second set of comments from USEPA and has noticed that a number of the amendments that it recommended in its January 5, 2007, comments to the Board on the initial proposal were not included in the first notice. In addition, there are some typos that need correction and that some clarifications that need to be made. *Id*.

IEPA's public comment, like the other four first-notice public comments, was filed on the last day of the public comment period, June 25, 2007. The Board nevertheless has not received any motion for leave to file *instanter* a public comment in response to these IEPA-proposed

amendments. Accordingly, while contested issues have remained in this rulemaking as discussed above, there is no opposition in the record to the specific word changes IEPA now seeks to make.

The Board also agrees with IEPA that these proposed changes in PC 15 are in the nature of clarifications and corrections to the first-notice rules. The vast majority of the changes are based on USEPA input received by IEPA. PC 15 at 7-26. Before first notice, in December 2006, USEPA provided IEPA with most of USEPA's recommended "conforming amendments." PC 5 at 21; PC 15 at 7-19. On January 5, 2007, IEPA filed with the Board, as part of PC 5, these USEPA-suggested edits, the highlights of which were discussed in the Board's first-notice opinion. Proposed New Clean Air Interstate Rules (CAIR) SO_2, NO_x Annual and NO_x Ozone Season Trading Programs, 35 Ill. Adm. Code 225, Subparts A, C, D, E, and F, R06-26, slip op. at 15 (Apr. 19, 2007) (CAIR First Notice). The changes, however, were inadvertently left out of the first-notice rule text.

As SIPC points out, some other changes now proposed by IEPA were found meritorious by the Board in the first-notice opinion but also unintentionally omitted from the first-notice order. PC 13 at 5-6; PC 15 at 27-28; CAIR First Notice at 14, 37; *see* proposed Sections 225.465(b)(5)(B) and 225.565(b)(5)(B). IEPA also proposes changes to avoid any retroactive application of the rule. For example, under the proposed CAIR NO_x annual trading program, for control periods 2009, 2010, and 2011, the deadline for the EGU owner or operator to submit to IEPA 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 is revised from June 1, 2007, to September 15, 2007. *See* proposed Section 225.435(a).

The Board finds all of the changes proposed by IEPA in PC 15 appropriate and adopts them for second notice. At the request of JCAR, the Board also makes several minor language changes to its first-notice order, none of which warrant discussion. The Board's rule changes from first to second notice are highlighted in the order following this opinion.

CONCLUSION

To reduce the interstate transport of SO_2 and NO_x emissions and take steps necessary to attain the $PM_{2.5}$ and 8-hour ozone NAAQS in the greater Chicago and Metro East/St. Louis nonattainment areas, this rulemaking proposal adopts the CAIR SO_2, CAIR NO_x annual, and CAIR NO_x ozone season trading programs. The proposal amends Subpart A and proposes new Subparts C, D, E, and F and Appendix A of Part 225. Based on this record, the Board finds that the amendments proposed today are technically feasible and economically reasonable and will not have an adverse economic impact on the People of Illinois. *See* 415 ILCS 5/27(a), (b) (2006). The Board adopts the proposed CAIR for second-notice review by JCAR.

ORDER

The Board directs the Clerk to cause the filing of the following proposed rule with JCAR for its second-notice review. Proposed deletions to the current rules at 35 Ill. Adm. Code 225 are

stricken and proposed additions are underlined. Additionally, for ease of comparison, deletions from rule text proposed at first notice are stricken; additions are double-underlined.

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

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

SUBPART D: CAIR NO_x ANNUAL TRADING PROGRAM

SUBPART E: CAIR NO_x OZONE SEASON TRADING PROGRAM

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 August 31, 2007.

SUBPART A: GENERAL PROVISIONS

Section 225.120 Abbreviations and Acronyms

Unless otherwise specified within this Part, the abbreviations used in this Part must be the same as those found in 35 Ill. Adm. Code 211. The following abbreviations and acronyms are used in this Part:

Act	Environmental Protection Act [415 ILCS 5]
ACI	activated carbon injection
Agency	Illinois Environmental Protection Agency
Btu	British thermal unit

CAA	Clean Air Act [42 USC 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAIR	Clean Air Interstate Rule
CASA	Clean Air Set-Aside
CEMS	continuous emission monitoring system
CO_2	carbon dioxide
CPS	Combined Pollutant Standard
CGO	converted gross electrical output
CUTE	converted useful thermal energy
EGU	electric generating unit
ESP	electrostatic precipitator
FGD	flue gas desulfurization
GO	gross electrical output
GWh	gigawatt hour
HI	heat input
hr	hour
kg	kilogram
lb	pound
MPS	Multi-Pollutant Standard
MW	megawatt
MWe	megawatt electrical
MWh	megawatt hour
NAAQS	National Ambient Air Quality Standards
NO_x	nitrogen oxides
NUSA	New Unit Set-Aside
ORIS	Office of Regulatory Information Systems
O_2	oxygen
$PM_{2.5}$	Particles less than 2.5 micrometers in diameter
RATA	relative accuracy test audit
SO_2	sulfur dioxide
SNCR	selective noncatalytic reduction
TTBS	Temporary Technology Based Standard
TCGO	total converted useful thermal energy
UTE	useful thermal energy
USEPA	United States Environmental Protection Agency
yr	year

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

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 compliance ~~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 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, CAIR SO_2 Trading Program, 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, and F ~~D, and E~~, or for purposes of allocating allowances under Sections 225.435, 225.445, 225.535, and 225.545 combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during a specified year;

Except as provided above ~~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 described in ~~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 Subparts B and F 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~~.~~; or

For the purposes of Subpart C, a "compliance account" means a CAIR SO_2 compliance account, established by the USEPA for a CAIR SO_2source pursuant to 40 CFR 96, subpart FFF, in which any SO_2 units at the source are initially recorded and in which are held any SO_2 allowances available for use for a control period in order to meet the source's CAIR SO_2 emissions limitations in accordance with Section 225.310 and 40 CFR 96.254, as incorporated by reference in Section 225.140.

"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~~ natural person as defined in 40 CFR 60.4102, and is the same natural person as the person who is the designated representative for the CAIR trading and Acid Rain programs.

"Electric generating unit" or "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 of 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" or "HHV" means the total heat liberated per mass of fuel burned (Btu/lb), 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" or "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 of such installation 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 of completion 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 Subparts B and F 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, subparts 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, subparts AA (excluding 40 CFR 96.104, 96.105(b)(2), and 96.106), BB, FF, GG, and HH (2006).

f) 40 CFR 96, CAIR NO_x Ozone Season Trading Program, subparts 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 Guidelines: 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~~ Sections 225.305, 225.405, and 225.505, 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~~ Sections 225.305, 225.405, and 225.505, 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~~ replacement 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 225.505, 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~~ a CAIR SO_2 unit, CAIR NO_x unit, or CAIR NO_x Ozone Season unit pursuant to Section 225.305, 225.405, or 225.505, 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~~ replacement 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 of 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 would otherwise be classified as ~~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 continues ~~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 would otherwise be classified as ~~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~~ Has 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 would otherwise be classified as ~~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~~ Has 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~~ designated representative 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, reporting and recordkeeping 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, midnight of March 1, 2011, and by midnight of March 1 of each subsequent year if March 1 is a business day, 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~~ compliance account. If March 1 is not a business day, t~~T~~he 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 on the allowance transfer deadline may not be less than the total tonnage equivalent of the 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 excess emissions of SO_2 emitted by a CAIR SO_2 source ~~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 a control period, starting in 2010 ~~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~~d)(1) of this Section for the control period starting on the later of January 1, ~~2009~~ 2010 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 a 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~~ specified in ~~Section 225.120~~ 225.130 and 40

CFR 96.202, as incorporated by reference in Section 225.140 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~~ 202, 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, 0.50 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 of 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~~ would otherwise be classified as 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~~ continues 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~~ would otherwise be classified as 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~~ Has 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~~ would otherwise be classified as 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~~ Has 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~~ designated representative 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~~ designated representative 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, reporting, and recordkeeping 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, midnight of March 1, 2010, and by midnight March 1 of each subsequent year if March 1 is a business day~~, 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. If March 1 is not a business day, t~~T~~he 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 on the allowance transfer deadline 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 excess emissions of a CAIR NO_x source for each day in a control period, starting in 2009, ~~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~~d)(1) of this Section for the control period 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 into or 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 Sections 39 and 39.5 of the Act, must contain federally enforceable conditions addressing all applicable CAIR NO_x Annual Trading Program requirements, and ~~must~~ 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 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~~December 31, 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~~December 31, 2007.

5) For all CAIR NO_x units that commence operation on or after ~~July 1~~December 31, 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~~ specified in Section ~~225.120~~225.130 and 40 CFR 96.102, as incorporated by reference in Section 225.140 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~~On or before September 25, 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~~ For CAIR NO_x units that commence commercial operation on or after January 1, 2006, that have not been allocated allowances under Section 225.440 for the applicable or any preceding control period, the Agency will allocate allowances from the NUSA in accordance with Section 255.445. 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 (CGO) 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~~ September 15, 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 for which data is available. ~~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 (in MWh) ~~× MWh~~ × 1.0;

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

C) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = GO (in MWh) ~~× 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 inputs from the 2001, 2002, 2003, 2004 or 2005 control period, will be used. If the unit has three or fewer control periods of heat input~~s~~ data, the heat input will be the average of those control periods for which data is available ~~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 will 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 unit commences commercial operation in the 2007 control period and does not have gross electrical output for the 2006 control period, then the gross electrical output from 2007 will be used. 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 (in MWh) ~~× MWh~~ × 1.0;

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

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

2) Heat input: The average of the unit's two most recent years of control period heat inputs~~; 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's gross electrical output, if available~~; otherwise it will be the unit's most recent control period's gross electrical output~~. If a unit commences commercial operation in the most recent control period and does not have gross electrical output for two control periods, the gross electrical output from the most recent period, e.g., if the unit commences commercial operation in 2009 and does not have gross electrical output from 2008, gross electrical output from 2009 will be used. 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 (in MWh) × 1.0;

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

3) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = GO (in MWh) × 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 subsection (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~~ In the first year for which a unit is considered to be an existing unit rather than a new unit, 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 converted gross electrical output pursuant to Section 225.435(a), (b), or (c) or total converted gross electrical output pursuant to Section 225.435(d), as applicable,, 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 as adjusted to add allowances not allocated pursuant to subsection (b) of this Section ~~225.440~~ in the previous year's allocation.

b) The Agency will allocate CAIR NO_x allowances to each CAIR NO_x unit on a pro-rata basis using the unit's converted gross electrical output pursuant to Section 225.435(a), (b), or (c) or total converted gross electrical output calculated pursuant to Section 225.435(d), as applicable, to the extent whole allowances may be allocated. The Agency will retain any additional allowances beyond this allocation of whole allowances for allocation pursuant to subsection (a) of this Section in the next control period. ~~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 or any preceding 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~~ five 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~~ fifth control period after the control period in which the unit commenced commercial operation ~~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 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 (in MWh) × 1.0;

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

C) If the unit is neither coal-fired nor oil-fired:

CGO (in MWh) = GO (in MWh) × 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:

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

Where:

UA_y = unprorated allocation to a new CAIR NO_x unit.

$NCGO_y$ = converted gross electrical output or total converted gross electrical output, as applicable, 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, to the extent that whole allowances may be allocated. For any additional allowances beyond this allocation of whole allowances, the Agency will retain the additional allowances in the NUSA for allocation pursuant to Section 225.445 in later control periods.

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, to the extent that whole allowances may be allocated. For any additional allowances beyond this allocation of whole allowances, the Agency will retain the additional allowances in the NUSA for allocation pursuant to Section 225.445 in later control periods. ~~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 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 ~~225.445~~.

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 calculating future allocations in 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~~ five control periods after the control period in which the unit commences commercial operation, 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 accurately 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~~ MWh using such a system; and must record the output of the measurement system at all times. 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 of 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~~ the 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 to USEPA as follows:

1) By ~~June 1~~ September 15, 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 of 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~~ or 75, as applicable, including the ~~applicable~~ appropriate 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~~ five years from the date the record is created or the data is collected ~~in~~ under subsections (a) and (b) of this Section, and the reports are 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 the 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~~ after 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 the 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 USC 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 following 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, a 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 commenced operation on or after January 1, 2006, and that 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 waste, institutional lunchroom waste, ~~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. For this purpose, a unit will be considered "existing" after it has been in commercial operation for at least eight years. 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 an 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 that commenced operation prior to December 31, 2006.

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 or Subpart F.

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~~B) of this Section best fit 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 subsections (a) through (c)(2)(~~A~~B) 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 Section 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 project 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~~ that 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~~ that 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~~ rateof 10 mmBtu/1 MW.

5) For highly efficient power generation and clean coal technology projects:

A) For projects other than fluidized coal combustion pursuant to Section 225.460(a)(4)(B), (a)(4)(C), and (c)(2), the number of allowances must be calculated using the number of ~~megawatt hours~~ MWh 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.

B) For fluidized bed coal combustion projects pursuant to Section 225.460 (c)(2), the number of allowances shall be calculated using the number of gross MWh of electricity the project generates during a control period and the following formula:

$$A = (MWh_g) \times (1.4 \text{ lb/MWh} - ER \text{ lb/MWh}) / 2000 \text{ lb}$$

Where:

A = The number of allowances for a particular project.

MWh_g = The number of gross MWh of electricity generated during a control period by a project.

ER = Annual NO_x emission rate for the control Period based on CEMS data in lb/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~~ in this subsection. 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~~ that 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 names 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, and 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 subsection (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 for a total number of control periods not to exceed the number of control periods listed ~~below~~ in this subsection. After a project has been allocated allowances from the 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:

1) 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 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 (b)(1) 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 (b)(1) through (b)(3) 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~~ allowed allocation of an additional 11,299 CAIR NO_x allowances ~~from the federal~~ in Illinois as a 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~~ However, for the purposes of public health and air quality improvements, none of these allowances will be allocated.

(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 of 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 Ozone Season 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~~ would otherwise be classified as 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~~ continues 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~~ would otherwise be classified as 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~~ Has 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~~ would otherwise be classified as 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~~ Has 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~~ designated representative 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~~ designated representative 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, reporting and recordkeeping 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 96, 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, midnight of November 30, 2009, and by midnight of November 30 of each subsequent year if November 30 is a business day, 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. If November 30 is not a business day, t~~T~~he allowance transfer deadline means by midnight of ~~November 30 (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 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 excess emissions of a CAIR NO_x Ozone Season source for each day in a control period, starting in 2009 ~~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~~d)(1) of this Section for the control period 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 or 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 a CAIR NO_x Ozone Season ~~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 ~~or~~ and 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~~ December 31, 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~~ December 31, 2007.

5) For all units that commence operation on or after ~~July 1~~ December 31, 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~~ specified in Section 225.~~120~~ 130 and 40 CFR 96.302, as incorporated by reference in Section 225.140, 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 and the 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~~ On or before September 25, 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~~ July, 2008 and ~~October~~ July 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~~ For CAIR NO_x Ozone Season units that commence commercial operation on or after May 1, 2006, that have not been allocated allowances under Section 225.440 for the applicable or any preceding control period, the Agency will allocate allowances from the NUSA in accordance with Section 225.545. 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 (CGO), 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~~September 15, 2007, a statement that either gross electrical output data or heat input data is to be used to calculate 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 outputs, the gross electrical output will be the average of those control periods for which data is available. ~~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 (in MWh) × ~~MWh ×~~ 1.0;

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

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

2) ~~If heat~~ Heat input (HI): 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 three or fewer control periods of heat input data, the heat input will be the average of those control periods for which data is available. ~~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 ~~will~~ is to 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 unit commences commercial operation in the 2007 control period and does not have gross electrical output for the 2006 control period, the gross electrical output from the 2007 control period will be used. 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 (in MWh)~~× MWh~~ × 1.0;

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

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

2) Heat input: The average of the unit's two most recent years of control period heat inputs~~; 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's gross electrical output~~. If a unit commences commercial operation in the most recent control period and does not have gross electrical output from the most recent control period, e.g. if the unit commences commercial operation in the 2009 control period and does not have gross electrical output from the 2008 control period, gross electrical output from the 2009 control period will be used. 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 (in MWh) × 1.0;

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

3) If the unit is neither coal-fired nor oil-fired:
CGO (in MWh) = GO (in MWh) × 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 subsection (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. In the first control period for which the unit us considered to be an existing unit rather than a new unit, ~~; 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 converted gross electrical output pursuant to Section 225.535(a), (b), or (c), or total converted gross electrical output pursuant to Section 225.535(d), as applicable, 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, as adjusted to add allowances not allocated pursuant to subsection (b) of this Section ~~225.540~~ in the previous year's allocation.

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 converted gross electrical output pursuant to Section 225.535(a), (b), or (c), or total converted gross electrical output calculated pursuant to Section 225.535(d), as applicable, to the extent whole allowances may be allocated. The Agency will retain any additional allowances beyond this allocation of whole allowances for allocation pursuant to subsection (a) of this Section in the next control period. ~~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 or any preceding 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~~ NUSA will be allocated CAIR NO_x Ozone Season allowances equal to ~~5~~ five 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~~ fifth control period after the control period in which the unit commenced commercial operation ~~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 (in MWh) × 1.0;

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

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

$$UA_y = \frac{NCGO_y \times (1.0 lbs/MWh)}{2000 lbs/ton}$$

Where:

UA_y = unprorated allocation to a new CAIR NO_x Ozone Season unit.

$NCGO_y$ = converted gross electrical or total converted gross electrical output, as applicable, 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, to the extent that whole allowances may be allocated. For any additional allowances beyond this allocation of whole allowances, the Agency will retain the additional allowances in the NUSA for allocation pursuant to Section 225.545 in later control periods.

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, to the extent that whole allowances may be allocated. For any additional allowances beyond this allocation of whole allowances, the Agency will retain the additional allowances in the NUSA for allocation pursuant to Section 225.545 in later control periods. ~~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 calculating future allocations in 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~~ five control periods after the control period in which the unit commenced commercial operation, 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 Ozone Season unit must operate a system for accurately 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~~ MWh using such a system; and must record the output of the measurement system at all times. 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 of 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~~ 2008, 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~~ the 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 Ozone Season 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~~ September 15, 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 of 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~~ or 75, as applicable, including the ~~applicable~~ appropriate 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~~ 550(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~~ five years from the date the record is created or the data is collected ~~in~~ under subsections (a) and (b) of this Section, and the reports are 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 Ozone Season allowances from the 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 Ozone Season allowances that it received pursuant to its CASA request or an equivalent number of CAIR NO_x Ozone Season allowances to the CASA within six months ~~of~~ after receipt of an Agency notice that NO_x Ozone Season allowances must be restored. These allowances will be assigned to the fund from which they were distributed.

c) CAIR NO_x Ozone Season allowances from the 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 projects 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 USC 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 following 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~~ the project shall not be 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 a rated-energy efficiency of at least 40 percent.

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

1) Zero-emission electric generating ~~units~~ 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 commenced operation on or after January 1, 2006, and that 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 waste, institutional lunchroom waste, ~~or~~ office waste, landscape waste, or construction or demolition debris.

c) Clean technology projects 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. For this purpose, a unit will be considered "existing" after it has been in commercial operation for at least eight years. 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 an 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 that commenced operation prior to December 31, 2006.

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 or Subpart F.

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 fit 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 subsections (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 Ozone Season 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 Section 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 project 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:

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

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 225.560(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:

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

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 225.560(c)(1), the number of allowances must be calculated using the emission rate before and after replacement or improvement, and the following formula:

$A = (MWh_g) \times 0.10 \times (ER_B \text{ lb/MWh} - ER_A \text{ lb/MWh}) / 2000 \text{ lb}$

Where:

A = The number of allowances for a particular project.
MWh_g = The number of 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 coal technology projects:

A) For projects other than fluidized coal combustion pursuant to Section 225.460(a)(4)(B), (a)(4)(C), and (c)(2), the number of allowances must be calculated using the number of ~~megawatt hours~~ MWh 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.

B) For fluidized bed coal combustion projects pursuant to Section 225.460 (c)(2), the number of allowances shall be calculated using the number of gross MWh of electricity the project generates during a control period and the following formula:

$A = (MWh_g) \text{ x } (1.4 \text{ lb/MWh} - ER \text{ lb/MWh}) / 2000 \text{ lb}$

Where:

A = The number of allowances for a particular project.

MWh_g = The number of gross MWh of electricity generated during a control period by a project.

ER = Annual NO_x emission rate for the control Period based on CEMS data in lb/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~~ in this subsection. 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~~ that 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 Ozone Season 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 names of the principals or corporate officials.

2) The number of the CAIR NO_x Ozone Season 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, and 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 subsection (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 Ozone Season 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 for a total number of control periods not to exceed the number of control periods listed ~~below~~ in this subsection. After a project has been allocated allowances from the 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 Ozone Season 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 Ozone Season allowances requested for approved projects is less than or equal to the number of CAIR NO_x Ozone Season allowances in the CASA project category, the number of allowances that are approved shall be allocated to each CAIR NO_x Ozone Season compliance or general account.

3) If more CAIR NO_x Ozone Season allowances are requested than the number of CAIR NO_x Ozone Season 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 Ozone Season 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:

1) If there are, after the completion of the procedures in subsection (a) of this Section for a control period, any CAIR NO_x Ozone Season allowances not allocated to a CASA project for the control period, the remaining allowances will accrue in each CASA project category up to twice the number of allowances that are assigned to the project category for 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 (b)(1) through (b)(3) are completed, the Agency may elect to retire any CAIR NO_x Ozone Season 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, 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~~ in subsections (a)(2)(A) and (B), which include hot and cold side ESPs, the owner or operator must install, if not already installed, and begin operating ACI equipment or the Agency must be given written notice that the EGU will be shut down on or before the following 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 per 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 per 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 specified in subsections (g)(3)(A) and (B), 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 subsection (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.

4) 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 injection rate or rates may be appealed to the Board pursuant to Section 39 of the Act; and

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 than 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 technique. If the evaluation of the alternative control technique 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 of 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~~ as follows:

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:

n n

$$ER_{avg} = \sum_{i=1} (SO_{2i} \text{ or } NO_{xi} \text{ tons}) / \sum_{i=1} (HI_i)$$

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 shut down or install and have operational FGD equipment on Waukegan 7;

2) On or before December 31, 2014, the owner or operator must either permanently shut down or install and have operational FGD equipment on Waukegan 8;

3) On or before December 31, 2015, the owner or operator must either permanently shut down or install and have operational FGD equipment on Fisk 19;

4) If Crawford 7 will be operated after December 31, 2018, and not permanently shut down 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 shut down 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 shut down 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~~ in this subsection that are equipped with a hot-side ESP must replace the hot-side ESP 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 subsections 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 shutdown of the EGU and a description of the future actions that must be accomplished to complete the shutdown of the EGU, with the anticipated schedule for those actions and the anticipated date of permanent shutdown 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 specified 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 USC 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 August 31, 2007, as required by the CAA (42 USC 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 _____)

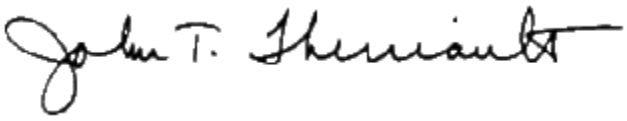
225.APPENDIX A Specified EGUs for Purposes of Subpart F (Midwest Generation's Coal-Fired Boilers as of July 1, 2006)

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, John Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on July 26, 2007, by a vote of 4-0.



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John Therriault, Assistant Clerk
Illinois Pollution Control Board