#### BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:		
	)	
PROPOSED NEW CAIR SO <sub>2</sub> , CAIR NO <sub>X</sub>	)	
ANNUAL AND CAIR NO <sub>X</sub> OZONE SEASON	)	R06-26
TRADING PROGRAMS, 35 ILL. ADM.	)	(Rulemaking- Air)
CODE 225, CONTROL OF EMISSIONS	)	
FROM LARGE COMBUSTION SOURCES,	)	
SUBPARTS A, C, D and E	)	

#### **NOTICE**

TO: Dorothy Gunn, Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph, Suite 11-500 Chicago, Illinois 60601-3218

## **SEE ATTACHED SERVICE LIST**

PLEASE TAKE NOTICE that I have today filed with the Office of the Pollution Control Board a <u>POST-HEARING COMMENTS OF THE ILLINOIS ENVIRONMENAL</u> <u>PROTECTION AGENCY</u>, a copy of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By:

John J. Kim

Managing Attorney

Air Regulatory Unit

Division of Legal Counsel

DATED: January 5, 2007

1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276 217.782.5544 217.782.9143 (TDD)

THIS FILING IS SUBMITTED ON RECYCLED PAPER

#### BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF: )	
)	
PROPOSED NEW CAIR $SO_2$ , CAIR $NO_X$	
ANNUAL AND CAIR NO <sub>X</sub> OZONE SEASON )	R06-26
TRADING PROGRAMS, 35 ILL. ADM.	(Rulemaking- Air)
CODE 225, CONTROL OF EMISSIONS	_
FROM LARGE COMBUSTION SOURCES, )	
SUBPARTS A. C. D and E	

# POST-HEARING COMMENTS OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

NOW COMES the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (Illinois EPA), by its attorneys, and hereby submits post-hearing comments in the above rulemaking proceeding. Illinois EPA appreciates the efforts of the Illinois Pollution Control Board (Board) in this rulemaking regarding Illinois EPA's proposed new Part 225, Subparts A, C, D and E to the Board's air pollution control regulations (35 Ill. Adm. Code 225). The purpose of this proposal is to reduce intra- and interstate transport of sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) emissions from fossil fuel-fired electric generating units (affected units), on an annual basis (January 1 though December 31) and on an ozone season basis (May 1 through September 30) of each calendar year, through the adoption of the Clean Air Interstate Rule (CAIR) SO<sub>2</sub> trading program, the CAIR NO<sub>x</sub> Annual trading program and the CAIR NO<sub>x</sub> Ozone Season trading program that establish retirement ratios for SO<sub>2</sub> allowances established under the CAIR and specific allocations for NO<sub>x</sub> allowances.

Illinois EPA engaged in extensive outreach on this proposal and held regular meetings with representatives of the affected sources and public interest groups during the months of January and February 2006. The proposal is intended to satisfy Illinois' obligations under the

United States Environmental Protection Agency's (USEPA) Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Revisions to Acid Rain Program; Revisions to the NO<sub>x</sub> SIP Call (CAIR), 70 *Fed. Reg.* 25162 (May 12, 2005). *See*, Exhibit A of Illinois EPA's rulemaking proposal. The proposed new part also is intended to address, in part, Illinois EPA's obligation to meet certain requirements under the federal Clean Air Act, 42 U.S.C. § 7401 *et seq.* (CAA). These requirements include Part D, Subpart 1 of the CAA, adoption of control strategies necessary to demonstrate attainment of the fine particulate matter (PM<sub>2.5</sub>) and 8-hour ozone National Ambient Air Quality Standards (NAAQS) in the greater Chicago moderate nonattainment area and the Metro East/St. Louis moderate nonattainment area; Part D, Subpart 2 of the CAA, adoption of control strategies necessary to demonstrate attainment of 8-hour ozone NAAQS for the greater Chicago nonattainment area and Metro East/St. Louis nonattainment area; Section 169A, the adoption an implementation plan addressing visibility; and Section 110(a)(2)(D) of the CAA, adoption of a State Implementation Plan (SIP) addressing interstate transport of air pollution.

Although the testimony elicited and evidence submitted to date in this proceeding reflects agreement of all parties on a number of issues, some of the regulated sources do not agree with Illinois EPA's approach for allocations based on gross electrical output or the amount of the set-asides. Indeed, the representatives of the power plants do not necessarily agree amongst themselves as to whether allowances should be allocated on heat input or gross electrical output or the amount of the set-asides. Also, although the participating environmental interest groups are generally supportive of the proposed rulemaking, they do not agree with the inclusion of the fluidized bed boilers in the Clean Air Set-Aside (CASA).

Illinois EPA witnesses testified and provided evidence in support of the proposed rulemaking at the first hearing that was held in Springfield on October 10, 2006 through October 12, 2006. In addition, prior to the second hearing, Illinois EPA filed a motion to amend rulemaking based on comments made at the first hearing and discussions with USEPA. At the second hearing that was held in Chicago on November 28 through November 30, 2006, opponents and supporters of the proposal had an opportunity to present testimony. Only five witnesses testified and they offered few specific suggestions for amendment to the proposal. After the second hearing, Dynegy Midwest Generation, Inc., Midwest Generation, LLC, and Southern Illinois Power Cooperative filed a motion to dismiss Illinois EPA's proposal. As stated in Illinois EPA's response, the motion attacking the Board's jurisdiction was untimely and unsupported by provisions in the Illinois Environmental Protection Act. Illinois EPA urges the Board to deny the motion and proceed to First Notice on this proposal.

In addition, Illinois EPA and Midwest Generation, LLC (Midwest Generation) are jointly submitting a comment that describes and proposes the Combined Pollutant Standards (CPS) that provides compliance flexibility for the mercury emissions reduction requirements in R06-25 (35 Ill. Adm. Code 225 Subpart B) in exchange for significant reductions in NO<sub>x</sub> and SO<sub>2</sub> emissions. The CPS, like the multi-pollutant standard (MPS) included in R06-25, are voluntary provisions that allow for additional compliance flexibility. The Board may revise proposed regulations before going to First Notice upon its own motion or in response to suggestions made at hearing and written comments made prior to second notice. 35 Ill. Adm. Code 102.600. Further, as these provisions are similar in scope to those provided for other affected entities, Illinois EPA urges the Board to move forward without scheduling a third hearing and include in the First Notice the amendatory language changes filed in Illinois EPA's Motion to Amend Rulemaking,

Illinois EPA's Reply to Response to Motion to Amend Rulemaking, its post-hearing comments, and the joint comment regarding proposed amendatory CPS provisions.

The post-hearing comments of Illinois EPA are two-fold: the comments summarize the hearing testimony and address issues raised by the Board and interested parties in pleadings. The areas of coverage are: fuel weighting, CASA, fluidized bed boilers, and air quality monitoring. The comments also address some questions asked on the record and some comments made by USEPA. Attached to these comments are suggested amendments to Illinois EPA's regulatory proposal that incorporate the above changes.

#### **Fuel Weighting**

Illinois EPA maintains its position that fuel-weighting as proposed is appropriate. As testified to at hearing coal-fired units bear the greatest burden to achieve emission reductions under CAIR. (Rory Davis testimony on October 11, 2006 pm at 127-129.) This is also the reason stated by the USEPA for not employing a fuel neutral allocation methodology in the CAIR model rule. The predominant sources of both  $NO_x$  and  $SO_2$  emissions in Illinois are from Illinois' large fleet of coal-fired power plants. These sources likewise have higher emission rates for both pollutants, and, therefore, reductions at these sources will provide the greatest benefits. The more feasible controlling these emissions are under the proposed rule, the more likely they are to be controlled. Furthermore, Illinois EPA's economic analysis that found its  $NO_x$  policy to be economically reasonable based upon the proposed fuel-weighting allocation methodology. Deviation from this allocation methodology would correspondingly impact the economic analysis performed and relied upon for the proposed rule. The fuel weighting factors in the Illinois proposal are identical to the CAIR model rule and reflect different burdens to control emissions (Exhibit A, Final Rule 05/12/05 - p.25231 & 25280).

Jason Goodwin testified on behalf of Zion Energy LLC (Zion) that the proposed regulation be amended to employ a fuel neutral allocation methodology for CAIR NO<sub>x</sub> allowances. Mr. Goodwin stated that "turbine units will barely receive enough allowances to cover expected emissions." (Goodwin at 7 of pre-filed testimony.) His testimony indicates that compliance costs for turbine units in CAIR will be zero or very low. At hearing, Mr. Goodwin agreed with Ms. Bugel that additional allowances for Zion units would only provide "an additional surplus" of allowances for those units. (Goodwin testimony on November 28, 2006 at 91.) However, he indicated that in future years with higher output more allowance may be needed, but also admitted that in the proposed output-based allocation methodology, greater output from the Zion units would result in the units receiving a greater number of allowances proportional to the increased output.

Mr. Goodwin's concern stems from his analysis that should a unit need a greater number of allowances, Zion gas turbines do not have a cost-effective option for installation of additional emission controls. His testimony provided an analysis of why selective catalytic reduction (SCR) is not a cost effective measure for NO<sub>x</sub> control on gas-fired turbines. Illinois EPA agrees that SCR for many gas-fired turbines is not a reasonable approach for compliance with CAIR. As stated above, and included in Mr. Goodwin's testimony, an analysis found that the gas-fired turbines generally will not require SCR to comply with CAIR. This is supported by Mr. Goodwin's assessment that Zion's turbines would not require further NO<sub>x</sub> reductions, and that these units should be compliant with CAIR as it is proposed without the purchase of additional allowances.

#### **CASA**

## 1. Pro-rata allocation of allowances from the CASA

During drafting of the rule, Illinois EPA explored a number of allocation schemes with key goals of equality for applicants as well as ease of implementation for Illinois EPA. Pro rata allocation was ultimately felt to best serve those purposes by proportionately sharing among all eligible. Additionally, fixed portion schemes would be particularly problematic for Illinois EPA to implement because Illinois' CASA allocation scheme is specifically based on the number of electricity hours generated or conserved, which will vary each and every year. Therefore, the rule could not simply offer a fixed number of allowances.

Dr. Gregory Kunkel, representing the interests of Christian County Generation, stated in his pre-filed testimony that he "generally supports Illinois EPA's judgment in the CAIR framework to allocate NO<sub>x</sub> allowances in a way that benefits the people of Illinois." (Kunkel at 4 of pre-filed testimony.) While being generally supportive, Dr. Kunkel suggests an alteration to the proposed rule that would "eliminate pro-rata reduction of CASA allocations for early adopters." (Kunkel at 6 of pre-filed testimony.) He explains that the major reason for this change would be to reduce the uncertainty in allocations introduced by a pro-rata allotment.

A question was posed to Dr. Kunkel about what alternative method he suggested, to which he responded that "...it might be on a first come first serve basis..." (Kunkel testimony on November 28, 2006 at 156.) That scheme is viewed by Illinois EPA as unfair, and was also recognized by Dr. Kunkel's own testimony that "It would be a benefit to the earliest and less beneficial to later entries." (Kunkel testimony on November 28, 2006 at 157.)

While Illinois EPA greatly appreciates Dr. Kunkel's concern from a business point of view, the lack of an acceptable alternative requires Illinois EPA to advise the Board to adopt those relevant portions of the rule as currently drafted. Illinois EPA views the current scheme as

a middle ground approach which will indiscriminately allow a portion of the CASA to all those eligible, and at the same time is able to be implemented by Illinois EPA's limited resources.

## 2. Size of the CASA

The 30% set-aside issue has been discussed at length numerous times throughout this rule making. Ultimately, USEPA left the authority to the individual States to distribute their allocations as necessary to meet their own State's individual goals. 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 efficiency/renewable energy (EE/RE) efforts for zero emission generation, and a small pool to undertake these projects early on) whose individual contributions benefit the environment. Additionally, each of those project categories assists Illinois EPA in their duty to attain the National Ambient Air Quality Standards (NAAQS). Lastly, Illinois EPA hired outside consultants to perform a financial analysis of the impact, under the worst-case scenario that the 30% set-aside was effectively retired. (TSD at 7.1 and TSD. Ref. 33.) The results showed that relying solely on a 70% main pool, the reliability of the grid was intact and residential and commercial electric rates would not be greatly impacted, especially in light of all the other benefits this program could provide. Considering the many positive impacts for Illinois with no concomitant detriment posed by Illinois EPA's choice for a 30% set-aside, Illinois EPA advises the Board to adopt those relevant portions of the rule as currently drafted.

C.J.. Saladino, representing the interests of Kincaid Generation, testified that a 30% setaside is too great and that the proposal penalizes Kincaid station for having already installed the best available technology (i.e., SCR). (Saladino at 13 of pre-filed testimony.) Illinois EPA believes that the CAIR proposal does not penalize the Kincaid station for already installing SCRs and that Mr. Saladino's conclusion is unfounded for several reasons:

- 1) With regards to the Pollution Control Upgrade category, it was Illinois EPA's goal in drafting and proposing the rule to reasonably maximize the impact for future emissions reductions here in Illinois, not to create a program to reward those entities that would already be utilizing emission controls that they had already installed. To provide incentives for controls already installed would greatly diminish the incentive for new controls across the State.
- 2) Kincaid is not the only facility in the State that has already installed controls for various reasons that are now ineligible for CASA allowances. There are 14 units controlled by SCR/selective non-catalytic reduction (SNCR), one unit controlled by baghouse, and five units controlled by flue gas desulfurization (FGD) that are ineligible for CASA. Again, as discussed above, the goal was to provide as large an incentive possible to attract new controls by subsidizing the large installation costs and not the much smaller operational costs. (Saladino at 52 of the transcript.)
- 3) As discussed in Mr. Saladino's pre-filed testimony, the installation of the SCRs in 2002 "...was certainly a business decision..." (Saladino at 7 of pre-filed testimony.) This decision was a voluntary choice that Kincaid utilized for compliance with the NOx SIP Call, done without the benefit of knowing that one day CASA allowances may be available. In fact, the program at the time provided its own set of incentives to install controls. Mr. Saladino briefly discusses that point in his pre-filed testimony as well, stating that the installation of the SCRs was "brought about in part by the incentives presented by the early reduction credits available under Part 217.770 of the Subpart W rules." Kincaid has already received credit to assist in recovering installation costs for their SCRs, therefore no further benefit is required. Fortuitously, the installation of the SCRs places Kincaid in a very comfortable position for compliance. Other units will have to perform their own analysis to determine their best paths forward; Illinois EPA hopes they will consider control as an option due to the available CASA incentives.
- 4) The notion, as mentioned in Mr. Saladino's testimony, that Kincaid is penalized for already installing SCR controls is without basis. The reality is that there are an innumerable number of projects Kincaid may choose to sponsor or participate in to earn allowances. (Saladino at 13 of pre-filed testimony.) By design, the CASA was structured such that an existing electric generating unit (EGU) could participate in every CASA category. Thus, the fact that Kincaid, as well as numerous other units, have already installed controls is no penalty at all.

On the other hand, Charles Kubert's recommended that Illinois EPA increase their RE/EE set-asides for the purpose of "being consistent with the policy goals and policy targets" set forth in the Governor Blagojevich's Sustainable Energy Plan. (Transcript on November 29, 2006, at 138.) According to Mr. Kubert, who testified on behalf of the Environmental Law and Policy Center, increasing the Illinois CAIR RE/EE set-aside from 12 percent to 15.4 percent would provide enough allowances to reach the Governor's Sustainable Energy Plan goal of having eight percent of the electricity provided to Illinois consumers come from renewable energy sources by 2012. (See generally, Kubert testimony and pre-filed testimony.)

Both the Governor's Sustainable Energy Plan and the allocation methodology proposed in the Illinois CAIR encourage renewable energy and energy efficiency; however, they are mutually exclusive programs. It was never the intent of Illinois EPA to set its RE/EE allocations predicated on the policy goals of the Governor's Sustainable Energy Plan. Illinois EPA agrees with Mr. Kubert's statement that "both the set-aside allowances and other legislation, such as RPS [Renewable Portfolio Standard], are complimentary to one another and both further the same goal." However, Illinois EPA is not the agency responsible for implementing the renewable portfolio standard of the Governor's plan, which was clarified in testimony and acknowledged by Mr. Kubert. (Kubert testimony on November 29, 2006 at 189 and 191.)

It should also be recognized that because of the scheme for allocating allowances from the CASA, allowances approaching the 15.4 percent that Mr. Kubert is recommending may, in fact, be available if there is under-subscription in other CASA categories. The unused allocations in these under-subscribed categories may become eligible for approved RE/EE projects, thereby exceeding the 12 percent initial design value.

## 3. Over-Fired Air

Illinois EPA continues to take the position that over-fired air (OFA) projects should be excluded from receiving allowances from the CASA. The primary purpose of the CASA, with respect to the pollution control upgrade category, was to defray costs and thereby reduce the main barrier (i.e., the typically large capital cost) in order to promote a few selected project types that are comparatively much more expensive than OFA and advanced OFA. 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. Illinois EPA also took into account that the more costly controls generally result in the greatest reductions in emissions.

Careful consideration was given to which project types would be eligible for CASA allowances during the regulatory development phase. It was determined that neither standard OFA nor advanced OFA should be an eligible project for the CASA for several reasons, including:

- Standard OFA was expected to be a common NO<sub>x</sub> control employed by sources 1) under the model CAIR trading program due to its low costs. There is no evidence that advanced OFA would result in significantly higher costs than standard OFA, therefore it is likely that many units would be installing that control technology even without CASA incentives. Therefore, there is no need to provide any further incentive through the CASA since the normal aspects of the trading program, which already provides an appropriate incentive for these controls, should result in widespread use of OFA and advanced OFA. Furthermore, allocating CASA allowances to low cost NO<sub>x</sub> controls such as OFA could simply result in the company receiving allowances worth more than the costs of the controls themselves and thus such allowances could then be sold for a profit. Illinois EPA believes that the emissions reductions would likely not be as large as those achieved if more costly controls were instead installed. In addition, because the advanced OFA control would likely have been installed without CASA incentives, the net effect to the trading program would be that fewer allowances are available for the intended purpose of the CASA.
- Allowing OFA or advanced OFA to be considered for allowances from the CASA could greatly reduce the available CASA allowances, and hence incentive, for sources to install the significantly more costly and typically more effective NO<sub>x</sub> controls (i.e., SNCR and SCR). Ameren provided testimony stating that "...even advanced OFA has capital costs substantially less than an SNCR system."

- (Menne pre-filed testimony at 5.) Note that SNCR has the lower capital costs among the eligible controls, namely SNCR, SCR, baghouses and scrubbers, whose costs can be tens of millions of dollars more than OFA controls. Any CASA allowances allocated to OFA or advanced OFA would be allowances that could not be allocated to offset much more costly controls and therefore reduce the likelihood of such controls being installed.
- 3) Enhancements to standard OFA can increase the control effectiveness and associated costs of OFA to result in what Ameren considers advanced OFA. The same argument can be made that enhancements to SNCR and SCR could be made and result in advanced SNCR and SCR. For example, at an increased cost, SNCR effectiveness can be increased by implementing Rich Reagent Injection (RRI) or any other enhancement. In any circumstance where enhancements are made, whether it be for standard OFA or SNCR, the associated costs would also correspondingly increase. An argument stating that the costs and control effectiveness of advanced OFA would increase into the range of a higher cost control such as SNCR due to enhancements, would need to also consider the increased costs and effectiveness of enhancements that could be applied to SNCR from RRI. Advanced OFA cannot be considered in the same costs range or control effectiveness as SNCR and SCR based on the limited amount of data supplied by Ameren. In fact, the available information indicates that even advanced OFA is relatively low in costs and therefore not in need of a CASA incentive.

#### Fluidized Bed Combustion Boiler Policy

During the first hearing, Illinois EPA stated it was reviewing its policy on allowing fluidized bed combustion (FBC) boilers to receive CASA allowances in the clean coal technology category. After further review, Illinois EPA has concluded that it is appropriate to continue to allow Illinois' single existing FBC boiler to receive CASA allowances; however, it is not appropriate to allow any future FBC boilers to receive CASA allowances. The rationale for this determination is provided below.

There are currently 59 coal-fired boilers in Illinois affected by CAIR. Of these 59, only one is an FBC boiler, namely the SIPCO 123 boiler in Marion, Illinois. This boiler was constructed more recently in 2001 and began operation in 2003. At the time of construction, FBC was considered a more current technology for utility boilers, while the 58 other boilers in

Illinois are older units, some by as much as 50 years or more, and are all pulverized coal combustion (PCC) boilers and cyclone-fired boilers (which burn crushed coal).

The SIPCO boiler 123 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. The SIPCO FBC boiler had an average annual (2003 to 2005) NO<sub>x</sub> emission rate of 0.10 lbs/mmbtu, which is lower than the system-wide NO<sub>x</sub> emission rates for any of the other boilers in Illinois. It is believed that this NO<sub>x</sub> emission rate was achieved with only part-time operation of the SNCR for NOx control. The NO<sub>x</sub> emission rate from SIPCO boiler 123 has reached as low as 0.06 lbs/mmbtu during the 3<sup>rd</sup> quarter of 2005. For SO<sub>2</sub>, the FBC boiler had an average annual (2003 to 2005) NO<sub>x</sub> emission rate of 0.47 lbs/mmbtu, which likewise is lower than the system-wide SO<sub>2</sub> emission rates for any of the other boilers in Illinois. These emission rates could be lower should SIPCO decide to more fully utilize the NO<sub>x</sub> controls currently in place or install additional controls for NO<sub>x</sub> and SO<sub>2</sub> on the FBC boiler.

Allowing SIPCO to receive CASA allowances is believed to help accomplish several environmentally beneficial goals, including the following:

- 1) Recognize the lower NO<sub>x</sub> and SO<sub>2</sub> emissions that originate from this FBC boiler as compared to other existing boilers.
- Provide an incentive for SIPCO to reduce NO<sub>x</sub> emissions as much as possible in order to allow them to obtain as many CASA allowances as possible since the amount of CASA allowances received is proportional to the amount of NO<sub>x</sub> emitted, i.e., the lower the NO<sub>x</sub> emissions the more CASA allowances they are eligible to receive.

Note that the allowances will be available for the SIPCO boiler for as long as the boiler is operating.

Illinois EPA believes that going forward the CASA clean coal technology category should focus on the most promising technology, i.e., IGCC. IGCC facilities are capable of much

lower emissions than FBC boilers. Therefore, Illinois EPA has determined that future FBC boilers should not be allowed to receive CASA allowances. Of note is that only recently have IGCC facilities been recognized and accepted as commercially viable. Such facilities were considered less so during the decision making process that accompanied the installation of the SIPCO 123 boiler and CAIR rule development process. Evidence of IGCC acceptability can be found in an increase in the recent number of IGCC applications for permits nationwide.

#### 1. FBC Boiler Emissions

Uncontrolled emissions of both NO<sub>x</sub> and SO<sub>2</sub> from FBC boilers are lower than those from other boilers. This is confirmed by a review of the preeminent source for emission factors, USEPA AP-42 (Reference: USEPA AP-42, 9/98, Section 1.1 Bituminous and Subbituminous Coal Combustion). (Agency Hearing Ex. 18.) The factor provided by AP-42 for uncontrolled NO<sub>x</sub> from a FBC boiler is 5 lbs/ton whereas for other boiler types the factor ranges from 7.2 to 33 lbs/ton. Obviously, uncontrolled emissions of NO<sub>x</sub> can be much higher from a non-FBC boiler. A similar situation exists for SO<sub>2</sub>, although it is not as straightforward of an emissions factor. Instead, AP-42 states that SO<sub>2</sub> emissions from FBC boilers are a function of fuel sulfur content and the calcium-to-sulfur ratio.

The emissions from coal-fired boilers are dependent upon many parameters, including boiler type, coal type, and installed pollution control devices. The common starting point for estimating the emissions from coal-fired boilers, like all units, is the uncontrolled emissions rate. Using uncontrolled emissions allows a like comparison (e.g., apples to apples) for the different type of boilers (PCC tangential-fired, PCC wall-fired, cyclone-fired, FBC and IGCC) and coal types, regardless of what type of control devices are installed. Next, the actual emissions rates are typically determined in order to assess the emissions after the installation of any emissions

control devices and techniques. A wide variety of emission control devices and techniques exist for  $NO_x$  and  $SO_2$  control from coal-fired boilers, including dry scrubber, wet scrubber, baghouse with lime injection, SCR, SNCR, SNCR with RRI, staged combustion air, OFA, and low  $NO_x$  burners. The effectiveness of controls is measured by the percent reduction in emissions they are able to achieve, or their control efficiency.

The actual emission rate is determined by reducing the uncontrolled emissions rate by the control effectiveness. For example, a boiler that has 100 tons/yr of uncontrolled SO<sub>2</sub> and has a scrubber installed that reduces the uncontrolled SO<sub>2</sub> emissions by 90% will have actual emissions of 10 tons/yr of SO<sub>2</sub>, which is the result of reducing 100 tons/yr by 90%. Obviously, a boiler that has lower uncontrolled emissions of 50 tons/yr of SO<sub>2</sub> will have even lower SO<sub>2</sub> emissions given the same scrubber control, i.e., 50 tons/yr reduced by 90% is only 5 tons/yr.

Since there are a wide variety of control devices and techniques available, many boilers are capable of reducing both their  $NO_x$  and  $SO_2$  emissions by a large percentage, limited perhaps primarily to the amount of money they are able and/or willing to spend on controls and other control techniques. For example, should a company with an FBC boiler wish to reduce  $NO_x$  and  $SO_2$  emissions by a large percentage they could switch to a lower sulfur coal, install and optimally operate an SNCR year round, and install a dry scrubber.

Using permitted emissions, actual emissions, or controlled emissions to analyze the impact boiler type has on emissions will not necessarily provide an accurate assessment since it is likely only measuring the level of control a particular boiler type has installed. A more accurate measure to determine if one type of boiler is "cleaner" than another is to compare the uncontrolled emission rate, thereby comparing "apples to apples." Likewise, concluding that a specific non-FBC (e.g., PCC or cyclone boiler) is "cleaner," or less polluting, than an FBC boiler

because its emission limits in a permit (or permitted emissions) are lower than a specific existing FBC boiler's actual emissions is also flawed in that one needs to know how the permitted emissions were obtained. If they are based on estimated actual emissions from the non-FBC boiler, then one of the primary factors in estimating these emissions is the control used by the non-FBC boiler. Given equal control and coal type, the FBC boiler would likely achieve lower emissions based on the lower uncontrolled emissions needed to be reduced. If the owner/operator of the non-FBC boiler installs controls able to achieve a higher percent reduction than those installed on the FBC boiler then the actual and permitted emissions may in fact be below those of the FBC boiler. However, if the same level of control was also installed on the FBC boiler then the emissions would likely be even lower than those of the non-FBC boiler. This is based on the fact that starting with lower emissions often allows one to reduce to a lower final emission rate.

For example, a PCC boiler controlled by a scrubber and SCR may have permitted emissions lower than a FBC boiler that does not have any controls, but that does not mean the PCC boiler itself is a cleaner unit. If the FBC boiler were to install a similar scrubber and an SNCR and all other parameters were kept similar, its emissions of SO<sub>2</sub> and NO<sub>x</sub> would likely be lower than those from the PCC boiler. Given equal operating parameters, the FBC boiler has lower emissions of regulated pollutants than those from a PCC boiler.

Even if some companies with PCC and cyclone boilers have agreed to lower permitted rates of NO<sub>x</sub> and SO<sub>2</sub> than similarly sized and fired FBC boilers, it does not necessarily follow that those non-FBC boilers have lower emissions and are capable of achieving lower emissions than the FBC boilers. This may not be the case for several reasons, including those previously mentioned as well as the fact that companies have many different reasons for accepting emission

rates limits in permits. Companies will typically seek a permit limit of the highest emission rate that allows them to meet the applicable regulatory requirements and accomplish other goals. As a practical matter for plant operation, companies do not seek or accept as a permit limit the lowest level of emissions that can be achieved. Although there may be many non-FBC boilers permitted to emit lower amounts of NO<sub>x</sub> and SO<sub>2</sub>, this cannot reasonably lead to a conclusion that these boilers either emit or are capable of emitting lower NO<sub>x</sub> and SO<sub>2</sub> emissions than comparable FBC boilers. The permitted emission rates in a FBC boiler permit may simply be based on the regulatory requirements while the boiler is actually achieving, or capable of achieving, a much lower emissions rate.

## 2. FBC Boilers And Green House Gases (GHG)

Although the scope of CAIR is on reducing the emissions of NO<sub>x</sub> and SO<sub>2</sub>, Illinois EPA conducted a review of the global warming impacts of utility FBC boilers as compared to PCC boilers. The analysis was based on currently available emission factors for greenhouse gases, and published factors which quantify the global warming potential for the major GHG pollutants. This analysis demonstrates that coal combustion in FBC boilers results in higher GHG impacts relative to PCC, mainly due to higher N<sub>2</sub>O emissions from FBC. It is important to note that the carbon mass in the coal, which can vary by coal type, has a significant impact on the results. Regardless of the combustion process, more than 80% of the GHG emissions are in the form of CO<sub>2</sub>. Ultimately, the fuel choice and its resulting carbon content may be a more important factor in determining the GHG impact than the choice of boiler type. The flexibility of FBC boilers to combust different types of fuel may yield a significant advantage over PCC in terms of GHG impacts. Unlike PCC, FBC boilers can more easily combust lower carbon content fuels (i.e. biomass) which can have lower carbon emissions (CO<sub>2</sub>). Additionally, according to the National

Renewable Energy Laboratories, the use of biomass energy has the potential to greatly reduce GHG emissions. Burning fossil fuels releases CO<sub>2</sub> captured by photosynthesis millions of years ago—an essentially "new" GHG. Biomass, on the other hand, releases CO<sub>2</sub> that is largely balanced by the CO<sub>2</sub> captured in its own growth (Reference: <a href="http://www.nrel.gov/learning/re\_biomass.html">http://www.nrel.gov/learning/re\_biomass.html</a>).

Furthermore, recent research has emphasized that there is considerable uncertainty in establishing accurate N<sub>2</sub>O emissions due to limited understanding of how fuels and operating conditions affect formation. Illinois EPA's analysis is based on one method and set of assumptions for calculating global warming impacts from these combustion processes and should not be considered definitive. As additional research becomes available on GHG emissions from PCC and FBC processes, hopefully a more conclusive determination can be made of the quantity of their GHG emissions and their potential to impact climate change.

According to the U.S. Department of Energy, optimum configurations of second-generation pressurized fluidized bed combustion boilers with fuel cells and CO<sub>2</sub> sequestration options are being developed. These second generation pressurized FBC boilers will have even lower SO<sub>2</sub> and NO<sub>x</sub> emissions. (Reference: <u>Program Facts</u>, U.S. Department of Energy, National Energy Technology Laboratory, 11/2000.)

#### 3. Revision of CASA Equation for Clean Fluidized Bed Coal Combustion

Illinois EPA has determined that it is appropriate to revise the allocation method in the proposed in Sections 225.465(b)(5)(B) and 225.565(b)(5)(B) relating to allocating CASA allowances to clean coal technology projects. The basis for this determination is that SIPCO directly measures its emission rate in pound per megawatt (lb/MW) rather than converting from pound per million Btu (lb/mmBtu). Illinois EPA had previously performed an estimate using

data available from USEPA's Clean Air Market Division (CAMD), which does not report the direct measurement that SIPCO performs and therefore was less accurate than the direct measurement.

The proposed revision will not result in a significant change for the CASA allowance distribution; instead, it will result in a status quo CASA allowance distribution as compared to Illinois EPA's prior estimate. The proposed revision will include new subsections in Sections 225.465(b)(5)(B) and 225.565(b)(5)(B). Subsection (b)(5)(B) will include an equation similar in all respects to the prior method with the exception of a factor change from 1.0 to 1.4. The factor change will compensate for SIPCO's direct measurements and provide the same level of incentive that Illinois EPA was previously attempting to achieve.

### **Air Quality Modeling**

Illinois EPA summarized USEPA's modeling results in the Technical Support Document (TSD), which were originally presented by USEPA in a March 2005 document entitled: "Technical Support Document for the Final Clean Air Interstate Rule – Air Quality Modeling." Illinois EPA presented USEPA's modeling showing that NO<sub>x</sub> and SO<sub>2</sub> reductions from power plants are effective in reducing ozone and PM<sub>2.5</sub> 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<sub>2.5</sub> standards. (TSD at 35.) The implication from USEPA's modeling is clearly that Illinois must seek additional emission reductions, either locally or regionally, to achieve attainment of the air quality standards.

Illinois EPA's TSD also presented the results of ongoing modeling analyses performed by the Lake Michigan Air Directors Consortium (LADCO). LADCO's modeling results, presented in Table 3-5 of the TSD, clearly indicate the emission reduction targets needed for

both ozone and PM<sub>2.5</sub> attainment. Based on LADCO's modeling, 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. Illinois EPA does not posit that such reductions are technically or economically reasonable. When regional NO<sub>x</sub> and SO<sub>2</sub> reductions are assumed, the modeling indicates that the emission reduction burden in the nonattainment area is lessened.

Mr. Saladino recommended that Illinois EPA conduct a "modeling demonstration to determine the level of reductions that may be necessary to resolve any residual nonattainment problems following implementation of the CAIR reductions." (Saladino at 4 and 5 of pre-filed testimony.) However, the TSD submitted by Illinois EPA to the Board in this rulemaking presented the results of two such modeling studies that address the issues raised by Mr. Saladino. Thus, Illinois EPA has already presented the type of modeling otherwise suggested by Mr. Saladino.

## **Responses to Questions Raised at Hearing**

- a. Question: Section 225.455(b) concerns consequences for a finding of noncompliance. Who makes these findings?
- Illinois EPA Response: Illinois EPA will issue the notice referenced in Section 225.455(b) upon receipt of information, e.g., self-reporting from a regulated facility, that warrants the issuance of the notice.
- b. Question: Section 225.460(d)(2) concerns projects that are not eligible to receive CASA allowances. One type of project that will not be eligible is one that is required to meet emission standards or technology requirements under State or federal law or regulation. How will Illinois EPA determine whether a project is required to meet a State or federal law or regulations?

Illinois EPA Response: Illinois EPA will make such a determination in a manner consistent with all such situations. Illinois EPA routinely determines whether an activity is subject to compliance with a law or regulation that is administered or overseen by Illinois EPA. This determination may involve different members of Illinois EPA's staff, including but not limited to the compliance unit or legal counsel.

- c. Question: In the definition for project sponsor it mentions a written agreement. Who is the written agreement between?
- Illinois EPA Response: The written agreement is between the entity providing the majority of the funding and the entity that is becoming the project sponsor.
- d. Question: Section 225.320 requires the submittal by the owner or operator of any supplemental information requested by Illinois EPA. What is the timing of the equest for supplemental information?

Illinois EPA Response: Illinois EPA will send a letter requesting the additional information that includes the timeline for its submission.

- e. Question: Section 225.450 refers to the word system when addressing the requirements for gross electrical output monitoring. What is meant by the word "system"?
- Illinois EPA Response: This issue was also raised in Midwest Generation's Response to Illinois EPA's Motion to Amend and was addressed by Illinois EPA in its Reply to that Motion.
- f. Question: Section 225.320 states that a CAIR permit will be issued pursuant to Section 39 or 39.5 of the Act. How will the owner or operator know which Section of the Act is applicable?
- Illinois EPA Response: It will depend on the circumstances that are applicable to source or the unit. The owner or operator will make this determination before submitting the application. For example, new sources typically obtain first obtain construction permits pursuant to Section 39 of the Act and then obtain Clean Air Act Program Permits (CAAPP) pursuant to Section 39.5 of the Act.
- g. Question: The language in Section 405(b) is confusing.
- Illinois EPA Response: USEPA had found the initial language included in the proposal unacceptable but has found the current language approvable.

### 8. Summary of Proposed Changes to the Proposal

a. In the electronic version of the attached proposed changes to the regulatory proposal changes appear in red, blue, purple and green. Changes in red and blue type refer to proposals recommended in Illinois EPA's Motion to Amend the Rule. Changes in purple refer to

changes recommended in Illinois EPA's Rely to the Response to Amend the Rule. Changes in

green refer to changes recently recommended by USEPA in a conference call with Illinois EPA

staff on December 21, 2006.

b. USEPA recommended numerous conforming amendments. The three most

significant amendments that it recommended concerned deleting subsection (d)(5)(C) in Sections

225.445 and 225.545 that required Illinois EPA to reduce a unit's allocation from the NUSA if it

had been allocated excess allowances for the prior control period. Second, the definition for

"CAIR Trading programs" was deleted because it was not used in the proposal. Third, the

language concerning fractional allowances has been clarified to indicate that Illinois EPA 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.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By:

Rachel L. Doctors
Assistant Counsel
Air Regulatory Unit
Division of Legal Counsel

DATED: January 5, 2007

1021 North Grand Avenue, East

P.O. Box 19276

Springfield, Illinois 62794-9276

217.782.5544 217.782.9807 (Fax)

1		
2		
3		TITLE 35: ENVIRONMENTAL PROTECTION
4		SUBTITLE B: AIR POLLUTION
5		CHAPTER I: POLLUTION CONTROL BOARD
6		SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS
7		FOR STATIONARY SOURCES
8		
9		PART 225
10	C	ONTROL OF EMISSIONS FROM LARGE COMBUSTION SOURCES
11		
12		SUBPART A: GENERAL PROVISIONS
13		
14	Section	
15	225.100	Severability
16	225.120	Abbreviations and Acronyms
17	225.130	Definitions
18	225.140	Incorporations by Reference
19		
20		SUBPART C: CAIR SO <sub>2</sub> TRADING PROGRAM
21		
22	Section	
23	225.300	Purpose
24	225.305	Applicability
25	225.310	Compliance Requirements
26	225.315	Appeal Procedures
27	225.320	Permit Requirements
28	225.325	Trading Program
29		
30		SUBPART D: CAIR NO <sub>x</sub> ANNUAL TRADING PROGRAM
31		
32	Section	
33	225.400	Purpose
34	225.405	Applicability
35	225.410	Compliance Requirements
36	225.415	Appeal Procedures
37	225.420	Permit Requirements
38	225.425	Annual Trading Budget
39	225.430	Timing for Annual Allocations
40	225.435	Methodology for Calculating Annual Allocations
41	225.440	Annual Allocations
42	225.445	New Unit Set-Aside (NUSA)
43	225.450	Monitoring, Recordkeeping and Reporting for Gross Electrical Output and Useful
44	<i>443.</i> ⊤30	Thermal Energy
45	225.455	Clean Air Set-Aside (CASA)
46	225.460	Energy Efficiency, Renewable Energy, and Clean Technology Projects
70	443.700	Energy Efficiency, Renewable Energy, and Clean Technology Projects

47	225.465	Clean Air Set-Aside (CASA) Allowances		
48	225.470	Clean Air Set-Aside (CASA) Applications and Recordkeeping		
49	225.475	Agency Action on Clean Air Set-Aside (CASA) Applications		
50	225.480	Compliance Supplement Pool		
51				
52	SU	JBPART E: CAIR NO <sub>x</sub> OZONE SEASON TRADING PROGRAM		
53				
54	Section			
55	225.500	Purpose		
56	225.505	Applicability		
57	225.510	Compliance Requirements		
58	225.515	Appeal Procedures		
59	225.520	Permit Requirements		
60	225.525	Trading Budget		
61	225.530	Timing for Ozone Season Allocations		
62	225.535	Methodology for Calculating Ozone Season Allocations		
63	225.540	Ozone Season Allocations		
64	225.545	New Unit Set-Aside (NUSA)		
65	225.550	Monitoring, Recordkeeping and Reporting for Gross Electrical Output and Useful		
66		Thermal Energy		
67	225.555	Clean Air Set-Aside (CASA)		
68	225.560	Energy Efficiency, Renewable Energy, and Clean Technology Projects		
69	225.565	Clean Air Set-Aside (CASA) Allowances		
70	225.570	Clean Air Set-Aside (CASA) Applications and Recordkeeping		
71	225.575	Agency Action on Clean Air Set-Aside (CASA) Applications		
72				
73	AUTHORITY: Implementing Section 10, and authorized by Sections 27 and 28 of the Illinois			
74	Environmental Protection Act [415 ILCS 5/10, 27 and 28].			
75				
76	SOURCE: Ad	dopted in Docket R06- <u>26</u> —at Ill. Reg., effective , 200 <del>6</del> 7		
77				
78				
79		SUBPART A: GENERAL PROVISIONS		
80				
81	Section 225.12	20 Severability		
82		,		
83	If any Section	, subsection or clause of this Part is found invalid, asuch finding willshall not affect		
84	•	this Part as a whole or any Section, sentence or clause not found invalid.		
85	the validity of	this rait as a whole of any section, sentence of clause not round invalid.		
86	Section 225.10	O3 Abbreviations		
87	Section 223.19	110010VIddioiis		
88	Unless otherw	vise specified within this Part, the abbreviations used in this Part will shall be the	l	
89		found in 35 Ill. Adm. Code 211. The following abbreviations and acronyms are	ļ	
90	used in this Part:			
91	asea in tills I t	62 V.		
92	Act	Environmental Protection Act [415 ILCS 5 et seq.]	l	
14	1100	Entroduction rior [115 IECS 5 et seq.]	ı	

93	Agency	Illinois Environmental Protection Agency
94	Btu	British thermal unit
95	CAA	Clean Air Act [42 U.S.C. 7401]
96	CAAPP	Clean Air Act Permit Program [415 ILCS 5/39.5]
97	CEMS	continuous emissions monitoring systems
98	EGU	electric generating unit
99	GO	Gross electrical output
100	HI	heat input
101	hr	hour
102	kg	kilogram
103	mmBtu	million Btu
104	MW	megawatt
105	MWe	megawatt electrical
106	MWh	megawatt hour
107	$NO_x$	nitrogen oxides
108	ORIS	Office of Regulatory Information Systems
109	$\mathrm{O}_2$	oxygen
110	$\mathrm{SO}_2$	sulfur dioxide
111	USEPA	United State Environmental Protection Agency
112	yr	year
113		
114	Section 225.130	Definitions

The <u>following</u> definitions <u>contained in this Section</u> apply <u>only to for</u> the <u>provisions purposes</u> of this Part. Unless otherwise defined in this Section <u>and unless or</u> a different meaning <u>for of</u> a term is clear from its context, the <u>definitions of</u> terms used in this Part shall have the meanings specified <u>for those terms</u> in 35 Ill. Adm. Code 211, and 40 CFR §§ 96.102, 96.202, and 96.302, as incorporated by reference in Section 225.140 of this Subpart.

"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, with regard to for the purpose of general accounts, a responsible natural person who is authorized, in accordance with 40 CFR 96 subparts BB, FF, BBB, FFF, and BBBB, and FFFF to transfer and otherwise dispose of CAIR NO $_x$ , and SO $_2$ -, and NO $_x$  Ozone Season allowances, as applicable, held in the CAIR NO $_x$ , SO $_2$ , and NO $_x$  Ozone Season general accounts, and with regard to 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<sub>x</sub> source, and a CAIR SO<sub>2</sub> source, and a CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> unit, and CAIR SO<sub>2</sub> unit and CAIR NO<sub>x</sub> 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, and BBBB, and FFFF as applicable, to represent and legally bind each owner and operator in matters pertaining to the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and the CAIR NO<sub>x</sub> Ozone Season Trading Program, as applicable. For any unit that is subject to one or more of the following programs: CAIR NO<sub>x</sub> Annual Trading Program, the CAIR SO<sub>2</sub> Trading Program, the CAIR NO<sub>x</sub> Ozone Season Trading Program, or the federal Acid Rain Program, the designated representative for the such unit shallmust be the same natural person for all programs-all applicable to the unit.

"CAIR NO<sub>\*</sub> compliance account" means, for the purposes of Subparts D and E of this Part, a CAIR NO<sub>\*</sub> Allowance Tracking System account, established by USEPA for a CAIR NO<sub>\*</sub> source under 40 CFR 96 subparts FF and FFFF in which any CAIR NO<sub>\*</sub> allowance allocations for the affected units at the source are initially recorded and in which are held any CAIR NO<sub>\*</sub> allowances available for use for a control period in order to meet the source's CAIR NO<sub>\*</sub> emissions limitations in accordance with Sections 225.410 and 225.510 of this Part, and 40 CFR §§ 96.154 and 96.354, as incorporated by reference in Section 225.140 of this Subpart.

"CAIR Trading Programs" means the requirements of this Part, and those provisions of the federal CAIR NO<sub>\*</sub> Annual Season, CAIR SO<sub>25</sub> or CAIR NO<sub>\*</sub> Ozone Season Trading Programs set forth in 40 CFR 96, as incorporated by reference in Section 225.140 of this Subpart.

"Coal-fired" means:

a) For purposes of allocating allowances under Sections 225.435, 225.445, 225.535 and 225.545, Subparts B, D, and E, combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during a specified year; or

Except as provided in paragraph a) of this definition, 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, during any year.

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

a) Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and

b) Producing during the 12-month period starting on the date the unit first

185 produces electricity and during any calendar year after the calendar year in 186 which the unit first produces electricity: 187 188 1) For a topping-cycle cogeneration unit: 189 190 i) Useful thermal energy not less than 5 percent of total 191 energy output; and 192 193 Useful power that, when added to one-half of useful ii) 194 thermal energy produced, is not less than 42.5 percent of 195 total energy input, if useful thermal energy produced is 15 196 percent or more of total energy output, or not less than 45 197 percent of total energy input, if useful thermal energy 198 produced is less than 15 percent of total energy output. 199 200 2) For a bottoming-cycle cogeneration unit, useful power not less 201 than 45 percent of total energy input. 202 203 "Combined cycle system" means a system comprised of one or more combustion 204 turbines, heat recovery steam generators, and steam turbines configured to improve 205 overall efficiency of electricity generation or steam production. 206 "Combustion turbine" means: 207 208 209 An enclosed device comprising a compressor, a combustor, and a turbine and in 210 which the flue gas resulting from the combustion of fuel in the combustor passes 211 through the turbine, rotating the turbine; and 212 213 If the enclosed device pursuant to the under paragraph above is combined cycle, 214 any associated duct burner, heat recovery steam generator and steam turbine. 215 216 "Commence commercial operation" means, with respect to Subparts C, D and E of this 217 Part, with regard to a unit serving a generator: 218 219 To have begun to produce steam, gas, or other heated medium used to a) 220 generate electricity for sale or use, including test generation, except as 221 provided in 40 CFR-\(\frac{1}{2}\) 96.105, 96.205, or 96.305, as incorporated by 222 reference in Section 225.140-of this Subpart. 223 224 1) For a unit that is a CAIR SO<sub>2</sub> unit, CAIR NO<sub>x</sub> unit, or a CAIR NO<sub>x</sub> Ozone Seasonan affected unit pursuant to under 40 CFR § 96.104, 225 226 96.204 or 96.304 Sections 225.305, 225.405 and 225.505, respectively, on the date the unit commences commercial operation 227 228 on the later of November 15, 1990 or the date the unit commence 229 commercial operation as defined in paragraph (a) of this definition 230 and that subsequently undergoes a physical change (other than

- replacement of the unit by a unit at the same source), such date <u>willshall</u> remain the unit's date of commencement of commercial operation, which <u>willshall</u> continue to be treated as the same unit.
- Por a unit that is a CAIR SO<sub>2</sub> unit, CAIR NO<sub>x</sub> unit, or a CAIR NO<sub>x</sub> Ozone Seasonan affected unit under-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 paragraph (a) of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), such date willshall remain the replacement replaced unit's date of commencement of commercial operation, and the replacementdment unit willshall be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraphs (a) or (b) of this definition as appropriate.
- Notwithstanding paragraph (a) of this definition and except as provided in 40 CFR-§ 96.105, 96.205, or 96.305 for a unit that is not a CAIR SO<sub>2</sub> unit, CAIR NO<sub>x</sub> unit, or a CAIR NO<sub>x</sub> Ozone Seasonan affected unit pursuant tounder SectionSections 225.305, 225.405 and 225.505, 225.305, 225.405, or 225.405, respectively,40 CFR § 96.104, 96.204 or 96.304 on the later of November 15, 1990 or the date the unit commences commercial operation as defined in paragraph (a) of this definition, the unit's date for commencement of commercial operation willshall be the date on which the unit becomes an affected unit under-pursuant to Section 225.305, 225.405, or 225.405, Sections 225.305, 225.405 and 225.505, respectively40 CFR § 96.104, 96.204, or 96.304.
  - 1) For a unit with a date for commencement of commercial operation as defined in paragraph (b) of this definition and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date <u>willshall</u> remain the unit's date of commencement of commercial operation, <u>which shall</u> continue to be treated as the same unit.
  - 2) For a unit with a date for commencement of commercial operation as defined in paragraph (b) of this definition and that is subsequently replaced by a unit at the same source (e.g., repowered), such date <a href="willshall">willshall</a> remain the replacementdment unit's date of commencement of commercial operation, and the replacementdment unit <a href="willshall">willshall</a> be treated as a separate unit with a separate date for commencement of commercial operation as defined in paragraph (a) or (b) of this definition as appropriate.
- c) Notwithstanding paragraphs (a) and (b) of this definition, for a unit not

serving a generator producing electricity for sale, the unit's date of commencement of operation shall also be the unit's date of commencement of commercial operation.

"Commence construction" means, for the purposes of Section 225.460(f), 225.470, and 225.560(f), and 225.570 that the owner or his 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
- b) 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:
- c) For purposes of this definition:
  - 1) "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.
  - 2) "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 of C, D and E-of this Part, means:

- a) To have begun any mechanical, chemical, or electronic process, including, with regard to 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-of this Subpart.
- <u>b</u>4) For a unit that undergoes a physical change (other than replacement of the unit by a unit <u>atas</u> the same source) after the date the unit commences operations as defined in paragraph (a) of this definition, such date <u>willshall</u> remain the date of commencement of operation of the unit, which <u>willshall</u> continue to be treated as the same unit.

<u>c</u> 2)	For a unit that is replaced by a unit at the same source (e.g., repowered),
	after the date the unit commences operation as defined in paragraph (a) of
	this definition, such date willshall remain the replaced unit's date of
	commencement of operation, and the replacement unit willshall be treated
	as a separate unit with a separate date for commencement of operation as
	defined in paragraphs (a), or (c) of this definition as appropriate.
<del>b)</del>	Notwithstanding paragraph (a) of this definition and solely for the
,	purposes of 40 CFR 96, subparts HH, HHH, and HHHH, for a unit that is
	not an affected unit under 40 CFR § 96.104, 96.204, or 96.304 on the later
	of November 15, 1990 or the date the unit commences operation as
	defined in paragraph (a) of this definition and subsequently becomes an
	affected uni, the unit's date for commencement of operation shall be the
	date on which the unit becomes an affected unit under 40 CFR § 96.104,
	96.204, or 96.304.
	1) For a unit with a date for commencement of operation as defined in
	paragraph (b) of this definition and that subsequently undergoes a
	physical change (other than replacement of the unit by a unit at the
	same source), such date shall remain the unit's date of
	commencement of operation.
	Commence in the operation.
	2) For a unit with a date for commencement of operation as defined in
	paragraph (b) of this definition and that is subsequently replaced
	by a unit at the same source (e.g., repowered), the replacement unit
	shall be treated as a separate unit with a separate date for
	commencement of operation as defined in paragraphs (a) or (b) of
	this definition as appropriate.
	uns definition as appropriate.
"Common st are exhausted	ack" means a single flue through which emissions from two or more units d.
"Compliance	e account" means, for the purposes of:
a)	Subparts D and E-, a CAIR NO <sub>x</sub> Allowance Tracking System account,
	established by USEPA for a CAIR NO <sub>x</sub> source or CAIR NO <sub>x</sub> Ozone
	Season source pursuant to 40 CFR 96 subparts FF and FFFF in which any
	CAIR NO <sub>x</sub> allowance or CAIR NO <sub>x</sub> Ozone Season allowance allocations
	for the CAIR NO <sub>x</sub> units or CAIR NO <sub>x</sub> Ozone Season units at the source
	are initially recorded and in which are held any CAIR NO <sub>x</sub> or CAIR NO <sub>x</sub>
	Ozone Season allowances available for use for a control period in order to
	meet the source's CAIR NO <sub>x</sub> or CAIR NO <sub>x</sub> 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 <sub>x</sub> allowances may not be used for compliance with the CAIR NO <sub>x</sub>

	Ozone Season Trading program and CAIR NO <sub>x</sub> Ozone Season allowances
	may not be used for compliance with the CAIR NO <sub>x</sub> Annual Trading
	program.
b)	For the purposes of Subpart C, a "compliance account" means a CAIR
	SO <sub>2</sub> Allowance Tracking System account, established by USEPA
	for a CAIR SO <sub>2</sub> source pursuant to 40 CFR 96 subpart FFF in which any
	SO <sub>2</sub> allowance allocations for the CAIR SO <sub>2</sub> units at the source are
	initially recorded and in which are held any SO <sub>2</sub> allowances available for
	use for a control period in order to meet the source's CAIR SO <sub>2</sub> 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<sub>2</sub> and NO<sub>x</sub> Annual Trading programs in Subparts C and D-of this Part, the period beginning January 1 of a calendar year, except as provided in Sections 225.310(d)(3) and 225.410(d)(3) of this Subpart, and ending on December 31 of the same year, inclusive; or

For the CAIR NO<sub>x</sub> Ozone Season Trading Program in Subpart E of this Part, the period beginning May 1 of a calendar year, except as provided in Section 225.510(d)(3)-of this Subpart, and ending on September 30 of the same year, inclusive.

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

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

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

"Generator" means a device that produces electricity.

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

"Heat input" means, <u>for the purposes of with regard</u> Subparts C, D, and E-of this Part, with regard to a specified period of time, the product (in mmBtu/hr) of the gross calorific value of the fuel (in Btu/lb) divided by 1,000,000 Btu/mmBtu and multiplied by the fuel feed rate into a combustion device (in lb of fuel/time), as measured, recorded and

reported to USEPA by the CAIR designated representative and determined by USEPA in accordance with 40 CFR 96, subpart HH, HHH, or HHHH-, if applicable, and excluding the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

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

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

"Nameplate Capacity" means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe) that the generator is capable of producing on a steady state basis and during continuous operation (when not restricted by seasonal or other deratings) as 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 such 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.

"Project sponsor' means a person, including the owner or operator of an electric generating unit that implements or helps to implement an energy efficiency and conservation, renewable energy, or clean technology project as listed in Sections 225.460 and 225.560 of this Part.

"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<sub>x</sub> allowances or NO<sub>x</sub> 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:

461 462 For electric generators, rated energy efficiency is calculated as one kilowatt hour 463 (3,413 Btu) of electricity divided by the unit's design heat rate using the higher 464 heating value of the fuel, and expressed as a percentage. 465 466 For combined heat and power projects, rated-energy efficiency is calculated using 467 the following formula: 468 469 REE = $((GO + UTE)/HI) \times 100$ 470 471 Where: 472 473 REE Rated-energy efficiency, expressed as percentage. 474 GO = Gross electrical output of the system expressed in Btu/hr. 475 UTE = Useful thermal output from the system that is used for 476 heating, cooling, industrial processes or other beneficial 477 uses, expressed in Btu/hr. НІ Heat input, based upon the higher heating value of fuel, in 478 479 Btu/hr. 480 481 "Repowered" means, with regard to for the purpose of aan electric generating unit, 482 replacement of a coal-fired boiler with one of the following coal-fired technologies at the 483 same source as the coal-fired boiler: 484 485 Atmospheric or pressurized fluidized bed combustion; 486 487 Integrated gasification combined cycle; 488 489 Magnetohydrodyamics; 490 491 Direct and indirect coal-fired turbines; 492 493 Integrated gasification fuel cells; or 494 495 As determined by the USEPA, a derivative of one or more of the technologies 496 listed above, and any other coal-fired technology capable of controlling multiple 497 combustion emissions simultaneously with improved boiler generation efficiency 498 and with significantly greater waste reduction relative to the performance of 499 technology in widespread commercial use as of January 1, 2005. 500 501 "Total energy output" means, with respect to a cogeneration unit, the sum of useful 502 power and useful thermal energy produced by the cogeneration unit. 503 504 "Useful thermal energy" means, with regard to for the purpose of a cogeneration unit, the 505 thermal energy that is made available to an industrial or commercial process, excluding 506 any heat contained in condensate return or makeup water:

507 508 509 510		Used in a heat <u>ing</u> application (e.g., space heating or domestic hot water heating); or	
511 512 513		Used in a space cooling application (e.g., thermal energy used by an absorption chiller).	
514 515	Section 225.1	Incorporations by Reference	
516 517 518		g materials are incorporated by reference. These incorporations do not include any ents or editions.	
519 520 521 522 523 524 525	a)	CAIR SO <sub>2</sub> Trading Program, 40 CFR 96, subpart AAA (CAIR SO <sub>2</sub> Trading Program General Provisions, excluding 40 CFR-§§ 96.204, and 96.206); 40 CFR 96, subpart BBB (CAIR Designated Representative for CAIR SO <sub>2</sub> Sources); 40 CFR 96, subpart FFF (CAIR SO <sub>2</sub> Allowance Tracking System); 40 CFR 96, subpart GGG (CAIR SO <sub>2</sub> Allowance Transfers); and 40 CFR 96, subpart HHH (Monitoring and Reporting) (2006).	
526 526 527 528 529 530 531 532	b)	CAIR NO <sub>x</sub> Annual Trading Program, 40 CFR 96, subpart AA (NO <sub>x</sub> Annual Trading Program General Provisions, excluding 40 CFR-\$\frac{1}{2}1	
533 534 535 536 537 538 539	c)	CAIR NO <sub>x</sub> Ozone Season Trading Program 40 CFR 96, subpart AAAA (CAIR NO <sub>x</sub> 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 <sub>x</sub> Ozone Season Sources); 40 CFR 96, subpart FFFF (CAIR NO <sub>x</sub> Ozone Season Allowance Tracking System); 40 CFR 96, subpart GGGG (CAIR NO <sub>x</sub> Ozone Season Allowance Transfers); and 40 CFR 96, subpart HHHH (Monitoring and Reporting) (2006).	
<ul><li>540</li><li>541</li><li>542</li></ul>	d)	40 CFR 75 ( <u>2006</u> <del>2005</del> ).	
543 544	e)	40 CFR 78 ( <u>2006</u> <del>2005</del> ).	
545 546 547 548 549	f)	Federal Energy Management Program, <i>M&amp;V Measurement and Verification for Federal Energy Projects</i> , U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Version 2.2, DOE/GO-102000-0960 (September 2000).	
550		SUBPART C: CAIR SO <sub>2</sub> TRADING PROGRAM	
551 552	Section 225.3	00 Purpose	

553554

555

556

557558

559560

561562

563

564

565

566567

568

569570

571

572

573574

575

576577

578

579580581

582

583 584

585

586

587 588

589

590

591

592

593

594595

596

597

598

The purpose of this Subpart C is to control the emissions of sulfur dioxide (SO<sub>2</sub>) from electric generating units (EGUs) annually by implementing the CAIR SO<sub>2</sub> Trading Program pursuant to 40 CFR -96, as incorporated by reference in Section 225.140 of this Subpart. Section 225.305 **Applicability** Except as provided in subsections (b)(1), (b)(3), and (b)(4) of this Section: The following units are CAIR SO<sub>2</sub> units, and any source that includes one 1) or more such units is a CAIR SO<sub>2</sub> source subject to the requirements of this Subpart C: any stationary, fossil-fuel-fired boiler or stationary, fossilfuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale. If a stationary boiler or stationary combustion turbine that, pursuant to subsection (a)(1) of this Section, is not a CAIR SO<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> units and units that meet the requirements of subsections (b)(2) and (b)(5) of this Section are CAIR SO<sub>2</sub> units: Any unit that is a CAIR  $SO_2$  unit pursuant to subsection (a)(1) or (a)(2) of 1) this Section and: Qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continuing to qualify as a cogeneration unit; and 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. 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

599		shall become a CAIR SO <sub>2</sub> unit starting on the earlier of January 1 after the
600		first calendar year during which the unit no longer qualifies as a
501		cogeneration unit or January 1 after the first calendar year during which
602		the unit no onger meets the requirements of subsection (b)(1)(B) of this
503		Section.
604		
605		Any unit that is a CAIR $SO_2$ unit pursuant to subsection (a)(1) or (a)(2) of
606		this Section commencing operation before January 1, 1985 and:
607		
608		A) Qualifies as a solid waste incineration unit; and
609		Tay was as a solid waste memoration and and
610		B) WithHas an average annual fuel consumption of non-fossil fuel for
611		1985-1987 exceeding 80 percent (on a Btu basis) and an average
612		annual fuel consumption of non-fossil fuel for any three
613		consecutive calendar years after 1990 exceeding 80 percent (on a
614		Btu basis).
615		<u>Dta oasisj.</u>
616		4) Any unit that is a CAIR SO <sub>2</sub> unit under subsection (a)(1) or (a)(2) of this
617		Section commencing operation on or after January 1, 1985: and
618		Section commencing operation on or after varioury 1, 1903, and
619		A) Qualifies as a solid waste incineration unit; and
620		2 damines as a some waste memoration unit, and
521		B) WithHas an average annual fuel consumption of non-fossil fuel the
622		first three years of operation exceeding 80 percent (on a Btu basis)
623		and an average annual fuel consumption of non-fossil fuel for any
624		three consecutive calendar years after 1990 exceeding 80 percent
625		(on a Btu basis).
626		(on a bea ousis).
527		5) If a unit qualifies as a solid waste incineration unit and meets the
628		requirements of subsection (b)(3) or (b)(4) of this Section for at least three
629		consecutive years, but subsequently no longer meets all such
630		requirements, the unit shall become a CAIR SO <sub>2</sub> unit starting on the earlier
631		of January 1 after the first three consecutive calendar years after 1990 for
632		which the unit has an average annual fuel consumption of fuel of 20
633		percent or more.
634		percent of more.
635	<del>a)</del>	A fossil fuel-fired stationary boiler, combustion turbine is an electric generating
636	<del>u)</del>	unit if it serves a generator that has a nameplate capacity greater than 25 MWe
637		and produces electricity for sale and is not included in Appendix D of 35 Ill.
638		Adm. Code Part 217. An electric generating unit is subject to the SO <sub>2</sub> Trading
639		Program contained in this Subpart and is a CAIR SO <sub>2</sub> unit or an affected unit for
640		the purposes of this Subpart.
540 541		the purposes of this Suopart.
541 542	<del>b)</del>	Notwithstanding subsection (a) of this Section, an EGU shall not be an affected
542 543	<del>0)</del>	unit and is not subject to the CAIR SO <sub>2</sub> Trading Program contained in this
54 <i>3</i> 544		Subpart if it meets the requirements of either subsection (b)(1)(A) or (b)(2)(A) of
J <del>44</del>		support if it inects the requirements of either subsection (b)(1)( $\Lambda$ ) of (b)(2)( $\Lambda$ ) of

645 this Section, as follows: 646 647 A unit that: 648 649 A) Meets the definition of a cogeneration unit in Section 225.130 of 650 this Part; and 651 652 Qualifies as a cogeneration unit during the 12-month period 653 starting on the date the unit first produces electricity, and 654 continues to qualify as a cogeneration unit; and 655 656 Does not serve at any time, since the later of November 15, 657 1990, or the start-up of the unit's combustion chamber, a 658 generator with a nameplate capacity of more than 25 MWe, 659 and which supplies in any calendar year more than one-660 third of the unit's potential electrical output capacity or 661 219,000 MWh, whichever is greater, to a utility power 662 distribution system for sale. 663 664 If a unit qualifies as a cogeneration unit during the 12-month 665 period starting on the date the unit first produces electricity but 666 subsequently no longer qualifies as a cogeneration unit, the unit 667 shall be subject to subsection (a) of this Section starting on the 668 January 1 after which the unit first no longer qualifies as a 669 cogeneration unit. 670 671 A unit that: 672 673 Qualifies as a solid waste incineration unit as defined by Section 674 129(g) of the CAA [42 U.S.C. § 7429(g)]; and 675 676 Commences operation on or after January 1, 1985; and 677 678 Has an average annual fuel consumption of non-fossil fuel 679 for the first three calendar years of operation exceeding 80 percent (on a Btu basis) and an average annual fuel 680 681 consumption of non-fossil fuel for any three consecutive 682 calendar years after 1990 exceeding 80 percent (on a Btu 683 basis). 684 685 If a unit qualifies as a solid waste incineration unit and meets the 686 requirements of subsection (b)(2)(A) of this Section for at least 687 three consecutive calendar years, but subsequently no longer meets 688 all such requirements, the unit shall become an affected unit 689 starting on the January 1 after which the unit has an average annual 690 fuel consumption of fossil fuel of 20 percent or more.

#### Section 225.310 Compliance Requirements

- a) The owner or operator of <u>a CAIR SO<sub>2</sub> an affected</u> unit <u>shallmust</u> comply with the requirements of the CAIR SO<sub>2</sub> Trading Program for Illinois as set forth in this Subpart <u>C</u> and 40 CFR 96, subpart AAA (CAIR SO<sub>2</sub> Trading Program General Provisions, excluding 40 CFR-\{\frac{8}{8}\}\} 96.204, and 96.206); 40 CFR 96, subpart BBB (CAIR Designated Representative for CAIR SO<sub>2</sub> Sources); 40 CFR 96, subpart FFF (CAIR SO<sub>2</sub> Allowance Tracking System); 40 CFR 96, subpart GGG (CAIR SO<sub>2</sub> Allowance Transfers); and 40 CFR 96, subpart HHH (Monitoring and Reporting); as incorporated by reference in Section 225.140-of this Part.
- b) Permit requirements:
  - The owner or operator of each source with one or more <u>CAIR SO<sub>2</sub>affected</u> units at the source must apply for a permit issued by the Agency with federally enforceable conditions covering the CAIR SO<sub>2</sub> Trading Program ("CAIR <del>SO<sub>2</sub></del> permit") that complies with the requirements of Section 225.320 of this Subpart (Permit Requirements).
  - 2) The owner or operator of each <u>CAIR SO<sub>2</sub> affected</u> source and each-<u>CAIR SO<sub>2</sub> affected</u> unit at the source must operate the <u>CAIR SO<sub>2</sub> affected</u> unit in compliance with <u>itssuch CAIR-SO<sub>2</sub> permit.</u>
- c) Monitoring requirements:
  - The owner or operator of each <u>CAIR SO<sub>2</sub></u> <u>affected</u> source and each <u>CAIR SO<sub>2</sub></u> <u>affected</u> 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 <u>CAIR SO<sub>2</sub></u> <u>affected</u> source and each <u>CAIR SO<sub>2</sub></u> <u>affected</u> unit at the <u>CAIR SO<sub>2</sub></u> <u>affected</u> 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.
  - The compliance of each <u>CAIR SO<sub>2</sub> affected</u> <u>sourceunit</u> with the emissions limitation <u>pursuant tounder</u> subsection (d) of this Section <u>willshall</u> be determined by the emissions measurements recorded and reported in accordance with 40 CFR 96, subpart HHH and 40 CFR 75.
- d) Emission requirements:
  - 1) By the allowance transfer deadline, March 1, 2011, and by March 1 of each subsequent year <u>if March 1 is a business day</u>, the <u>owner or operator CAIR designated representative</u> of each <u>CAIR SO<sub>2</sub> affected</u> source and each <u>CAIR SO<sub>2</sub> affected</u> unit at the source <u>shallmust</u> hold <u>a</u>

tonnage equivalent in CAIR SO<sub>2</sub> allowances available for compliance deductions pursuant tounder 40 CFR-§§ 96.254(a) and (b) in the CAIR SO<sub>2</sub> affected source's CAIR compliance SO<sub>2</sub> Allowance System Tracking account. If March 1 is not a business day, the The allowance transfer deadline means is 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 mayshall not be less than the total tonnage equivalent of the tons of SO<sub>2</sub> emissions for the control period from all-CAIR SO<sub>2</sub> affected units at the CAIR SO<sub>2</sub> affected source, rounded to the nearest whole ton, as determined in accordance with 40 CFR 96, subpart HHH, plus any number of allowances necessary to account for actual utilization (e.g., for testing, start-up, malfunction, and shut down).

- Each ton <u>or fraction</u> of SO<sub>2</sub> emitted by <u>a CAIR SO<sub>2</sub> an affected</u>-unit in excess of the <u>tonnage authorization</u>number of CAIR SO<sub>2</sub> allowances held by the owner or operator for each <u>CAIR SO<sub>2</sub> affected</u> unit in its CAIR SO<sub>2</sub> <u>Allowance System Trackingcompliance</u> account for each <u>day of the</u> <u>applicable</u> control period <u>willshall</u> constitute a separate violation of this Subpart C, the Clean Air Act, and the Act.
- Each <u>CAIR SO<sub>2</sub></u> <u>affected</u> unit <u>willshall</u> be subject to the monitoring and compliance requirements of subsections (c)(1) and (d)(1) of this Section for the control period starting on the later of January 1, 201020092010, or the deadline for meeting the unit's monitoring certification requirements <u>pursuant tounder</u> 40 CFR-§ 96.270(b)(1) or (2) and for each control period thereafter.
- 4) CAIR SO<sub>2</sub> allowances shallmust 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.
- In order to comply with the requirements of subsection (d)(1) of this Section, a CAIR SO<sub>2</sub> allowance may not be <u>deductedutilized</u> for <u>compliance according to subsection (d)(1) of this Section, for</u> a control period in a <u>calendar</u> year <u>beforeprior to</u> the year for which the allowance is allocated.
- A CAIR SO<sub>2</sub> allowance allocated by USEPA under the CAIR SO<sub>2</sub> Trading Program is a limited authorization to emit SO<sub>2</sub> in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> Trading Program, the CAIR SO<sub>2</sub>-permit application, the CAIR SO<sub>2</sub> permit, or a retired unit exemption pursuant tounder 40 CFR-§ 96.205, and no provision of law, willshall be construed to limit the authority of the United States or the State to terminate or limit this authorization.

- 7) A CAIR SO<sub>2</sub> allowance allocated by USEPA pursuant tounder the CAIR SO<sub>2</sub> Trading Program does not constitute a property right.
- Upon recordation by USEPA <u>pursuant tounder</u> 40 CFR 96, subpart FFF or 40 CFR 96, subpart GGG, every allocation, transfer, or deduction of <u>a CAIR SO<sub>2</sub> an</u> allowance to or from <u>a CAIR SO<sub>2</sub> an affected</u> source's <u>compliance account</u>, as defined by 40 CFR 96.202, is deemed to amend automatically, and become a part of, any CAIR <del>SO<sub>2</sub> permit of the CAIR SO<sub>2</sub> affected</del> source. This automatic amendment of the CAIR <del>SO<sub>2</sub> permit will shall</del> 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 <u>CAIR SO</u><sub>2</sub> affected source and each <u>CAIR SO</u><sub>2</sub>affected unit at the source shallmust 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 <u>CAIR SO<sub>2</sub></u> affected 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 <u>thesuch</u> documents are superseded because of the submission of a new certificate of representation <u>pursuant tounder</u> 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 <u>pursuant tounder</u> the CAIR SO<sub>2</sub> Trading Program or documents necessary to demonstrate compliance with the requirements of the CAIR SO<sub>2</sub> Trading Program or with the requirements of this Subpart <u>C</u>.
  - D) Copies of all documents used to complete a CAIR SO<sub>2</sub>-permit application and any other submission <u>or documents used to demonstrate compliance pursuant tounder</u> the CAIR SO<sub>2</sub> Trading Program.

829 2) The CAIR designated representative of a CAIR SO<sub>2</sub> an affected source and 830 each CAIR SO<sub>2</sub> affected unit at the source must submit to the Agency and 831 USEPA the reports and compliance certifications required pursuant 832 tounder the CAIR SO<sub>2</sub> Trading Program, including those pursuant tounder 833 40 CFR 96, subpart HHH. 834 835 f) Liability: 836 837 1) No revision of a permit for a CAIR SO<sub>2</sub>an affected unit may shall excuse 838 any violation of the requirements of this Subpart C or the requirements of 839 the CAIR SO<sub>2</sub> Trading Program. 840 841 2) Each CAIR SO<sub>2</sub> affected source and each affected CAIR SO<sub>2</sub> unit shall must 842 meet the requirements of the CAIR SO<sub>2</sub> Trading Program. 843 844 3) Any provision of the CAIR SO<sub>2</sub> Trading Program that applies to CAIR 845 SO<sub>2</sub> an affected source (including any provision applicable to the CAIR 846 designated representative of a CAIR SO<sub>2</sub>an affected source) willshall also 847 apply to the owner and operator of thesuch CAIR SO<sub>2</sub> affected source and 848 to the owner and operator of each CAIR SO<sub>2</sub> affected unit at the source. 849 850 4) Any provision of the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR 851 SO<sub>2</sub>an affected unit (including any provision applicable to the CAIR 852 designated representative of a CAIR SO<sub>2</sub>an affected unit) willshall also 853 apply to the owner and operator of thesuch CAIR SO<sub>2</sub> affected unit. 854 Except with regard to the requirements applicable to affected units with a 855 common stack under 40 CFR 96, subpart HHH, the owner, the operator, and the CAIR designated representative of an affected unit shall not be 856 857 liable for any violation by any other affected unit of which they are not an 858 owner or operator or the CAIR designated representative. 859 860 5) The CAIR designated representative of a CAIR SO<sub>2</sub>an affected unit that 861 has excess SO<sub>2</sub> emissions in any control period shallmust surrender the allowances as required for deduction pursuant tounder 40 CFR § 862 863 96.254(d)(1). 864 865 The owner or operator of a CAIR SO<sub>2</sub>an affected unit that has excess SO<sub>2</sub> 6) 866 emissions in any control period shallmust pay any fine, penalty, or 867 assessment or comply with any other remedy imposed pursuant to<del>under</del> 868 the Act and 40 CFR \( \frac{5}{9} \) 96.254(d)(2). 869 870 g) Effect on other authorities. No provision of the CAIR SO<sub>2</sub> Trading Program, a

CAIR SO<sub>2</sub>-permit application, a CAIR SO<sub>2</sub>-permit, or a retired unit exemption

pursuant to<del>under</del> 40 CFR \\$-96.205 will<del>shall</del> be construed as exempting or

excluding the owner and operator and, to the extent applicable, the CAIR

designated representative of a CAIR SO<sub>2</sub> an affected source or a CAIR

871

872

873

875 SO<sub>2</sub> affected unit, from compliance with any other regulation promulgated 876 pursuant to<del>under</del> the CAA, the Act, any State regulation or permit, or a federally 877 enforceable permit. 878 879 Section 225.315 **Appeal Procedures** 880 881 The appeal procedures for decisions of USEPA pursuant tounder the CAIR SO<sub>2</sub> Trading Program 882 are set forth in 40 CFR 78, as incorporated by reference in Section 225.140-of this Part. 883 884 Section 225.320 **Permit Requirements** 885 886 a) Permit requirements: 887 888 1) The owner or operator owner or operator of each source with a CAIR 889 SO<sub>2</sub>an affected unit is required to submit: 890 891 A-a complete permit application addressing all applicable CAIR 892 SO<sub>2</sub> Trading Program requirements for a permit meeting the 893 requirements of this Section 225.320, applicable to each CAIR 894 SO<sub>2</sub>affected unit at the source. Each CAIR SO<sub>2</sub>-permit mustshall 895 contain elements required for a complete CAIR SO<sub>2</sub>-permit 896 application pursuant to<del>under</del> subsection (b)(2) of this Section. 897 898 Any supplemental information that the Agency determines is 899 necessary in order to review a CAIR permit application and issue a 900 CAIR permit. 901 902 2) Each CAIR SO<sub>2</sub>-permit will be issued pursuant to Section 39 or 39.5 of the 903 Act, mustshall contain federally enforceable conditions addressing all 904 applicable CAIR SO<sub>2</sub> Trading Program and requirements, and will<del>shall</del> be 905 a complete and segregable portion of the source's entire permit pursuant 906 tounder subsection (a)(1) of this Section. 907 908 3) No CAIR SO<sub>2</sub>-permit mayshall be issued and no CAIR SO<sub>2</sub> Allowance 909 System Tracking Compliance account may shall be established for the 910 CAIR SO<sub>2</sub>an affected source, until the Agency and USEPA have received 911 a complete certificate of representation for a CAIR designated 912 representative or alternate designated representative pursuant to<del>under</del> 40 913 CFR 96, subpart BBB, for aan source and the CAIR SO<sub>2</sub> affected unit at 914 the source. 915 916 4) For all CAIR SO<sub>2</sub> affected units that commenced operation before July 1, 917 2008, the owner or operator of thesuch unit must submit a CAIR SO<sub>2</sub> 918 permit application meeting the requirements of this Section 225.320 on or 919 before July 1, 2008. 920

For CAIR SO<sub>2</sub> affected units and that commence operation on or after July 5) 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 thesuch applications must specify that they are applying for CAIR SO<sub>2</sub> permits, and must address the CAIR SO<sub>2</sub> permit application requirements of this Section 225.320. b) Permit applications: 1) Duty to apply. The owner or operator owner or operator of any source with one or more CAIR SO<sub>2</sub> affected units shallmust submit to the Agency a CAIR SO<sub>2</sub>-permit application for the source covering each CAIR 

- Duty to apply. The owner or operator owner or operator of any source with one or more <u>CAIR SO<sub>2</sub>affected</u> units <u>shallmust</u> submit to the Agency a CAIR <u>SO<sub>2</sub>affected</u> unit <u>pursuant tounder</u> 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 <u>CAIR SO<sub>2</sub>affected</u> units <u>shallmust</u> reapply for a CAIR <u>SO<sub>2</sub></u> 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 SO<sub>2</sub> permit applications. A complete CAIR SO<sub>2</sub> permit application shallmust 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 shallmust also be included, if applicable;
  - B) Identification of each <u>CAIR SO<sub>2</sub> affected</u> unit at the source; and
  - C) The compliance requirements applicable to each <u>CAIR</u>
    <u>SO<sub>2</sub>affected</u> unit as set forth in Section 225.310 of this <u>Subpart</u>.
- An application for a CAIR SO<sub>2</sub> permit willshall be treated as a modification of the CAIR SO<sub>2</sub> affected source's existing federally enforceable permit, if such a permit has been issued for that CAIR SO<sub>2</sub> affected source, and willshall be subject to the same procedural requirements. When the Agency issues a CAIR SO<sub>2</sub> permit pursuant to the requirements of this Section 225.320, it willshall be incorporated into and become part of that CAIR SO<sub>2</sub> affected source's existing federally enforceable permit.
- c) Permit content. Each CAIR permit is deemed to incorporate automatically the definitions and terms pursuant to Section 225.<del>120</del>130 and 40 CFR 96.202 (as

967 incorporated by reference in Section 225.140) and, upon recordation of USEPA 968 under 40 CFR 96, Subparts FFF and GGG as incorporated by reference in Section 969 225.140, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or 970 from the compliance account of the CAIR SO<sub>2</sub> source covered by the permit. 971 972 Section 225.325 **Trading Program** 973 974 a) The CAIR SO<sub>2</sub> Trading Program is administered by USEPA. CAIR SO<sub>2</sub> 975 allowances are issued as described by the definition for allocate in 40 CFR 976 96.202220, as incorporated by reference in Section 225.140determined by 977 USEPA pursuant to the Acid Rain Program, Title IV of the CAA, 42 U.S.C. § 978 7651. The amount of such CAIR SO<sub>2</sub> allowances to be credited to a CAIR SO<sub>2</sub>an 979 affected source's CAIR SO<sub>2</sub> Allowance Tracking System account for a CAIR 980 SO<sub>2</sub>an affected unit willshall be determined in accordance with 40 CFR 96.253, as 981 incorporated by reference in Section 225.140by USEPA. 982 983 b) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit SO<sub>2</sub> during the calendar 984 year for which the allowance is allocated or any calendar year thereafter pursuant 985 tounder the CAIR SO<sub>2</sub> Trading Program as follows: 986 987 For one CAIR SO<sub>2</sub> allowance allocated for a control period in a year 1) 988 before 2010, one ton of SO<sub>2</sub>the retirement ratio shall be one ton of SO<sub>2</sub> to 989 1.0 CAIR SO<sub>2</sub> allowance, except as provided for in the compliance 990 deductions pursuant to<del>under</del> 40 CFR §-96.254(b); 991 992 2) For one CAIR SO<sub>2</sub> allowance allocated for a control period in 2010 993 through 2014, 0.50 ton of SO<sub>2</sub>the retirement ratio shall be one ton of SO<sub>2</sub> 994 to 2.0 CAIR SO<sub>2</sub> allowances, except as provided for in the compliance 995 deductions pursuant to<del>under</del> 40 CFR §-96.254(b); and 996 997 3) For one CAIR SO<sub>2</sub> allowance allocated for a control period in 2015 or 998 later, 0.35 ton of SO<sub>2</sub>the retirement ration shall be one ton of SO<sub>2</sub> to 2.86 999 CAIR SO<sub>2</sub> allowances, except as provided for in the compliance 1000 deductions pursuant to<del>under</del> 40 CFR §-96.254(b). 1001 1002 SUBPART D: CAIR NO<sub>x</sub> ANNUAL TRADING PROGRAM 1003 1004 Section 225.400 Purpose 1005 1006 The purpose of this Subpart D is to control the annual emissions of nitrogen oxides (NO<sub>x</sub>) from 1007 electric generating units (EGU) by determining allocations and implementing the CAIR NO<sub>x</sub> 1008 Annual Trading Program. 1009 1010 Section 225.405 **Applicability** 1011 1012 Except as provided in subsections (b)(1), (b)(3), and (b)(4) of this Section:

1013		
1014		1) The following units are CAIR NO <sub>x</sub> units, and any source that includes one
1015		or more such units is a CAIR NO <sub>x</sub> source subject to the requirements of
1016		this Subpart D: any stationary, fossil-fuel-fired boiler or stationary, fossil-
1017		<u>fuel-fired combustion turbine serving at any time, since the later of</u>
1018		November 15, 1990, or the start-up the unit's combustion chamber, a
1019		generator with nameplate capacity of more than 25 MWe producing
1020		electricity for sale.
1021		
1022		2) If a stationary boiler or stationary combustion turbine that, pursuant to
1023		subsection (a)(1) of this Section, is not a CAIR NO <sub>x</sub> unit begins to
1024		combust fossil fuel or to serve a generator with nameplate capacity of
1025		more than 25 MWe producting electricity for sale, the unit will become a
1026		CAIR NO <sub>x</sub> unit as provided in subsection (a)(1) of this Section on the first
1027		date on which it both combusts fossil fuel and serves such generator.
1028		
1029	<u>b)</u>	The units that meet the requirements set forth in subsections (b)(1), (b)(3), and
1030		(b)(4) of this Section willare not be CAIR NO <sub>x</sub> units and units that meet the
1031		requirements of subsections (b)(2) and (b)(5) of this Section are CAIR NO <sub>x</sub> units:
1032		
1033		1) Any unit that would otherwise be classified as is a CAIR NO <sub>x</sub> unit
1034		pursuant to subsection (a)(1) or (a)(2) of this Section and:
1035		
1036		A) Qualifies as a cogeneration unit during the 12-month period
1037		starting on the date the unit first produces electricity and
1038		continuing to qualify as a cogeneration unit; and
1039		
1040		B) Does not serve at any time, since the later of November 15, 1990
1041		or the start-up of the unit's combustion chamber, a generator with
1042		nameplate capacity of more than 25 MWe supplying any calendar
1043		year more than one-third of the of the unit's potential electric
1044		output capacity or 219,000 MWh, whichever is greater, to any
1045		utility power distribution for sale.
1046		
1047		2) If a unit qualifies as a cogeneration unit during the 12-month period
1048		starting on the date the unit first produces electricity and meets the
1049		requirements of subsection (b)(1) of this Section for at least one calendar
1050		year, but subsequently no longer meets all such requirements, the unit
1051		shall become a CAIR NO <sub>x</sub> unit starting on the earlier of January 1 after the
1052		first calendar year during which the unit no longer qualifies as a
1053		cogeneration unit or January 1 after the first calendar year during which
1054		the unit no longer meets the requirements of subsection (b)(1)(B) of this
1055		Section.
1056		

1057		3) Any unit that would otherwise be classified as is a CAIR NO <sub>x</sub> unit
1058		pursuant to subsection (a)(1) or (a)(2) of this Section commencing
1059		operation before January 1, 1985 and:
1060		
1061		A) Qualifies as a solid waste incineration unit; and
1062		
1063		B) WithHas an average annual fuel consumption of non-fossil fuel for
1064		1985-1987 exceeding 80 percent (on a Btu basis) and an average
1065		annual fuel consumption of non-fossil fuel for any three
1066		consecutive calendar years after 1990 exceeding 80 percent (on a
1067		Btu basis).
1068 1069		4) Any unit that would otherwise be classified as is-a CAIR NO <sub>x</sub> unit under
1009		subsection (a)(1) or (a)(2) of this Section commencing operation on or
1070		after January 1, 1985: and
1071		after January 1, 1983. and
1072		A) Qualifies as a solid waste incineration unit; and
1073		A) Quantites as a some waste incinctation unit, and
1074		B) WithHas an average annual fuel consumption of non-fossil fuel the
1075		first three years of operation exceeding 80 percent (on a Btu basis)
1070		and an average annual fuel consumption of non-fossil fuel for any
1077		three consecutive calendar years after 1990 exceeding 80 percent
1078		(on a Btu basis).
1079		(on a Diu basis).
1080		5) If a unit qualifies as a solid waste incineration unit and meets the
1082		requirements of subsection (b)(3) or (b)(4) of this Section for at least three
1083		consecutive years, but subsequently no longer meets all such
1084		requirements, the unit shall become a CAIR NO <sub>x</sub> unit starting on the
1085		earlier of January 1 after the first three consecutive calendar years after
1086		1990 for which the unit has an average annual fuel consumption of fuel of
1087		20 percent or more.
1088	<del>a)</del>	A fossil fuel-fired stationary boiler, combustion turbine or combined cycle system
1089	α)	is an electric generating unit if it serves a generator that has a nameplate capacity
1090		greater than 25 MWe and produces electricity for sale and is not included in
1091		Appendix D of 35 Ill. Adm. Code Part 217. An electric generation unit is subject
1092		to the NO <sub>*</sub> Trading Program contained in this Subpart and is a CAIR NO <sub>*</sub> unit or
1093		affected unit for the purposes of this Subpart.
1094		
1095	<del>b)</del> —	Notwithstanding subsection (a) of this Section, an EGU shall not be an affected
1096	- /	unit and is not subject to the NO <sub>x</sub> Trading Program contained in this Subpart if it
1097		meets the requirements of either subsection (b)(1)(A) or (b)(2)(A) of this Section,
1098		as follows:
1099		
1100		1) A unit that:
1101		
1102		A) Meets the definition of a cogeneration unit in Section 225.130 of

1103		this Part; and
1104		
1105		i) Qualifies as a cogeneration unit during the 12-month period
1106		starting on the date the unit first produces electricity and
1107		continues to qualify as a cogeneration unit; and
1108		
1109		ii) Does not serve at any time, since the later of November 15,
1110		1990, or the start-up of the unit's combustion chamber, a
1111		generator with a nameplate capacity of more than 25 MWe,
1112		and which supplies in any calendar year more than one-
1113		third of the unit's potential electrical output capacity or
1114		219,000 MWh, whichever is greater, to a utility power
1115		distribution system for sale.
1116		
1117		B) If a unit qualifies as a cogeneration unit during the 12-month
1118		period starting on the date the unit first produces electricity but
1119		subsequently no longer qualifies as a cogeneration unit, the unit
1120		shall be subject to subsection (a) of this Section starting on the
1121		January 1 after which the unit first no longer qualifies as a
1122		cogeneration unit.
1123		
1124	<del>2)</del>	— A unit that:
1125		
1126		A) Qualifies as a solid waste incineration unit as defined by Section
1127		129(g) of the CAA [42 U.S.C. § 7429(g)]; and
1128		
1129		i) Commences operation on or after January 1, 1985; and
1130		
1131		ii) Has an average annual fuel consumption of non-fossil fuel
1132		for the first three calendar years of operation exceeding 80
1133		percent (on a Btu basis) and an average annual fuel
1134		consumption of non-fossil fuel for any three consecutive
1135		calendar years after 1990 exceeding 80 percent (on a Btu
1136		<del>basis).</del>
1137		
1138		B) If a unit qualifies as a solid waste incineration unit and meets the
1139		requirements of subsection (b)(2)(A) of this Section for at least
1140		three consecutive calendar years, but subsequently no longer meets
1141		all such requirements, the unit shall become an affected unit
1142		starting on the January 1 after which the unit has an average annual
1143		fuel consumption of fossil fuel of 20 percent or more.
1144		
1145	Section 225.410	Compliance Requirements
1146		•
1147	a) The o	wher or operator CAIR designated representative of a CAIR NO <sub>x</sub> an affected
1148		hallmust comply with the requirements of the CAIR NO <sub>x</sub> Annual Trading

Program for Illinois asre set forth in this Subpart D and 40 CFR 96, subpart AA (NO<sub>x</sub> 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<sub>x</sub> Sources); 40 CFR 96, subpart FF (CAIR NO<sub>x</sub> Allowance Tracking System); 40 CFR 96, subpart GG (CAIR NO<sub>x</sub> Allowance Transfers); and 40 CFR 96, subpart HH (Monitoring and Reporting); as incorporated by reference in Section 225.140-of this Part.

#### b) Permit requirements:

- The owner or operator of each source with one or more <u>CAIR NO<sub>x</sub>affected</u> units at the source must apply for a permit issued by the Agency with federally enforceable conditions covering the CAIR NO<sub>x</sub> Annual Trading Program ("CAIR-NO<sub>x</sub> permit") that complies with the requirements of Section 225.420 of this Subpart (Permit Requirements).
- 2) The owner or operator of each <u>CAIR NO<sub>x</sub> affected</u> source and each <u>CAIR NO<sub>x</sub> affected</u> unit at the source must operate the <u>CAIR NO<sub>x</sub> affected</u> unit in compliance with <u>itssuch CAIR NO<sub>x</sub> permit.</u>

#### c) Monitoring requirements:

- The owner or operator of each <u>CAIR NO<sub>x</sub>affected</u> source and each <u>CAIR NO<sub>x</sub>affected</u> unit at the source must comply with the monitoring, reporting and recordkeeping requirements of 40 CFR 96, subpart HH<sub>2</sub> and Section 225.450 of this <u>Subpart</u>. The CAIR designated representative of each <u>CAIR NO<sub>x</sub>affected</u> source and each <u>CAIR NO<sub>x</sub>affected</u> unit at the <u>CAIR NO<sub>x</sub>affected</u> 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 <u>CAIR NO<sub>x</sub> affected sourceunit</u> with the NO<sub>x</sub> emissions limitation <u>pursuant tounder</u> subsection (d) of this Section <u>willshall</u> be determined by the emissions measurements recorded and reported in accordance with 40 CFR 96, subpart HH.

#### d) Emission requirements:

1) By the allowance transfer deadline, March 1, 20112010, and by March 1 of each subsequent year if March 1 is a business day, the allowance transfer deadline, the owner or operator CAIR designated representative of each CAIR NO<sub>x</sub> affected source and each CAIR NO<sub>x</sub> affected unit at the source shallmust hold CAIR NO<sub>x</sub> allowances available for compliance deductions pursuant tounder 40 CFR §-96.154(a) in the CAIR NO<sub>x</sub> affected source's CAIR NO<sub>x</sub> compliance account. If March 1 is not a business day, the The allowance transfer deadline is means by midnight of March 1 (if it

1195 is a business day) or midnight of the first business day thereafter. The 1196 number of allowances held on the allowance transfer deadline mayshall 1197 not be less than the tons of NO<sub>x</sub> emissions for the control period from all 1198 CAIR NO<sub>x</sub>affected units at the source, rounded to the nearest whole ton, as determined in accordance with 40 CFR 96, subpart HH, plus any 1199 1200 number of allowances necessary to account for actual utilization, 1201 including, but not limited to testing, start-up, malfunction, and shut down. 1202 1203 2) Each ton of NO<sub>x</sub> emitted in excess of the number of CAIR NO<sub>x</sub> 1204 allowances held at the allowance transfer deadline by the owner or 1205 operator for each CAIR NO<sub>x</sub> affected unit in its CAIR NO<sub>x</sub> compliance 1206 account for each day of the applicable control period willshall constitute a 1207 separate violation of this Subpart D, and the Act, and the CAA. 1208 1209 Each CAIR NO<sub>x</sub>affected unit willshall be subject to the monitoring and 3) 1210 compliance requirements of subsections (c)(1) and (d)(1) of this Section for the control period starting on the later of January 1, 2009<del>2009</del>, or the 1211 deadline for meeting the unit's monitoring certification requirements 1212 1213 pursuant tounder 40 CFR §-96.170(b)(1) or (b)(2) and for each control 1214 period thereafter. 1215 1216 4) CAIR NO<sub>x</sub> allowances shallmust be held in, deducted from, or transferred 1217 into or -among allowance accounts in accordance with this Subpart and 40 1218 CFR- 96, subparts FF and GG. 1219 1220 5) In order to comply with the requirements of subsection (d)(1) of this 1221 Section, a CAIR NO<sub>x</sub> allowance may not be deducted utilized for compliance according to subsection (d)(1) of this Section, for a control 1222 period in a year before prior to the calendar year for which the allowance is 1223 1224 allocated. 1225 1226 6) A CAIR NO<sub>x</sub> allowance allocated by the Agency or USEPA pursuant tounder the CAIR NO\* Annual Trading Program is a limited authorization 1227 1228 to emit one ton of NO<sub>x</sub> in accordance with the CAIR NO<sub>x</sub> Trading 1229 Program. No provision of the CAIR NO<sub>x</sub> Trading Program, the CAIR NO<sub>x</sub> permit application, the CAIR NO<sub>x</sub> permit, or a retired unit exemption 1230 pursuant tounder 40 CFR \-9-96.105, and no provision of law, willshall be 1231 1232 construed to limit the authority of the United States or the State to 1233 terminate or limit this authorization. 1234 1235 7) A CAIR NO<sub>x</sub> allowance allocated by the Agency or USEPA pursuant 1236 tounder the CAIR NO<sub>x</sub> Annual Trading Program does not constitute a 1237 property right. 1238 1239 Upon recordation by USEPA pursuant to<del>under</del> 40 CFR 96, subpart FF, or 8)

1240

40 CFR 96, subpart GG, every allocation, transfer, or deduction of a CAIR

1241 NO<sub>x</sub> an allowance to or from a CAIR NO<sub>x</sub> source compliance account is deemed to amend automatically, and become a part of, any CAIR NO. 1242 1243 permit of the CAIR NO<sub>x</sub>affected source. This automatic amendment of 1244 the CAIR NO<sub>\*</sub> permit willshall be deemed an operation of law and will not require any further review. 1245 1246 1247 e) Recordkeeping and reporting requirements: 1248 1249 1) Unless otherwise provided, the owner or operator of the CAIR 1250 NO<sub>x</sub>affected source and each CAIR NO<sub>x</sub>affected unit at the source 1251 shallmust keep on site at the source each of the documents listed in 1252 subsections (e)(1)(A) through (e)(1)(E) of this Section for a period of five 1253 years from the date the document is created. This period may be extended 1254 for cause, at any time prior to the end of five years, in writing by the Agency or USEPA. 1255 1256 1257 A) The certificate of representation for the CAIR designated representative for the source and each CAIR NO<sub>x</sub>affected unit at 1258 1259 the source, all documents that demonstrate the truth of the statements in the certificate of representation, provided that the 1260 certificate and documents must be retained on site at the source 1261 1262 beyond such five-year period until thesuch documents are superseded because of the submission of a new certificate of 1263 representation pursuant to<del>under</del> 40 CFR §-96.113, changing the 1264 1265 CAIR designated representative. 1266 1267 B) All emissions monitoring information, in accordance with 40 CFR 1268 96, subpart HH. 1269 1270 Copies of all reports, compliance certifications, and other C) submissions and all records made or required pursuant to<del>under</del> the 1271 1272 CAIR NO<sub>x</sub> Annual Trading Program or documents necessary to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> 1273 1274 Annual Trading Program or with the requirements of this Subpart 1275 D. 1276 1277 D) Copies of all documents used to complete a CAIR NO<sub>x</sub> permit 1278 application and any other submission or documents used to 1279 demonstrate compliance pursuant to under the CAIR NO<sub>x</sub> Annual 1280 Trading Program. 1281 1282 E) Copies of all records and logs for gross electrical output and useful 1283 thermal energy required by Section 225.450-of this Subpart. 1284 1285 2) The CAIR designated representative of an a CAIR NO<sub>x</sub> affected source and each CAIR NO<sub>x</sub>affected unit at the source must submit to the Agency and 1286

1287 USEPA the reports and compliance certifications required pursuant 1288 tounder the CAIR NO<sub>x</sub> Annual Trading Program, including those pursuant tounder 40 CFR 96, subpart HH. 1289 1290 Liability: 1291 f) 1292 1293 1) No revision of a permit for a CAIR NO<sub>v</sub>an affected unit may shall excuse 1294 any violation of the requirements of this Subpart D or the requirements of 1295 the CAIR NO<sub>x</sub> Annual Trading Program. 1296 1297 2) Each CAIR NO<sub>x</sub>affected source and each CAIR NO<sub>x</sub>affected unit 1298 shallmust meet the requirements of the CAIR NO<sub>x</sub> Annual Trading 1299 Program. 1300 1301 Any provision of the CAIR NO<sub>x</sub> Annual Trading Program that applies to a 3) 1302 CAIR NO<sub>x</sub>an affected source (including any provision applicable to the 1303 CAIR designated representative of a CAIR NO<sub>x</sub>an affected source) 1304 willshall also apply to the owner and operator of thesuch CAIR 1305 NO<sub>x</sub>affected source and to the owner and operator of each CAIR NO<sub>x</sub>affected unit at the source. 1306 1307 1308 4) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program that applies to a CAIR NO<sub>x</sub> an affected unit (including any provision applicable to the 1309 CAIR designated representative of a CAIR NO<sub>x</sub>an affected unit) willshall 1310 1311 also apply to the owner and operator of thesuch CAIR NO<sub>x</sub>affected unit. Except with regard to the requirements applicable to affected units with a 1312 common stack under 40 CFR 96, subpart HH, the owner, the operator, 1313 and the CAIR designated representative or alternate designated 1314 1315 representative of an affected unit shall not be liable for any violation by 1316 any other affected unit of which they are not an owner or operator or the 1317 CAIR designated representative. 1318 1319 5) The CAIR designated representative of a CAIR NO<sub>x</sub>an affected unit that 1320 has excess emissions in any control period shallmust surrender the 1321 allowances as required for deduction pursuant tounder 40 CFR-§ 1322 96.154(d)(1). 1323 1324 6) The owner or operator of a CAIR NO<sub>x</sub> an affected unit that has excess NO<sub>x</sub> 1325 emissions in any control period shallmust pay any fine, penalty, or 1326 assessment or comply with any other remedy imposed pursuant to<del>under</del> the Act and 40 CFR  $\S$ -96.154(d)(2). 1327 1328 1329 Effect on other authorities. No provision of the CAIR NO<sub>x</sub> Annual Trading g) 1330 Program, a CAIR NO<sub>\*</sub>-permit application, a CAIR NO<sub>\*</sub> permit, or a retired unit exemption <u>pursuant tounder</u> 40 CFR § 96.105 <u>willshall</u> be construed as exempting 1331

or excluding the owner and operator and, to the extent applicable, the CAIR

1333 designated representative of a CAIR NO<sub>x</sub>an affected source or a CAIR NO<sub>x</sub>an affected unit, from compliance with any other regulation promulgated pursuant to 1334 1335 under the CAA, the Act, any State regulation or permit, or a federally enforceable 1336 permit. 1337 1338 Section 225.415 **Appeal Procedures** 1339 1340 The appeal procedures for decisions of USEPA pursuant to<del>under</del> the CAIR NO<sub>x</sub> Annual Trading 1341 Program are set forth in 40 CFR 78, as incorporated by reference in Section 225.140 of this Part. 1342 1343 Section 225.420 **Permit Requirements** 1344 1345 Permit requirements: a) 1346 1347 1) The owner or operator of each source with a CAIR 1348 NO<sub>x</sub>an affected unit is required to submit: 1349 1350 A complete permit application addressing all applicable CAIR 1351 NO<sub>x</sub> Annual Trading Program requirements for a permit meeting the requirements of this Section 225.420, applicable to each CAIR 1352 1353 NO<sub>x</sub>affected unit at the source. Each CAIR NO<sub>x</sub>-permit shallmust 1354 contain elements required for a complete CAIR NO<sub>\*</sub>-permit 1355 application pursuant to<del>under</del> subsection (b)(2) of this Section. 1356 1357 Any supplemental information that the Agency determines necessary in order to review a CAIR permit application and issue 1358 1359 any CAIR permit. 1360 1361 2) Each CAIR NO<sub>\*</sub>-permit will be issued pursuant to Section 39 and 39.5 of 1362 the Act, shallmust contain federally enforceable conditions addressing all applicable CAIR NO<sub>x</sub> Annual Trading Program requirements and 1363 shallmust be a complete and segregable portion of the source's entire 1364 permit pursuant to<del>under</del> subsection (a)(1) of this Section. 1365 1366 No CAIR NO<sub>x</sub>-permit mayshall be issued, and no CAIR NO<sub>x</sub> compliance 1367 3) account mayshall be established for a CAIR NOvan affected source, until 1368 the Agency and USEPA have received a complete certificate of 1369 1370 representation for a CAIR designated representative pursuant to<del>under</del> 40 CFR -96, subpart BB, for the CAIR NO<sub>x</sub> affected source and the CAIR 1371 1372 NO<sub>x</sub>affected unit at the source. 1373 1374 4) For all CAIR NO<sub>v</sub>affected units that commenced operation before July 1, 1375 2007, the owner or operator of thesuch unit must submit a CAIR NO<sub>\*</sub> 1376 permit application meeting the requirements of this Section 225,420 on or 1377 before July 1, 2007. 1378

1379 5) For all CAIR NO<sub>x</sub>affected units and that commence operation on or after 1380 July 1, 20078, the owner or operator of thesesuch units must submit applications for construction and operating permits pursuant to the 1381 1382 requirements of Sections 39 and 39.5 of the Act, as applicable, and 35 Ill. Adm. Code 201 and the such applications must specify that they are 1383 1384 applying for CAIR NO<sub>x</sub>-permits, and must address the CAIR NO<sub>x</sub> permit 1385 application requirements of this Section 225.420. 1386 1387 b) Permit applications: 1388 1389 1) Duty to apply. The owner or operator owner or operator of any source 1390 with one or more CAIR NO<sub>x</sub>affected units shallmust submit to the Agency 1391 a CAIR NO<sub>\*</sub>-permit application for the source covering each CAIR 1392 NO<sub>x</sub>affected unit pursuant to<del>under</del> subsection (b)(2) of this Section by the 1393 applicable deadline in subsection (a)(4) or (a)(5) of this Section. The 1394 owner or operator of any source with one or more CAIR NO<sub>x</sub>affected units 1395 shallmust reapply for a CAIR NO<sub>x</sub>-permit for the source as required by 1396 this Subpart, 35 Ill. Adm. Code 201, and, as applicable, Sections 39 and 1397 39.5 of the Act. 1398 1399 2) Information requirements for CAIR NO<sub>\*</sub> permit applications. A complete 1400 CAIR NO<sub>\*</sub>-permit application shallmust include the following elements concerning the source for which the application is submitted: 1401 1402 1403 A) Identification of the source, including plant name. The ORIS 1404 (Office of Regulatory Information Systems) or facility code 1405 assigned to the source by the Energy Information Administration 1406 shallmust also be included, if applicable: 1407 1408 Identification of each CAIR NO<sub>x</sub> affected unit at the source; and B) 1409 1410 C) The compliance requirements applicable to each CAIR 1411 NO<sub>x</sub>affected unit as set forth in Section 225.410-of this Subpart. 1412 1413 3) An application for a CAIR NO<sub>x</sub>-permit willshall be treated as a modification of the CAIR NO<sub>x</sub> affected source's existing federally 1414 enforceable permit, if such a permit has been issued for that source, and 1415 1416 willshall be subject to the same procedural requirements. When the Agency issues a CAIR NO<sub>x</sub>-permit pursuant to the requirements of this 1417 1418 Section 225.420, it willshall be incorporated into and become part of that 1419 source's existing federally enforceable permit. 1420 1421 Permit content. Each CAIR permit is deemed to incorporate automatically the 1422 definitions and terms pursuant to Section 225.130120 and, upon recordation of USEPA under 40 CFR 96, Subparts FF and GG as incorporated by reference in 1423 Section 225.140, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> 1424

1425 allowance to or from the compliance account of the CAIR NO<sub>x</sub> source covered by 1426 the permit. 1427 1428 Section 225.425 Annual Trading Budget 1429 1430 The CAIR NO<sub>x</sub> Annual Trading budget available for allowance allocations for each control 1431 period willshall be determined as follows: 1432 1433 The total base CAIR NO<sub>x</sub> Annual Trading budget is 76,230 tons per control a) 1434 period for the years 2009 through 2014, subject to a reduction for two set-asides, 1435 the New Unit Set-Aside (NUSA) and the Clean Air Set-Aside (CASA). Five 1436 percent of the budget willshall be allocated to the NUSA and 25 percent willshall 1437 be allocated to the CASA, resulting in a CAIR NO<sub>x</sub> Annual Trading budget of 1438 53,361 tons available for allocation per control period pursuant to Section 1439 225.440-of this Subpart. The requirements of the NUSA are set forth in Section 1440 225.445-of this Subpart, and the requirements of the CASA are set forth in 1441 Sections 225.455 through 225.470-of this Subpart. 1442 1443 b) The total base CAIR NO<sub>x</sub> Annual Trading budget is 63,525 tons per control 1444 period for the year 2015 and thereafter, subject to a reduction for two set-asides, 1445 the NUSA and the CASA. Five percent of the budget willshall be allocated to the 1446 NUSA and 25 percent willshall be allocated to the CASA, resulting in a CAIR 1447 NO<sub>x</sub> Annual Trading budget of 44,468 tons available for allocation per control 1448 period pursuant to Section 225.440-of this Subpart. 1449 1450 c) If USEPA adjusts the total base CAIR NO<sub>x</sub> Annual Trading budget for any reason, the Agency willshall adjust the base CAIR NO<sub>x</sub> Annual Trading budget 1451 1452 and the CAIR NO<sub>x</sub> Annual Trading budget available for allocation—accordingly. 1453 1454 Section 225.430 Timing for Annual Allocations 1455 1456 a) No later than April 30, 2007By July 31, 2007October 31, 2006, the Agency willshall submit to USEPA the CAIR NO<sub>x</sub> allowance allocations, in accordance 1457 1458 with Sections 225.435 and 225.440-of this Subpart, for the 2009, 2010, and 2011 1459 control periods. 1460 1461 b) By October 31, 20089, and October 31 of each year thereafter, the Agency 1462 willshall submit to USEPA the CAIR NO<sub>x</sub> allowance allocations in accordance with Sections 225.435 and 225.440 of this Subpart, for the control period 1463 1464 fourthree years after the year of the applicable deadline for submission pursuant tounder this Section 225.430. For example, on October 31, 20089, the Agency 1465 willshall submit to USEPA the allocations for the 2012 control period. 1466 1467 For The Agency willshall allocate allowances from the NUSA to CAIR 1468 c) 1469 NO<sub>x</sub> affected units that commence commercial operation on or after January 1, 1470 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 225.445. The Agency willshall report these allocations to USEPA by October 31February 15 ofafter the applicable control period. For example, on October 31February 15, 20092010, the Agency willshall submit to USEPA the allocations from the NUSA for the 2009 control period.

d) The Agency <u>willshall</u> 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-of this Subpart. The Agency <u>willshall</u> report these allocations to USEPA by <u>October 1 December 1</u> of each year. For example, on <u>October 1, 2009 December, 1, 2010</u>, the Agency <u>willshall</u> submit to USEPA the allocations from the CASA for the <u>20092010</u> control period, based on reductions made in the <u>20082009</u> control period.

#### Section 225.435 Methodology for Calculating Annual Allocations

The Agency <u>willshall</u> calculate converted gross electrical output <u>(CGO)</u> (CGO), in MWh, for each <u>CAIR NO<sub>x</sub> affected</u> 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's must submit in writing to the Agency by June 1, 2007, a statement that either gross electrical output data or heat input data is to be used to calculate the unit's converted gross electrical output (CGO). The data shall be used to calculate converted gross electrical output pursuant to either subsection (a)(1) or (a)(2) of this Section shall be:
  - 1) Gross electrical output. If the unit has four or five control periods of data, then the gross electrical output (GO) willshall 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 willshall be the average of those control periods. If the unit does not have gross electrical output for the 2004 and 2005 control periods, the gross electrical output willshall be the gross electrical output data from the 2005 control period. If the unit does not have gross electrical output, heat input shall be used pursuant to subsection (a)(2) of this Section. If a generator is served by two or more units, the gross electrical output of the generator willshall be attributed to each unit in proportion to the unit's share of the total control period heat input of thesesuch units for the control period. The unit's converted gross electrical output-(CGO) willshall be calculated as follows:
    - A) If the unit is coal-fired:  $CGO (in MWh) = GO (in \times MWh) \times 1.0;$

1517 1518			B)	If the unit is oil-fired: CGO (in MWh) = GO (in $\times$ MWh) $\times$ 0.6; or		
1519				(a		
1520			C)	If the unit is neither coal-fired nor oil-fired:		
1521				CGO (in MWh) = GO (in $\times$ MWh) $\times$ 0.4-		
1522						
1523		2)		es electrical output data is not provided to the Agency, Hheat input		
1524				shall be used. If the unit has four or five control periods of data, the		
1525				ge of the unit's three highest heat inputs from the 2001, 2002,		
1526 1527				2004, or 2005 control period, willshall be used. If the unit has heat		
1528				from the 2003, 2004, or 2005 control period, the heat input willshall average of those years. If the unit does not have heat input from the		
1529				and 2005 control periods, the heat input from the 2005 control period		
1530				all be used. The unit's converted gross electrical output (CGO)	ĺ	
1531			· · · · · · · · · · · · · · · · · · ·	all be calculated as follows:		
1532			<u></u> ~		ı	
1533			A)	If the unit is coal-fired:		
1534			,	CGO (in MWh) = HI (in mmBtu) $\times$ 0.0967;		
1535						
1536			B)	If the unit is oil-fired:		
1537				CGO (in MWh) = HI (in mmBtu) $\times$ 0.0580; or		
1538						
1539			C)	If the unit is neither coal-fired nor oil-fired:		
1540				CGO (in MWh) = HI (in mmBtu) $\times$ 0.0387.		
1541	• •	_			ı	
1542	<u>b)</u>			eriods 2012 and 2013, the owner or operator of the unit must submit		
1543				he Agency by June 1, 2008, a statement that either gross electrical		
1544 1545		output data or heat input data is to be used to calculate the unit's converted gross electrical output. The unit's converted gross electrical output shall be calculated				
1545				ther subsection (b)(1) or (b)(2) of this Section:		
1547		pursua	ant to en	ther subsection (b)(1) or (b)(2) or this Section.		
1548		1)	Gross	electrical output. The gross electrical output will be Tthe average of		
1549		<u>+)</u>		it's two most recent years of control period gross electrical output, if		
1550				ble; otherwise it will be the unit's most recent control period's gross		
1551				cal output. If a generator is served by two or more units, the gross		
1552			electri	cal output of the generator shall be attributed to each unit in		
1553			propo	rtion to the unit's share of the total control period heat input of such		
1554				for the control period. The unit's converted gross electrical output		
1555			<del>shall</del> w	vill be calculated as follows:		
1556						
1557			<u>A)</u>	If the unit is coal-fired:		
1558				$\underline{CGO (in MWh)} = \underline{GO (in \times MWh)} \times 1.0;$		
1559			D)	If the wait is all fined.		
1560			<u>B)</u>	If the unit is oil-fired:		
1561 1562				$\underline{CGO (in MWh)} = \underline{GO (in \times MWh)} \times 0.6;$		

1563 If the unit is neither coal-fired nor oil-fired: CGO (in MWh) = GO (in  $\times$  MWh)  $\times$  0.4. 1564 1565 1566 Heat input. The heat input used will be \(\frac{1}{2}\)the average of the unit's two most recent years of control period heat input; otherwise the unit's most 1567 recent control period's heat input, e.g. for the 2012 control period the 1568 average of the unit's heat inputs from the 2006 and 2007 control periods. 1569 1570 If the unit does not have heat input from the 2006 and 2007 control periods, the heat input from the 2007 control period shall-must be used. 1571 The unit's converted gross electrical output shall-willbe calculated as 1572 1573 follows: 1574 1575 A) If the unit is coal-fired: 1576 CGO (in MWh) = HI (in mmBtu)  $\times$  0.0967; 1577 1578 If the unit is oil-fired: 1579 CGO (in MWh) = HI (in mmBtu)  $\times$  0.0580; or 1580 1581 If the unit is neither coal-fired nor oil-fired: CGO (in MWh) = HI (in mmBtu)  $\times$  0.0387. 1582 1583 1584 For control period 2014<del>2012</del> and thereafter, the unit's gross electrical output <u>c</u>b) willshall be the average of the unit's two most recent years of control period gross 1585 1586 electrical output, if available; otherwise it will be the unit's most recent control 1587 period's gross electrical output. If a generator is served by two or more units, the gross electrical output of the generator willshall be attributed to each unit in 1588 1589 proportion to the unit's share of the total control period heat input of these<del>such</del> 1590 units for the control period. The unit's converted gross electrical output willshall 1591 be calculated as follows: 1592 1593 1) If the unit is coal-fired: 1594 CGO (in MWh) = GO (in MWh)  $\times$  1.0; 1595 1596 2) If the unit is oil-fired: 1597 CGO (in MWh) = GO (in MWh)  $\times 0.6$ ; or 1598 1599 3) If the unit is neither coal-fired nor oil-fired: 1600 CGO (in MWh) = GO (in MWh)  $\times$  0.4. 1601 1602 For a unit that is a combustion turbine or boiler and has equipment used to de) 1603 produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the Agency willshall 1604 1605 add the converted gross electrical output calculated for electricity pursuant to 1606 subsections (a), (b), or (cb) of this Section to the converted useful thermal energy 1607 (CUTE) to determine the total converted gross electrical output for the unit 1608 (TCGO). The Agency will<del>shall</del> determine the converted useful thermal energy by

1609 using the average of the unit's control period useful thermal energy for the prior 1610 two control periods, if available, otherwise the unit's control period useful 1611 thermal output for the prior year willshall be used. The converted useful thermal 1612 energy will<del>shall</del> be determined using the following equations: 1613 1614 1) If the unit is coal-fired: 1615 CUTE (in MWh) = UTE (in mmBtu)  $\times$  0.2930; 1616 1617 2) If the unit is oil-fired: 1618 CUTE (in MWh) = UTE (in mmBtu)  $\times$  0.1758; or 1619 1620 3) If the unit is neither coal-fired nor oil-fired: 1621 CUTE (in MWh) = UTE (in mmBtu)  $\times$  0.1172. 1622 1623  $\underline{ed}$ ) The <u>CAIR NO<sub>x</sub>affected</u> unit's <u>converted</u> gross electrical output and converted 1624 useful thermal energy in subsections (a)(1), (b)(1), (c), and (de) of this Section for 1625 each control period willshall be based on the best available data reported or 1626 available to the Agency for the CAIR NO<sub>x</sub>affected unit pursuant to the provisions of Section 225.450-of this Subpart. 1627 1628 1629 The CAIR NO<sub>x</sub>affected unit's heat input in subsections (a)(2) and (b)(2) of this fe) 1630 Section for each control period willshall be determined in accordance with 40 1631 CFR-75, as incorporated by reference in Section 225.140-of this Part. 1632 1633 Section 225.440 **Annual Allocations** 1634 1635 For the 2009 control period, and each control period thereafter, the Agency a) 1636 willshall allocate CAIR NO<sub>x</sub> allowances to all CAIR NO<sub>x</sub> affected units in Illinois 1637 for which the Agency has calculated the total converted gross electrical output pursuant to Section 225.435 of this Subpart, a total amount of CAIR NO<sub>x</sub> 1638 1639 allowances equal to tons of NO<sub>x</sub> emissions in the CAIR NO<sub>x</sub> Annual Trading 1640 budget available for allocation as determined in Section 225.425525 of this 1641 Subpart and as adjusted to add allowances not allocated pursuant to this Section 1642 225.440(b) in the previous year's allocation-of this Subpart. 1643 1644 b) The Agency willshall allocate CAIR NO<sub>x</sub> allowances to each CAIR NO<sub>x</sub>affected 1645 unit on a pro-rata basis using the unit's total converted gross electrical output 1646 calculated pursuant to Section 225.435, to the extent whole allowances may be 1647 allocated. of this Subpart. The Agency will retain any additional allowances beyond this allocation of whole allowances for allocation pursuant to Section 1648 225.440(a) in the next control period. If there are insufficient allowances to 1649 allocate whole allowances pro-rata, these such unallocated allowances will shall be 1650 1651 retained by the Agency and willshall be available for allocation in later control

Section 225.445 New Unit Set-Aside (NUSA)

periods.

1652

For the 2009 control period and each control period thereafter, the Agency <u>willshall</u> allocate CAIR NO<sub>x</sub> allowances from the NUSA to <u>CAIR NO<sub>x</sub></u> affected units that commenced commercial operation on or after January 1, 2006, and do not yet have an allocation for the particular control period pursuant to Section 225.440 of this Subpart, in accordance with the following procedures:

- a) Beginning with the 2009 control period and each control period thereafter, the Agency willshall establish a separate NUSA for each control period. Each NUSA willshall be allocated CAIR NO<sub>x</sub> allowances equal to 5 percent of the amount of tons of NO<sub>x</sub> emissions in the base CAIR NO<sub>x</sub> Annual Trading budget in Section 225.425 of this Subpart.
- b) The CAIR designated representative of such a new CAIR NO<sub>x</sub> an affected unit may submit to the Agency a request, in a format specified by the Agency, to be allocated CAIR NO<sub>x</sub> allowances from the NUSA starting with the first control period after the control period in which the new unit commences commercial operation and until the first control period for which the unit may use CAIR NO<sub>x</sub> allowances allocated to the unit <u>pursuant tounder</u> Section 225.440 of this Subpart. The NUSA allowance allocation request may only be submitted after a new unit has operated during one control period, and no later than <u>March 1January 15</u> of after the control period for which allowances from the NUSA are being requested.
- c) In a NUSA allowance allocation request <u>pursuant tounder</u> 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 <u>CAIR NO<sub>x</sub>affected</u> unit for that control period.
- d) The Agency <u>willshall</u> allocate allowances from the NUSA to a new <u>CAIR</u> <u>NO<sub>x</sub>affected</u> unit using the following procedures:
  - 1) For each new <u>CAIR NO<sub>x</sub> unitaffected unit that has operated in at least one</u> control period, the unit's gross electrical output for the most recent control period <u>willshall</u> 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 <u>willshall</u> be attributed to each unit in proportion to the unit's share of the total control period heat input of <u>thesesuch</u> units for the control period. The new unit's converted gross electrical output <u>willshall</u> be calculated as follows:
    - A) If the unit is coal-fired:  $CGO (in MWh) = GO \times 1.0$ ;
    - B) If the unit is oil-fired:  $CGO \text{ (in MWh)} = GO \times 0.6; \text{ or }$

1713 1714 1715 1716 1717 1718 1719	
1719 1720 1721 1722 1723 1724 1725 1726 1727 1728 1729 1730 1731 1732 1733 1734	
1736 1737 1738 1739 1740 1741 1742	

1743

1744

- C) If the unit is neither coal-fired nor oil-fired:  $CGO (in MWh) = GO \times 0.4$ .
- 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 willshall add the converted gross electrical output calculated for electricity pursuant to subsection (de)(1) of this Section to the converted useful thermal energy to determine the total converted gross electrical output for the unit. The Agency willshall determine the converted useful thermal energy using the unit's useful thermal energy for the most recent control period. The converted useful thermal energy willshall 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)  $\times$  0.1172.
- The gross electrical output and useful thermal energy in subsections (d)(1) and (d)(2) of this Section for each control period willshall be based on the best available data reported or available to the Agency for the CAIR NO<sub>x</sub> affected unit pursuant to the provisions of Section 225.450-of this Subpart.
- The Agency willshall determine a unit's un-prorated allocation  $(UA_y)$  using the unit's converted gross electrical output (CGO) 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<sub>x</sub> tons (the unit's un-prorated allocation), as follows:

$$UA_{y} = \frac{TCGO_{y} * (1.0lbs/MWh)}{2000lbs/ton}$$

Where:

UA<sub>y</sub> = un-prorated allocation to a new

CAIR NO<sub>x</sub>affected unit.

TCGO<sub>y</sub> = total converted gross electrical output for a new CAIR NO<sub>x</sub>affected unit.

- 5) The Agency <u>willshall</u> allocate CAIR NO<sub>x</sub> allowances from the NUSA to new CAIR NO<sub>x</sub> affected units as follows:
  - A) If the NUSA for the control period for which CAIR NO<sub>x</sub> allowances are requested has a number of allowances greater than or equal to the total un-prorated allocations for all new units requesting allowances, the Agency willshall allocate the number of allowances using the un-prorated 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, such unallocated allowances shall be retained by the Agency and shall be available for allocation in a later control period.
  - B) If the NUSA for the control period for which the allowances are requested has a number of CAIR NO<sub>x</sub> allowances less than the total un-prorated allocation to all new CAIR NO<sub>x</sub> affected units requesting allocations, the Agency willshall allocate the available allowances for new CAIR NO<sub>x</sub> affected units on a pro-rata basis, using the un-prorated 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, such unallocated allowances shall be retained by the Agency and shall be available for allocation in a later control period.
  - C) If the gross electrical output or useful thermal energy reported to the Agency in subsection (d) of this Section is later determined to be greater than the unit's actual gross electrical output or useful thermal energy for the applicable control period, the Agency shall 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 <u>willshall</u> review each NUSA allowance allocation request <u>pursuant</u> tounder subsection (b) of this Section. The Agency <u>willshall</u> 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 <u>225.445</u>.
- f) By <u>June 1 February 8 of after</u> the applicable control period, the Agency <u>willshall</u>

notify each CAIR designated representative that submitted a NUSA allowance request of the amount of CAIR NO<sub>x</sub> allowances from the NUSA, if any, allocated for the control period to the new unit covered by the request.

- g) The Agency <u>willshall</u> allocate CAIR NO<sub>x</sub> allowances to new units from the NUSA no later than <u>October 31February 15</u> ofafter the applicable control period.
  - h) After a new <u>CAIR NO<sub>x</sub> affected</u> unit has operated in one control period, it becomes an existing unit for the purposes of Section 225.440-of this Subpart only, and the Agency <u>willshall</u> allocate CAIR NO<sub>x</sub> allowances for that unit, for the control period commencing four years in the future pursuant to Section 225.440 of this Subpart. For example, if a unit commences commercial operation in 2009, in 2010, the Agency <u>willshall</u> allocate to that unit allowances pursuant to Section 225.440 for the 20143 control period. The new <u>CAIR NO<sub>x</sub>xaffected</u> unit <u>willshall</u> continue to receive CAIR NO<sub>x</sub> allowances from the NUSA according to this Section until the unit is eligible to use the CAIR NO<sub>x</sub> allowances allocated to the unit pursuant to Section 225.440-of this Subpart.
  - If, after the completion of the procedures in subsection (c) of this Section for a control period, any unallocated CAIR NO<sub>x</sub> allowances remain in the NUSA for the control period, the Agency willshall, at a minimum, accrue those CAIR NO<sub>x</sub> allowances for future control period allocations to new CAIR NO<sub>x</sub> CAIR NO<sub>x</sub> affected units. The Agency may from time to time elect to retire CAIR NO<sub>x</sub> 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.

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

- a) By January 1, 20082007, or by the date of commencing commercial operation, whichever is later, the owner or operator of the CAIR NO<sub>x</sub>affected unit shallmust install, calibrate, maintain, and operate a system for accurately measuring gross electrical output that is consistent with the requirements of either 40 CFR 60 or 75; wattmeter; and shallmust measure gross electrical output in MW-hrs using such a system at all timesmegawatt hours on a continuous basis; and shallmust record the output of the measurement systemwattmeter. If a generator is served by two or more units, the information to determine each unit's heat input for that control period shallmust 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 shallmust comply with the applicable provisions 40 CFR 75, as incorporated by reference in Section 225.140-of this Part.
- b) For a <u>CAIR NO<sub>x</sub> an affected</u> unit that is a cogeneration unit by January 1, <u>20082007</u>, or by the date the <u>CAIR NO<sub>x</sub> affected</u> unit commences to produce useful thermal energy, whichever is later, the owner or operator of <u>a CAIR NO<sub>x</sub> an</u>

affected unit with cogeneration capabilities shallmust 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<sub>x</sub>an affected unit that produces useful thermal energy but uses an energy transfer medium other than steam, e.g., hot water or, glycol, shallmust 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<sub>x</sub>affected unit ceases to produce useful thermal energy, the owner or operator may cease operation of the meters, provided that operation of thesesuch meters shallmust be resumed if the CAIR NO<sub>x</sub>affected unit resumes production of useful thermal energy.

- c) By September 30, 2006, tThe owner or operator of a CAIR NO<sub>x</sub> an affected unit shall must either report gross electrical output data to the Agency or comply with the applicable provisions for providing heat input data to USEPA as follows:
  - 1)- By June 1, 2007, the gross electrical output for control periods 2001, 2002, 2003, 2004, and 2005, if available, and, the unit's useful thermal energy data, if applicable. If gross electric output is not available, heat input shall be used for those control periods 2001, 2002, 2003, 2004, and 2005 for which gross electrical output data is not available. 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 shallmust also be submitted. If heat input data is used, the owner or operator shallmust comply with the applicable provisions 40 CFR 75, as incorporated by reference in Section 225.140-of this Part.
  - 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 t-he applicable provisions of 40 CFR 75, as incorporated by reference in Section 225.140.
- d) Beginning with year 20082007, the CAIR designated representative of the CAIR NO<sub>x</sub>affected unit shallmust submit to the Agency quarterly, by no later than January 31, April 30, July 31, and October 31, and January 31 of each year, information for the CAIR NO<sub>x</sub>affected 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 <u>a CAIR NO<sub>x</sub> an affected</u> unit <u>shallmust</u> maintain on-site the monitoring plan detailing the monitoring system, maintenance of the monitoring system, including quality assurance activities <u>pursuant to the</u>

requirements of 40 CFR 60 orand 75, as applicable, including the applicable provisions for the measurement of gross electrical output for the CAIR NO<sub>x</sub> 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 venture venturi, orifice plates, flow nozzles, vortex meters, turbine meters, pressure transmitters, differential pressure transmitters, termperature transmitters, thermocouples, and resistance temperature detectors and any other 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<sub>x</sub> an affected unit shallmust retain records for at least 5 years from the date the record is created or the data collected in subsections (a) and (b) of this Section, and the reports submitted to the Agency and USEPA in accordance with subsections (c) and (d) of this Section. The owner or operator of a CAIR NO<sub>x</sub> an affected unit shallmust 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.

#### 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 of this Subpart by submitting the application required by Section 225.470 of this Subpart.
- b) Notwithstanding subsection (a) of this Section, a project sponsor with a CAIR NO<sub>x</sub> an affected 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<sub>x</sub> allowances from CASA and then is subsequently found to have been out of compliance with this Subpart for the applicable control period or periods, the project sponsor must restore the CAIR NO<sub>x</sub> allowances that it received pursuant to its CASA request or an equivalent number of CAIR NO<sub>x</sub> allowances to the CASA within six months of receipt of an Agency notice that NO<sub>x</sub> allowances must be restored finding of noncompliance.

1928 1929 1930		These distrib		ances willshall be assigned to the fund from which they were			
1931	c)	The A	<del>rgency '</del>	will not act as a mediator in situations where more than one project			
1932		<del>spons</del>	<del>or requ</del>	ests CAIR NO <sub>*</sub> allowances for the same project. If more than one			
1933		projec	et spons	sor submits an application for allowances for the same project for the			
1934		same	control	period, the Agency shall reject all such applications.			
1935							
1936	<u>c</u> d)	CAIR	$NO_x$ al	llowances from CASA willshall be allocated in accordance with the			
1937		proce	dures in	in Section 225.475 <del>-of this Subpart</del> .			
1938							
1939	<u>d</u> e) The pr		roject s	ponsor may submit an application that aggregates two or more			
1940		projec	cts unde	er a CASA project category that would individually result in less than			
1941		one al	llowanc	ee, but that equal at a minimum one whole allowance when			
1942		aggre	gated.	The Agency shall not allocate allowances for projects totaling less			
1943		<del>than c</del>	<del>ne wh</del> e	ole allowance after rounding.			
1944							
1945	Section 225.4	60	_	gy Efficiency and Conservation, Renewable Energy, and Clean			
1946			Techr	nology Projects			
1947							
1948	a) Energy		y efficiency and conservation project means any of the following projects				
1949		imple	mented	and located in Illinois:			
1950							
1951		1)	Dema	and side management projects that reduce overall power demand by			
1952			using	less energy, include:			
1953							
1954			A)	Smart building management software that more efficiently			
1955				regulates power flows.			
1956							
1957			B)	The use of or replacement to high efficiency motors, pumps,			
1958				compressors, or steam systems.			
1959							
1960			<u>C)</u>	<u>Lighting retrofits.</u>			
1961			_				
1962		2)	Energ	gy efficient new building construction projects include:			
1963							
1964			A)	ENERGY STAR qualified new home projects.			
1965							
1966			B)	Measures to reduce or conserve energy consumption beyond the			
1967				requirements of the Illinois Energy Conservation Code for			
1968				Commercial Buildings (20 ILCS 687/6-3).			
1969			C)				
1970			C)	New residential construction projects that qualify for Energy			
1971				Efficient Tax Incentives <u>pursuant tounder</u> the Energy Policy Act of			
1972				2005, 42 U.S.C. §15801 (2005).			
1973							

Air pollution control equipment upgrades at existing coal-fired electric

1974 3) Supply-side energy efficiency projects include projects implemented to improve the efficiency in electricity generation by coal-fired power plants, 1975 1976 and the efficiency of electrical transmission and distribution systems. 1977 1978 4) Highly efficient power generation projects, such as, but not limited to. 1979 combined cycle projects, combined heat and power, and microturbines. 1980 To be considered a highly efficient power generation project pursuant 1981 tounder this subsection (a)(4), a project must meet, the applicable 1982 thresholds and criteria listed below: 1983 1984 A) For combined heat and power projects generating both electricity 1985 and useful thermal energy for space, water, or industrial process heat, a rated-energy efficiency of at least 60 percent and is not a 1986 1987 CAIR NO<sub>x</sub> unit. 1988 1989 B) For combined cycle projects rated at greater than 0.50 MW, a 1990 rated-energy efficiency of at least 50 percent. 1991 1992 C) For microturbine projects rated at or below 0.50 MW and all other 1993 projects, rated-energy efficiency of at least 40 percent. 1994 1995 b) Renewable energy project means any of the following projects implemented and 1996 located in Illinois: 1997 1998 1) Zero-emission electric generating projects, including wind, solar (thermal 1999 or photovoltaic), and hydropower projects. Eligible hydropower plants are 2000 restricted to new generators, that are not replacements of existing 2001 generators, that commence operation on or after January 1, 2006, and do 2002 not involve the significant expansion of an existing dam or the 2003 construction of a new dam. 2004 2005 2) Renewable energy units are those units that generate electricity using more 2006 than 50 percent of the heat input, on an annual basis, from dedicated crops 2007 grown for energy production or the capture systems for methane gas from 2008 landfills, water treatment plants or sewage treatment plants, and organic 2009 waste biomass, and other similar sources of non-fossil fuel energy. Renewable energy projects do not include energy from incineration by 2010 2011 burning or heating of waste wood, tires, garbage, general household, institutional lunchroom or office waste, landscape waste, or construction 2012 2013 or demolition debris. 2014 2015 c) Clean technology project for reducing emissions from producing electricity and 2016 useful thermal energy means any of the following projects implemented and 2017 located in Illinois: 2018

2019

1)

Emission rates or limits achieved that are lower than what is

decree entered into before May 30, 2006.

required to meet the emission rates or limits for SO<sub>2</sub> or NO<sub>x</sub> or for

installing a baghouse as provided for in a court order or consent

2020 generating unitEGUs, as follows: installation of flue gas desulfurization 2021 (FGD) for control of SO<sub>2</sub> emissions; installation of a baghouse for control of particulate matter emissions; and installation of selective catalytic 2022 2023 reduction (SCR), selective non-catalytic reduction (SNCR), or other add-2024 on control devices for control of NO<sub>x</sub> emissions. For this purpose, a unit 2025 will be considered "existing" after it has been in commercial operation for 2026 at least eight years. Air pollution control upgrade projects do not include 2027 the addition of low NO<sub>x</sub> burners, overfired air techniques, or gas reburning 2028 techniques for control of NO<sub>x</sub> emissions; projects involving flue gas 2029 conditioning techniques or upgrades, or replacement of electrostatic precipitators; or addition of activated carbon injection or other sorbent 2030 2031 injection system for control of mercury. For this purpose, a unit willshall 2032 be considered "existing" after it has been in commercial operation for at 2033 least eight years. 2034 2035 2) Clean coal technologies projects include: 2036 2037 Integrated gasification combined cycle (IGCC) plants. A) 2038 2039 B) Fluidized bed coal combustion that commenced operation prior to 2040 December 31, 2006. 2041 2042 d) In addition to those projects excluded in subsections (a) through (c) of this 2043 Section, the following projects are also not eEnergy efficiency and conservation, 2044 renewable energy, or clean technology projects listed in subsection (a) through (c) 2045 of this Section shall not include: 2046 2047 N<del>n</del>uclear power projects. <u>1)</u> 2048 2049 P<del>projects required to meet emission standards or technology requirements</del> 2) 2050 under State or federal law or regulation—, except that allowances may be 2051 allocated for: 2052 2053 <u>A</u>) Tthe installation of a baghouse).: 2054 2055 Projects undertaken pursuant to Section 225.233 or Subpart F. B) 2056 2057 P<del>projects</del> used to meet the requirements of a court order or consent decree. 3) 2058 except that allowances may be allocated for: 2059

<u>A)</u>

2060

2061 2062

2063

- 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.
- Aa Supplemental Environmental Project (SEP). CASA allowances shall not be allocated to such projects.
- e) Applications for projects implemented and located in Illinois that 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 Such application shallmust designate which category or categories from those listed in subsections (a)(1) through (c)(2)(B) of this Section best fits the proposed project and the applicable formula pursuant to<del>under</del> Section 225.465(b) of this Section to calculate the number of allowances that it is requesting. The Agency willshall determine whether the application is approvable based on a sufficient demonstration by the project sponsor that the project is a new type of energy efficiency, renewable energy, or clean technology project, similar in its effects as the projects specifically listed in subsection (a) through (c) of this Section.
- f) Early adopter projects include projects that meet the criteria for any energy efficiency and conservation, renewable energy, or clean technology projects listed in subsections (a), (b), (c), and (e) of this Section and commence construction between July 1, 2006, and December 31, 2012.

#### Section 225.465 CASA Allowances

2065

2066

2067 2068 2069

2070

2071 2072

2073

2074

2075 2076

2077

2078

2079

2080

2081

2082

2083

2084

2085 2086

2087 2088

2089

2090 2091

2092 2093

2094

a) The CAIR NO<sub>x</sub> allowances for the CASA for each control period will<del>shall</del> be assigned to the following categories of projects:

2095		C			
2096				Phase I	Phase II
2097				(2009-2014)	(2015 and
2098					thereafter)
2099					
2100		1)	Energy Efficiency and Conservation/	9149	7625
2101			Renewable Energy		
2102			-		
2103		2)	Air Pollution Control Equipment	3811	3175
2104			Upgrades		
2105					
2106		3)	Clean Coal Technology	4573	3810
2107					
2108		4)	Early Adopters	1525	1271
2109			· ·		
2110	b)	The fo	ollowing formulas mustshall be used to	determine the number	er of CASA

2111 allowances that may be allocated to a project per control period: 2112 2113 For an energy efficiency and conservation project pursuant to Sections 1) 2114 225.460(a)(1) through (a)(4)(A)(3) of this Subpart, the number of allowances mustshall be calculated using the number of megawatt hours of 2115 electricity that was not consumed during a control period and the 2116 2117 following formula: 2118 2119 Α  $(MWh_c) \times (1.5 \text{ lb/MWh}) / 2000 \text{ lb}$ 2120 2121 Where: 2122 2123 Α The number of allowances for a particular project. The number of megawatt hours of electricity 2124  $MWh_c =$ 2125 conserved or generated during a control period by a 2126 project. 2127 2128 2) For a zero emission electric generating projects pursuant to Section 225.460(b)(1)-of this Subpart, the number of allowances mustshall be 2129 calculated using the number of megawatt hours of electricity generated 2130 during a control period and the following formula: 2131 2132 2133 Α  $(MWh_g) \times (2.0 \text{ lb/MWh}) / 2000 \text{ lb}$ 2134 Where: 2135 2136 2137 A The number of allowances for a particular project  $MWh_g =$ 2138 The number of megawatt hours of electricity generated during a control period by a project. 2139 2140 2141 3) For a renewable energy emission unit pursuant to Section 225.460(b)(2)-of this Subpart, the number of allowances mustshall be calculated using the 2142 2143 number of MWhmegawatt hours of electricity generated during a control period and the following formula: 2144 2145 2146  $(MWh_g) \times (0.5 \text{ lb/MWh}) / 2000 \text{ lb}$ Α 2147 2148 Where: 2149 2150 The number of allowances for a particular project. 2151  $MWh_g =$ The number of MW hours of electricity generated during a control period by a project. 2152 2153 2154 4) For an air pollution control equipment upgrade project pursuant to Section 225.460(c)(1) of this Subpart, the number of allowances willshall be 2155 calculated as follows: 2156

2157					
2158	A)	For No	O. or S	O2 cont	rol projects, by determining the difference in
2159	11)				per control period using the emission rate
2160				-	acement or improvement, and the following
2161		formu		ter repra	deciment of improvement, and the following
		IOIIIIu	ia.		
2162			() (XX		(ED. II A (IVI - ED. II A (IVI ) / 2000 II
2163		A=	(MWI	$h_g) \times K$	$\times$ (ER <sub>B</sub> lb/MWh - ER <sub>A</sub> lb/MWh) / 2000 lb
2164					
2165			Where	e:	
2166			A	=	The number of allowances for a particular
2167					project.
2168			MWh	.g =	The number of megawatt hours of electricity
2169				0	generated during a control period by a
2170					project.
2171			K	=	The pollutant factor: for $NO_x$ , $K=0.1$ ; and
2172			11		for SO <sub>2</sub> , $K = 0.05$ .
2173			$ER_{\scriptscriptstyle B}$	=	Average $NO_x$ or $SO_2$ emission rate based on
2174			LINB	_	CEMS data from the most recent two
2175					control periods prior to the replacement or
2176					improvement of the control equipment in
2177					lb/MWh, unless subject to a court order
2178					or consent decree. For units subject to a
2179					court order or consent decree entered into
2180					before May 30, 2006, ER <sub>B</sub> is limited to
2181					emission rates that are lower than the
2182					emission rate required in the consent decree
2183					or court order. For a court order or consent
2184					decree entered into after May 30, 2006, ER <sub>B</sub>
2185					is limited to the lesser of the emission rate
2186					specified in the court order or consent
2187					decree or the actual average emission rate
2188					during the control period. If such limit is
2189					not expressed in lb/MWh, the limit must be
2190					converted into lb/MWh using a heat rate of
2191			ED		10 mmBtu/1 MW.
2192			$ER_A$	=	Annual NO <sub>x</sub> or SO <sub>2</sub> average emission rate
2193					for the applicable control period data based
2194					on CEMS data in lb/MWh.
2195					
2196	B)	For a l	baghou	se proje	ct:
2197					
2198		A =	(MWI	$h_{\sigma}$ ) × (O	<del>0.2</del> lb/MWh) / 2000 lb
2199				5/ ( <del>-X</del> -	,
2200			Where	e·	
2201			,, 1101		
2202			A	=	The number of allowances for a
2202			$\boldsymbol{\Lambda}$	_	THE HUMBER OF ABOVAILCES TOF A

2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216	particular project.  The number of MWhmegawatt hours of electricity generated during a control per or the portion of a control period that the units were controlled by the baghouse.  Q = 0.2, unless installed pursuant to a court of or consent decree which does not specify factor, then Q = 0.05; or if installed pursuant to a consent decree or court order that does specify a factor, then Q equals a the factor the consent decree or court order, not to exceed 0.2.	order / a
2217	5) A)—For highly efficient power generation and clean coal-	
2217	technology <del>IGCC</del> projects:	
2219	projects.	
2219	A) For projects other than fluidized bed coal combustion	
2220	pursuant to Sections 225.460(a)(4)(B),-(a)(4)(C), and (c)(2)-of	thic
2222	pursuant to Sections 223.400(a)(4)(1)(1)(1-1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1	
2223	the number of megawatt hours MWh of electricity the project	
2224		
	generatesduring a control period and the	
2225	following formula:	Į
2226		
2227	$A = (MWh_g) \times (1.0 lb/MWh - ER lb/MWh) / 2000 lb$	
2228		
2229	Where:	
2230		
2231	A = The number of allowances for a particular project	ct.
2232	MWh <sub>g</sub> = The number of megawatt hours of electricity	
2233	generated during a control period by a project.	
2234	ER = Annual average $NO_x$ emission rate based on CE	MS
2235	data in 1b/MWh.	
2236		
2237	B) For fluidized bed coal combustion projects pursuant to Section	
2238	225.460(c)(2) of this Subpart, the number of allowances shall be	<u>oe</u>
2239	calculated using the number of megawatt hours gross MWh of	_
2240	electricity the project generates during a control period and the	•
2241	following-formula:	_
2242		
2243	$A = (MWh_g) \times (1.4 \text{ lb/MWh} - \text{ER lb/MWh}) / 2000 \text{ lb}$	
2244	(11111111111111111111111111111111111111	
		J
	Where:	
2245	Where:	
2245 2246		ct
2245	Where: A = The number of allowances for a particular projection of the number of the numbe	ct.

2249						of electricity generated during a control period by a
2250						project.
2251				ER	=	Annual average NO <sub>x</sub> emission rate based on CEMS
2252						data in 1b/MWh.
2253						
2254		6)	For a	CASA	project	that commencesed construction before December 31,
2255		-)				the allowances allocated pursuant to <del>under</del> subsections
2256						of this Section, a project sponsor may also request
2257				_		es <u>pursuant tounder</u> the early adopter project category
2258						225.460(e) of this Section based on the following
2259			formu			223.400(c) of this section based on the following
2260			1011110	ııa.		
			٨	_	1.0 +	0.10 \(\nabla_A\)
2261			A	=	1.0 +	$0.10 \times \Sigma A_i$
2262				****		
2263				When	e:	
2264						
2265				A	=	The number of allowances for a particular project as
2266						determined in subsections (b)(1) through (b)(5) of
2267						this Section.
2268				$A_i$	=	The number of allowances as determined in
2269						subsection (b)(1), (b)(2), (b)(3), (b)(4), or (b)(5) of
2270						this Section for a given project.
2271						
2272	Section 225.4	-70	CASA	A Appli	cations	
2272						
2273						
2274	a)	A proj	ject spo	nsor m	ay requ	est allowances if the project commenced construction
	a)					est allowances if the project commenced construction elow. The project sponsor may request and be
2274	a)	on or	after the	e dates	listed b	
2274 2275	a)	on or	after the	e dates	listed b	elow. The project sponsor may request and be
2274 2275 2276	a)	on or a	after the	e dates	listed b	elow. The project sponsor may request and be
2274 2275 2276 2277	a)	on or a alloca applic	after the ted allo able.	e dates wances	listed b s from r	elow. The project sponsor may request and be nore than one CASA category for a project, if
2274 2275 2276 2277 2278 2279	a)	on or a	after the ted allo able.	e dates wances and side	listed be from remarked	elow. The project sponsor may request and be nore than one CASA category for a project, if ement, energy efficient new construction, and supply
2274 2275 2276 2277 2278 2279 2280	a)	on or a alloca applic	after the ted allo able.  Dema	e dates wances and side	listed best from remander	elow. The project sponsor may request and be nore than one CASA category for a project, if ement, energy efficient new construction, and supply by and conservation projects that commenced
2274 2275 2276 2277 2278 2279 2280 2281	a)	on or a alloca applic	after the ted allo able.  Dema	e dates wances and side	listed best from remander	elow. The project sponsor may request and be nore than one CASA category for a project, if ement, energy efficient new construction, and supply
2274 2275 2276 2277 2278 2279 2280 2281 2282	a)	on or alloca applic	after the ted allo cable.  Dema side e constr	e dates owances and side energy e ruction	listed best from remander manage on or a	elow. The project sponsor may request and be nore than one CASA category for a project, if ement, energy efficient new construction, and supply by and conservation projects that commenced fter January 1, 2003;
2274 2275 2276 2277 2278 2279 2280 2281 2282 2283	a)	on or a alloca applic	after the ted allo cable.  Dema side e constr	e dates owances and side energy eruction	listed be from remanage fficience on or and coal c	elow. The project sponsor may request and be nore than one CASA category for a project, if  ement, energy efficient new construction, and supply by and conservation projects that commenced fter January 1, 2003;  ombustion projects, highly efficient power generation
2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284	a)	on or alloca applic	after the ted allo cable.  Dema side e construction opera	e dates owances and side energy e ruction ized bed tions pr	e manage efficience on or and coal coal coal coal coal coal coal coal	elow. The project sponsor may request and be nore than one CASA category for a project, if  ement, energy efficient new construction, and supply by and conservation projects that commenced fter January 1, 2003;  ombustion projects, highly efficient power generation or renewable energy emission units, which
2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285	a)	on or alloca applic	after the ted allo cable.  Dema side e construction opera	e dates owances and side energy e ruction ized bed tions pr	e manage efficience on or and coal coal coal coal coal coal coal coal	elow. The project sponsor may request and be nore than one CASA category for a project, if  ement, energy efficient new construction, and supply by and conservation projects that commenced fter January 1, 2003;  ombustion projects, highly efficient power generation
2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286	a)	on or a alloca applic 1)	Dema side e constr	e dates owances and side energy e ruction ized bea tions propertions	listed best from remanage efficience on or and coal constru	elow. The project sponsor may request and be nore than one CASA category for a project, if  ement, energy efficient new construction, and supply by and conservation projects that commenced fter January 1, 2003;  ombustion projects, highly efficient power generation or renewable energy emission units, which cation on or after January 1, 2001; and
2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287	a)	on or alloca applic	Dema side e constr	e dates owances and side energy e ruction ized bea tions propertions	listed best from remanage efficience on or and coal constru	elow. The project sponsor may request and be nore than one CASA category for a project, if  ement, energy efficient new construction, and supply by and conservation projects that commenced fter January 1, 2003;  ombustion projects, highly efficient power generation or renewable energy emission units, which
2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288		on or a alloca application (1)	Dema side e constr Fluidi operar comm	e dates owances and side energy e ruction ized bec tions pro-	e manage fficience on or and coal constru	elow. The project sponsor may request and be nore than one CASA category for a project, if  ement, energy efficient new construction, and supply by and conservation projects that commenced fter January 1, 2003;  combustion projects, highly efficient power generation or renewable energy emission units, which cation on or after January 1, 2001; and  a or after July 1, 2006.
2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2288	a) b)	on or a alloca application of the second of	Dema side e construction operation All ot	e dates owances and side energy eruction ized because the project of the project	e manage fficience on or a dicoal construite or 2009 co	elow. The project sponsor may request and be nore than one CASA category for a project, if  ement, energy efficient new construction, and supply by and conservation projects that commenced fter January 1, 2003;  combustion projects, highly efficient power generation for renewable energy emission units, which cation on or after January 1, 2001; and  a or after July 1, 2006.
2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290		on or a alloca application application (1)  2)  Begin project	Dema side e construction operation and the comment of the comment of the construction operation	and side energy eruction lized because there projects ith the 2 cor may	e manage efficience on or a cojects, construijects or 2009 co request	elow. The project sponsor may request and be nore than one CASA category for a project, if  ement, energy efficient new construction, and supply by and conservation projects that commenced fter January 1, 2003;  combustion projects, highly efficient power generation for renewable energy emission units, which cation on or after January 1, 2001; and  a or after July 1, 2006.  Introl period and each control period thereafter, a stallowances from the CASA. The application must be
2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291		on or a alloca application of the second of	Dema side e construction operate comments of the construction of the construction operate comments operate c	e dates owances and side energy eruction lized because the project of the project of the project of the Age of	e manage efficience on or a cojects, construijects or 2009 co request	elow. The project sponsor may request and be nore than one CASA category for a project, if  ement, energy efficient new construction, and supply by and conservation projects that commenced fter January 1, 2003;  combustion projects, highly efficient power generation for renewable energy emission units, which cation on or after January 1, 2001; and  a or after July 1, 2006.
2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290		on or a alloca application of the second of	Dema side e construction operation and the comment of the comment of the construction operation	e dates owances and side energy eruction lized because the project of the project of the project of the Age of	e manage efficience on or a cojects, construijects or 2009 co request	elow. The project sponsor may request and be nore than one CASA category for a project, if  ement, energy efficient new construction, and supply by and conservation projects that commenced fter January 1, 2003;  combustion projects, highly efficient power generation for renewable energy emission units, which cation on or after January 1, 2001; and  a or after July 1, 2006.  Introl period and each control period thereafter, a stallowances from the CASA. The application must be

2294 c) The allocation willshall be based on the electricity conserved or generated in the 2295 control period preceding the calendar year in which the application is submitted. 2296 To apply for a CAIR NO<sub>x</sub> allocation from the CASA, project sponsors must 2297 provide the Agency with the following information: 2298 2299 1) Identification of the project sponsor, including name, address, type of 2300 organization, certification that the project sponsor has met the definition of "project sponsor" as set forth in Section 225.130, and name(s) of the 2301 2302 principals or corporate officials. 2303 2304 2) The number of the CAIR NO<sub>x</sub> general or compliance account for the 2305 project and the name of the associated CAIR account representative. 2306 2307 3) A description of the project or projects, location, the role of the project 2308 sponsor in the projects, and a general explanation of how the amount of 2309 energy conserved or generated was measured, verified, and calculated, and the number of allowances requested and the with the supporting 2310 calculations. The number of allowances requested willshall be calculated 2311 2312 using the applicable formula from Section 225.470(b) of this Section. 2313 2314 4) Detailed information to support the request for allowances, including the 2315 following types of documentation for the measurement and verification of the NO<sub>x</sub> emissions reductions, electricity generated, or electricity 2316 2317 conserved using established measurement verification procedures, as 2318 applicable. The measurement and verification required willshall depend on the type of project proposed. 2319 2320 2321 A) As applicable, documentation of the project's base and control 2322 period conditions and resultant base and control period energy 2323 data, using the procedures and methods included in M&V2324 Guidelines: Measurement and Verification for Federal Energy 2325 *Projects*, incorporated by reference in Section 225.140-of this Part, 2326 or other method approved by the Agency. Examples include: 2327 2328 i) Energy consumption and demand profiles; 2329 2330 ii) Occupancy type; 2331 2332 iii) Density and periods; 2333 2334 iv) Space conditions or plant throughput for each operating 2335 period and season. (For example, in a building this would 2336 include the light level and color, space temperature, 2337 humidity and ventilation); 2338 2339 Equipment inventory, nameplate data, location, condition; v)

2340 and 2341 2342 vi) Equipment operating practices (schedules and set points, 2343 actual temperatures/pressures). 2344 2345 B) Emissions data, including, if applicable, CEMS data; 2346 2347 C) Information for rated–energy efficiency including supporting 2348 documentation and calculations; and 2349 2350 D) Electricity, in MWh generated or conserved for the applicable 2351 control period. 2352 2353 5) Notwithstanding the requirements of subsections (c)(4) of this Section, applications for fewer than five allowances may propose other reliable and 2354 2355 applicable methods of quantification acceptable to the Agency. 2356 2357 Any additional information requested by the Agency to determine the 6) 2358 correctness of the requested number of allowances, including site 2359 information, project specifications, supporting calculations, operating 2360 procedures, and maintenance procedures. 2361 2362 7) The following certification by the responsible official for the project sponsor and the applicable CAIR account representative for the project: 2363 2364 2365 "I am authorized to make this submission on behalf of the project sponsor 2366 and the holder of the CAIR NO<sub>x</sub> general account or compliance account 2367 for which the submission is made. I certify under penalty of law that I 2368 have personally examined, and am familiar with the statements and 2369 information submitted in this application and all its attachments. Based on 2370 my inquiry of those individuals with primary responsibility for obtaining 2371 the information, I certify that the statements and information are to the 2372 best of my knowledge and belief true, accurate, and complete. I am aware 2373 that there are significant penalties for submitting false statements and 2374 information or omitting required statements and information." 2375 2376 d) A project sponsor may request allowances from the CASA for each project a total 2377 number of control periods not to exceed the number of control periods listed 2378 below. After a project has been allocated allowances from CASA, subsequent 2379 requests for the project from the project sponsor shallmust include the information 2380 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 2381 2382 information specified in subsections (c)(5) and (c)(6) as specifically requested by 2383 the Agency. 2384

2385 2386		1)	For energy efficiency and conservation projects (except for efficient
			operation and renewable energy projects), for a total of eight control
2387			periods.
2388 2389		2)	For early adopter projects, for a total of tan central periods
2390		2)	For early adopter projects, for a total of ten control periods.
2391		3)	For air pollution control equipment upgrades for a total of 15 control
2392		3)	periods.
2393			periods.
2394		<u>4</u> 3)	For renewable energy projects, clean coal technology, and highly efficient
2395		<del>_</del>	power generation projects, for each year that the project is in operation.
2396			power generation projects, for each year that the project is in operation.
2397	e)	Δ nro	ject sponsor must keep copies of all CASA applications and the
2398	C)		nentation used to support the application for at least five years.
2399		docum	ilentation used to support the application for at least five years.
2400	Section 225.4	75	Agency Action on CASA Applications
2401	Section 223.4	13	Agency Action on CASA Applications
2402	a)	Ry Se	ptember October 1, 2009, and each September October 1 thereafter, the
2403	a)	-	cy willshall determine the total number of allowances that are approvable for
2404		_	tion to project sponsors based upon the applications submitted pursuant to
2405			on 225.470-of this Subpart.
2406		Scene	11 223.470 or this Suopart.
2407		1)	The Agency willshall determine the number of CAIR NO <sub>x</sub> allowances that
2407		1)	are approvable based on the formulas and the criteria for these such
2409			projects. The Agency willshall notify a project sponsor within 90 days
2410			after receipt of an application if the project is not approvable, the number
2411			of allowances requested is not approvable, or additional information is
2411			needed by the Agency to complete its review of the application.
2412			needed by the Agency to complete its review of the application.
2413		2)	If the total number of CAIR NO <sub>x</sub> allowances requested for approved
2415		2)	projects is less than or equal to the number of CAIR $NO_x$ allowances in
2416			the CASA project category, the number of allowances that are approved
2417			willshall be allocated to each CAIR NO <sub>x</sub> compliance or general account.
2417			winishan be anocated to each CATK NO <sub>x</sub> comphance of general account.
2419		3)	If more CAIR NO <sub>x</sub> allowances are requested than the number of CAIR
2419		3)	$NO_x$ allowances in a given CASA project category, allowances will shall
2421			be allocated on a pro-rata basis based on the number of allowances
2422			available, subject to further adjustment as provided for by subsection (b)
2422			of this Section. CAIR NO <sub>x</sub> allowances will <del>shall</del> be allocated, transferred,
2423			or used as whole allowances. The number of whole allowances willshall
2424			
2423			be determined by rounding down for decimals less than 0.5 and rounding
			up for decimals of 0.5 or greater.
2427	<b>L</b> )	Force	antral pariods 2011 and thereafter ill there are after the completion of the
2428	b)		ontrol periods 2011 and thereafter, iHf there are, after the completion of the
2429			dures in subsection (a) of this Section for a control period, any CAIR $NO_x$
2430		anowa	ances not allocated to a CASA project for the control period:

The remaining allowances <u>will accrue</u> in each CASA project category <u>will</u>
accrue up to twice the number of allowances that are assigned to the
project category each control period as set forth in Section 225.465-of this
Subpart.

- 2) For control period 2011 and thereafter, If any allowances remain after allocations pursuant to subsection (a) of this Section, the Agencyin a project category that are in excess of twice the number assign for the control period as set forth in Section 225.465 of this Subpart willshall beallocate 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 redistributed to project categories that have fewer than twice the number of allowances assigned to that project category for the control period.
- 3) For control period 2011 and thereafter If any allowances remain after the allocation of allowances pursuant to subsection (b)(2) of this Section, the Agency willshall then distribute pro-rate the remaining reallocate allowances to projects that received fewer allowances than requested and approved on a pro-rate basis, based on the total number of approved allowances for the projects to project categories that have fewer than twice the number of allowances assigned to that project category. The pro-rate 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) For control period 2011 and thereafter, if after the redistribution of allowances pursuant to subsection (b)(2) any allowances remain, these allowances shall be reassigned to project categories that have fewer than twice the number of allowances annually assigned to that project category as set forth in Section 225.465 of this Subpart, after the allocation in subsection (b)(3) of this Section.
- The Agency shall repeat the process of allocating allowances to CASA projects that received fewer allowances than requested and approved, and reassigning allowances to project categories as set forth in subsections (b)(2), (b)(3), and (b)(4) of this Section, until no allowances remain to be reassigned between project categories and the approved allowance requests have been filled. If allowances still remain unallocated undistributed after the allocations and distributions in the above subsections are completed, the Agency may elect to retire theany CAIR NO<sub>x</sub> allowances that have not been distributed to any CASA category remain after all approved requests for allowances have been met and each project category has accrued twice the number of allowances

2477 assigned for that project category to continue progress toward attainment 2478 or maintenance of the National Ambient Air Quality Standards pursuant to 2479 the CAA. 2480 2481 Section 225.480 Compliance Supplement Pool 2482 2483 In addition to the CAIR NO<sub>x</sub> allowances allocated pursuant to<del>under</del> Section 225.4235-of this Subpart, the USEPA has allowed allocation of provided an additional 11,299 CAIR NO<sub>x</sub> 2484 2485 allowances in Illinois as a from the federal compliance supplement pool to Illinois for the control 2486 period in 2009. However, On January 1, 2009, the Agency willshall retire all 11,299 NO\* allowances for purposes of for public health and air quality improvements, none of these 2487 2488 allowances will be allocated. 2489 2490 SUBPART E: CAIR NO<sub>x</sub> OZONE SEASON TRADING PROGRAM 2491 2492 Section 225.500 Purpose 2493 2494 The purpose of this Subpart E is to control the seasonal emissions of nitrogen oxides (NO<sub>x</sub>) from 2495 electric generating unit EGUs by determining allocations and implementing the CAIR NO<sub>x</sub> 2496 Ozone Season Trading Program. 2497 2498 Section 225.505 **Applicability** 2499 2500 a) Except as provided in subsections (b)(1), (b)(3), and (b)(4) of this Section: 2501 2502 The following units are CAIR NO<sub>x</sub> Ozone Season units, and any source 2503 that includes one or more such units is a CAIR NO<sub>x</sub> source subject to the 2504 requirements of this Subpart E: any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since 2505 2506 the later of November 15, 1990, or the start-up the unit's combustion 2507 chamber, a generator with nameplate capacity of more than 25 MWe 2508 producing electricity for sale. 2509 2510 If a stationary boiler or stationary combustion turbine that, pursuant to 2511 subsection (a)(1) of this Section, is not a CAIR NO<sub>x</sub> Ozone Season unit 2512 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 2513 2514 become a CAIR NO<sub>x</sub> Ozone Season unit as provided in subsection (a)(1) of this Section on the first date on which it both combusts fossil fuel and 2515 2516 serves such generator. 2517 2518 The units that meet the requirements set forth in subsections (b)(1), (b)(3), and b) 2519 (b)(4) of this Section will are not be CAIR NO<sub>x</sub> units and units that meet the 2520 requirements of subsections (b)(2) and (b)(5) of this Section are CAIR NO<sub>x</sub> 2521 Ozone Season units: 2522

2523	1)	Any unit that would otherwise be classified as is a CAIR NO <sub>x</sub> Ozone
2524		Season unit pursuant to subsection (a)(1) or (a)(2) of this Section and:
2525		
2526		A) Qualifies as a cogeneration unit during the 12-month period
2527		starting on the date the unit first produces electricity and
2528		continuing to qualify as a cogeneration unit; and
2529		
2530		B) Does not serve at any time, since the later of November 15, 1990
2531		or the start-up of the unit's combustion chamber, a generator with
2532		nameplate capacity of more than 25 MWe supplying any calendar
2533		year more than one-third of the of the unit's potential electric
2534		output capacity or 219,000 MWh, whichever is greater, to any
2535		utility power distribution for sale.
2536		
2537	<u>2)</u>	If a unit qualifies as a cogeneration unit during the 12-month period
2538		starting on the date the unit first produces electricity and meets the
2539		requirements of subsection (b)(1) of this Section for at least one calendar
2540		year, but subsequently no longer meets all such requirements, the unit
2541		shall become a CAIR NO <sub>x</sub> Ozone Season unit starting on the earlier of
2542		January 1 after the first calendar year during which the unit no longer
2543		qualifies as a cogeneration unit or January 1 after the first calendar year
2544		during which the unit no longer meets the requirements of subsection
2545		(b)(1)(B) of this Section.
2546		
2547	<u>3)</u>	Any unit that would otherwise be classified as is a CAIR NO <sub>x</sub> Ozone
2548		Season unit pursuant to subsection (a)(1) or (a)(2) of this Section
2549		commencing operation before January 1, 1985 and:
2550		
2551		A) Qualifies as a solid waste incineration unit; and
2552		
2553		B) WithHas an average annual fuel consumption of non-fossil fuel for
2554		1985-1987 exceeding 80 percent (on a Btu basis) and an average
2555		annual fuel consumption of non-fossil fuel for any three
2556		consecutive calendar years after 1990 exceeding 80 percent (on a
2557		Btu basis).
2558	48	
2559 2560	<u>4)</u>	Any unit that would otherwise be classified as is a CAIR NO <sub>x</sub> Ozone
2560		Season unit under subsection (a)(1) or (a)(2) of this Section commencing
2561		operation on or after January 1, 1985: and
2562 2563		
2563		A) Qualifies as a solid waste incineration unit; and
2564		
2565		B) WithHas an average annual fuel consumption of non-fossil fuel the
2566		first three years of operation exceeding 80 percent (on a Btu basis)
2567		and an average annual fuel consumption of non-fossil fuel for any

2568 three consecutive calendar years after 1990 exceeding 80 percent 2569 (on a Btu basis). 2570 2571 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 2572 2573 consecutive years, but subsequently no longer meets all such 2574 requirements, the unit shall become a CAIR NO<sub>x</sub> Ozone Season unit 2575 starting on the earlier of January 1 after the first three consecutive calendar 2576 years after 1990 for which the unit has an average annual fuel 2577 consumption of fuel of 20 percent or more. A fossil fuel-fired stationary boiler, combustion turbine or combined cycle system 2578 2579 is an electrical generating unit if it serves a generator that has a nameplate 2580 capacity greater than 25 MWe and produces electricity for sale and is not included 2581 in Appendix D of 35 III. Adm. Code Part 217. An electric generating unit is 2582 subject to the CAIR NO<sub>\*</sub> Ozone Season Trading Program contained in this 2583 Subpart and is a CAIR NOx Ozone Season unit or affected unit for the purposes of 2584 this Subpart. 2585 2586 Notwithstanding subsection (a) of this Section, an EGU shall not be an affected 2587 unit and is not subject to the CAIR NO<sub>\*</sub> Ozone Season Trading Program 2588 contained in this Subpart if it meets the requirements of either subsection 2589 (b)(1)(A) or (b)(2)(A) of this Section, as follows: 2590 2591 1) A unit that: 2592 2593 Meets the definition of a cogeneration unit in Section 225.130 of 2594 this Part: and 2595 2596 Qualifies as a cogeneration unit during the 12-month period 2597 starting on the date the unit first produces electricity and 2598 continues to qualify as a cogeneration unit; and 2599 2600 Does not serve at any time, since the later of November 15, 2601 1990, or the start-up of the unit's combustion chamber, a 2602 generator with a nameplate capacity of more than 25 MWe, 2603 and which supplies in any calendar year more than one-2604 third of the unit's potential electrical output capacity or 2605 219,000 MWh, whichever is greater, to a utility power 2606 distribution system for sale. 2607 2608 If a unit qualifies as a cogeneration unit during the 12-month 2609 period starting on the date the unit first produces electricity but 2610 subsequently no longer qualifies as a cogeneration unit, the unit 2611 shall be subject to subsection (a) of this Section starting on the 2612 January 1 after which the unit first no longer qualifies as a 2613 cogeneration unit.

2614 2615 A unit that: 2616 2617 Qualifies as a solid waste incineration unit as defined by Section 129(g) of the CAA [42 U.S.C. 7429(g)]; and 2618 2619 2620 Commences operation on or after January 1, 1985; and 2621 2622 Has an average annual fuel consumption of non-fossil fuel 2623 for the first three calendar years of operation exceeding 80 2624 percent (on a Btu basis) and an average annual fuel 2625 consumption of non-fossil fuel for any three consecutive 2626 calendar years after 1990 exceeding 80 percent (on a Btu 2627 basis). 2628 2629 If a unit qualifies as a solid waste incineration unit and meets the 2630 requirements of subsection (b)(2)(A) of this Section for at least 2631 three consecutive calendar years, but subsequently no longer meets 2632 all such requirements, the unit shall become an affected unit 2633 starting on the January 1 after which the unit has an average annual 2634 fuel consumption of fossil fuel of 20 percent or more. 2635 2636 Section 225.510 **Compliance Requirements** 2637 2638 The owner or operator of a CAIR NO<sub>x</sub> Ozone Seasonan affected unit mustshall a) comply with the requirements of the CAIR NO<sub>x</sub> Ozone Season Trading Program 2639 for Illinois as set forth in this Subpart E and 40 CFR 96, subpart AAAA (CAIR 2640 2641 NO<sub>x</sub> Ozone Season Trading Program General Provisions) (excluding 40 CFR-\$\frac{\pmathbb{E}}{2}\$) 2642 96.304, 96.305(b)(2), and 96.306); 40 CFR 96, subpart BBBB (CAIR Designated 2643 Representative for CAIR NO<sub>x</sub> Ozone Season Sources); 40 CFR 96, subpart FFFF 2644 (CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System); 40 CFR 96, subpart GGGG (CAIR NO<sub>x</sub> Ozone Season Allowance Transfers); and 40 CFR -96. 2645 2646 subpart HHHH (Monitoring and Reporting); as incorporated by reference in 2647 Section 225.140 of this Part. 2648 2649 b) Permit requirements: 2650 2651 1) The <del>owner or operator</del> owner or operator of each source with one or more CAIR NO<sub>x</sub> Ozone Seasonaffeeted units at the source must apply for a 2652 2653 permit issued by the Agency with federally enforceable conditions 2654 covering the CAIR NO<sub>x</sub> Ozone Season Trading Program ("CAIR NO<sub>x</sub> 2655 Ozone Season permit") that complies with the requirements of Section 2656 225.520 of this Subpart (Permit Requirements). 2657 2658 2) The owner or operator of each CAIR NO<sub>x</sub> Ozone Seasonaffected source and each CAIR NO<sub>x</sub> Ozone Seasonaffected unit at the source must operate 2659

the <u>CAIR NO<sub>x</sub> Ozone Season</u> affected unit in compliance with <u>itssuch</u> CAIR NO<sub>x</sub> Ozone Season permit.

c) Monitoring requirements:

26602661

26622663

26642665

2666

2667

26682669

2670

2671

2672

2673

26742675

2676

2677

26782679

26802681

26822683

2684

2685 2686

26872688

2689

2690

2691

2692

26932694

2695

26962697

2698

2699

2700 2701

2702

2703

2704

2705

- The owner or operator of each <u>CAIR NO<sub>x</sub> Ozone Seasonaffected</u> source and each <u>CAIR NO<sub>x</sub> Ozone Seasonaffected</u> 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 of this Subpart. The CAIR designated representative of each <u>CAIR NO<sub>x</sub> Ozone Seasonaffected</u> source and each <u>CAIR NO<sub>x</sub> Ozone Seasonaffected</u> unit at the source must comply with those sections of the monitoring, reporting, and recordkeeping requirements of 40 CFR -6, subpart HHHH, applicable to a CAIR designated representative.
- The compliance of each <u>CAIR NO<sub>x</sub> Ozone Seasonaffected</u> <u>sourceunit</u> with the CAIR NO<sub>x</sub> Ozone Season emissions limitation <u>pursuant tounder</u> subsection (d) of this Section <u>willshall</u> be determined by the emissions measurements recorded and reported in accordance with 40 CFR 96, subpart HHHH.
- d) Emission requirements:
  - By the allowance transfer deadline, November 30, 2009, and by 1) November 30, of each subsequent year, if November 30 is a business daythe allowance transfer deadline, the owner or operator CAIR designated representative of each CAIR NO<sub>x</sub> Ozone Seasonaffected source and each CAIR NO<sub>x</sub> Ozone Seasonaffected unit at the source mustshall hold allowances available for compliance deductions pursuant to<del>under</del> 40 CFR §-96.354(a) in the CAIR NO<sub>x</sub> Ozone Season source's compliance account. If November 30 is not a business day, the allowance transfer deadline is by midnight of the first business day thereafter. The allowance transfer deadline means by midnight of November 30 (if it is business day) or midnight of the first business day thereafter. The number of allowances held mayshall not be less than the tons of NO<sub>x</sub> emissions for the control period from all CAIR NO<sub>x</sub> Ozone Seasonaffected units at the CAIR NO<sub>x</sub> Ozone Seasonaffected source, rounded to the nearest whole ton, as determined in accordance with 40 CFR 96, subpart HHHH, plus any number of allowances necessary to account for actual utilization including, but not limited to, testing, start-up, malfunction, and shut down.
  - 2) Each ton of NO<sub>x</sub> emitted in excess of the number of CAIR NO<sub>x</sub> Ozone Season allowances held at the allowance transfer deadline by the owner or operator for each <u>CAIR NO<sub>x</sub> Ozone Seasonaffected</u> unit in its CAIR NO<sub>x</sub> Ozone Season compliance account for each <u>day of the applicable</u> control period <u>willshall</u> constitute a separate violation of this Subpart E, and the

2706 Act, and the CAA. 2707 2708 3) Each CAIR NO<sub>x</sub> Ozone Seasonaffected unit willshall be subject to the 2709 monitoring and compliance requirements of subsections (c)(1)-and (d)(1) of this Section for the control period starting on the later of May January 1, 2710 20092009, or the deadline for meeting the unit's monitoring certification 2711 2712 requirements pursuant to<del>under</del> 40 CFR \(\frac{8}{2}\)-96.370(b)(1), (b)(2) or (b)(3) and 2713 for each control period thereafter. 2714 2715 4) CAIR NO<sub>x</sub> Ozone Season allowances mustshall be held in, deducted from, 2716 or transferred into or among allowance accounts in accordance with this 2717 Subpart and 40 CFR 96, subparts FFFF and GGGG. 2718 2719 5) In order to comply with the requirements of subsection (d)(1) of this 2720 Section, a CAIR NO<sub>x</sub> Ozone Season allowance may not be 2721 deducted utilized for compliance according to subsection (d)(1) of this 2722 Section-, for a control period in a calendar year before<del>prior to</del> the year for which the CAIR NO<sub>x</sub> Ozone Season allowance is allocated. 2723 2724 2725 6) A CAIR NO<sub>x</sub> Ozone Season allowance allocated by the Agency or 2726 USEPA pursuant tounder the CAIR NO<sub>\*</sub> Ozone Season Trading Program 2727 is a limited authorization to emit one ton of NO<sub>x</sub> in accordance with the 2728 CAIR NO<sub>x</sub> Ozone Season Trading Program. No provision of the CAIR 2729 NO<sub>x</sub> Ozone Season Trading Program, the CAIR-NO<sub>x</sub>-Ozone Season 2730 permit application, the CAIR NO<sub>\*</sub> Ozone Season permit, or a retired unit exemption pursuant to<del>under</del> 40 CFR \\$-96.305, and no provision of law, 2731 2732 willshall be construed to limit the authority of the United States or the State to terminate or limit this authorization. 2733 2734 2735 7) A CAIR NO<sub>x</sub> Ozone Season allowance allocated by the Agency or 2736 USEPA pursuant tounder the CAIR NO, Ozone Season Trading Program 2737 does not constitute a property right. 2738 2739 8) Upon recordation by USEPA pursuant to<del>under</del> 40 CFR 96, subpart FFFF, 2740 or 40 CFR 96, subpart GGGG, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season an-allowance to or from a CAIR NO<sub>x</sub> Ozone 2741 Season source compliance account is deemed to amend automatically, and 2742 2743 become a part of, any CAIR NO<sub>x</sub> Ozone Season permit of the CAIR NO<sub>x</sub> Ozone Seasonaffeeted source. This automatic amendment of the CAIR 2744 2745 NO<sub>x</sub> Ozone Season permit willshall be deemed an operation of law and 2746 will not require any further review. 2747 2748 e) Recordkeeping and reporting requirements: 2749 2750 1) Unless otherwise provided, the owner or operator of the CAIR NO<sub>x</sub> Ozone 2751 Seasonaffected source and each CAIR NO<sub>x</sub> Ozone Seasonaffected unit at

the source <u>mustshall</u> 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<sub>x</sub> Ozone Seasonaffeeted 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 thesuch documents are superseded because of the submission of a new certificate of representation pursuant tounder\_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 <u>pursuant tounder</u> the CAIR NO<sub>x</sub> Ozone Season Trading Program or documents necessary to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Ozone Season Trading Program or with the requirements of this Subpart <u>F</u>.
- D) Copies of all documents used to complete a CAIR NO<sub>x</sub> Ozone Season permit application and any other submission <u>or documents</u> used to demonstrate compliance pursuant tounder the CAIR NO<sub>x</sub> Ozone Season Trading Program.
- E) Copies of all records and logs for gross electrical output and useful thermal energy required by Section 225.550-of this Subpart.
- The CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Seasonan affected source and each CAIR NO<sub>x</sub> Ozone Seasonaffected unit at the source must submit to the Agency and USEPA the reports and compliance certifications required pursuant tounder the CAIR NO<sub>x</sub> Ozone Season Trading Program, including those pursuant tounder 40 CFR 96, subpart HHHH and Section 225.550-of this Subpart.
- f) Liability:
  - 1) No revision of a permit for <u>a CAIR NO<sub>x</sub> Ozone Seasonan affected</u> unit <u>mayshall</u> excuse any violation of the requirements of this Subpart <u>E</u> or the requirements of the CAIR NO<sub>x</sub> Ozone Season Trading Program.

2798 2799 2) Each CAIR NO<sub>x</sub> Ozone Seasonaffected source and each CAIR NO<sub>x</sub> Ozone 2800 Seasonaffected unit mustshall meet the requirements of the CAIR NO<sub>x</sub> 2801 Ozone Season Trading Program. 2802 2803 3) Any provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program that 2804 applies to a CAIR NO<sub>x</sub> Ozone Seasonan affected source (including any 2805 provision applicable to the CAIR designated representative of a CAIR 2806 NO<sub>x</sub> Ozone Seasonan affected source) willshall also apply to the owner 2807 and operator of the<del>such</del> CAIR NO<sub>x</sub> Ozone Season<del>affected</del> source and to 2808 the owner and operator of each CAIR NO<sub>x</sub> Ozone Seasonaffected unit at 2809 the source. 2810 2811 4) Any provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program that 2812 applies to a CAIR NO<sub>x</sub> Ozone Seasonan affected unit (including any 2813 provision applicable to the CAIR designated representative of a CAIR 2814 NO<sub>x</sub> Ozone Seasonan affected unit) willshall also apply to the owner and 2815 operator of thesuch CAIR NO<sub>x</sub> Ozone Seasonaffected unit. Except with 2816 regard to the requirements applicable to affected units with a common stack under 40 CFR 96, subpart HHHH, the owner, the operator, and the 2817 2818 CAIR designated representative or alternate designated representative of 2819 an affected unit shall not be liable for any violation by any other affected 2820 unit of which they are not an owner or operator or the CAIR designated 2821 representative. 2822 2823 5) The CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Seasonan 2824 affected unit that has excess emissions in any control period mustshall 2825 surrender the allowances as required for deduction pursuant to<del>under</del> 40 2826 CFR \secondarrow-96.354(d)(1). 2827 2828 6) The owner or operator of a CAIR NO<sub>x</sub> Ozone Seasonan affected unit that has excess NO<sub>x</sub> emissions in any control period must<del>shall</del> pay any fine. 2829 2830 penalty, or assessment or comply with any other remedy imposed pursuant 2831 to<del>under</del> the Act and 40 CFR \( \frac{8}{9} \) 96.354(d)(2). 2832 2833 Effect on other authorities. No provision of the CAIR NO<sub>x</sub> Ozone Season g) Trading Program, a CAIR-NO<sub>\*</sub>-Ozone Season permit application, a CAIR-NO<sub>\*</sub> 2834 2835 Ozone Season permit, or a retired unit exemption pursuant tounder 40 CFR-96.305 will<del>shall</del> be construed as exempting or excluding the owner and operator 2836 2837 and, to the extent applicable, the CAIR designated representative of a CAIR NO<sub>x</sub> 2838 Ozone Season an affected source or a CAIR NO<sub>x</sub> Ozone Seasonan affected unit, 2839 from compliance with any other regulation promulgated pursuant to<del>under</del> the 2840 CAA, the Act, any State regulation or permit, or a federally enforceable permit.

Section 225.515 Appeal Procedures

2841 2842

2843

2844 The appeal procedures for decisions of USEPA pursuant to<del>under</del> the CAIR NO<sub>x</sub> Ozone Season 2845 Trading Program are set forth in 40 CFR -78, as incorporated by reference in Section 225.140 ef 2846 this Part. 2847 2848 Section 225.520 **Permit Requirements** 2849 2850 a) Permit requirements: 2851 2852 1) The owner or operator of each source with a CAIR NO<sub>x</sub> 2853 Ozone Seasonan affected unit is required to submit: 2854 2855 -Aa complete permit application addressing all applicable CAIR 2856 NO<sub>x</sub> Ozone Season Trading Program requirements for a permit 2857 meeting the requirements of this Section 225.520, applicable to 2858 each CAIR NO<sub>x</sub> Ozone Seasonaffected unit at the source. Each 2859 CAIR NO<sub>x</sub> Ozone Season permit mustshall contain elements required for a complete CAIR NO<sub>\*</sub> Ozone Season permit 2860 application pursuant to<del>under</del> subsection (b)(2) of this Section. 2861 2862 2863 Any supplemental information that the Agency determines 2864 necessary in order to review a CAIR permit application and issue 2865 any CAIR permit. 2866 2867 2) Each CAIR NO<sub>\*</sub> Ozone Season permit will be issued pursuant to Section 2868 39 of 39.5 of the Act and will<del>shall</del> contain federally enforceable conditions addressing all applicable CAIR NO<sub>x</sub> Ozone Season Trading 2869 2870 Program requirements and willshall be a complete and segregable portion 2871 of the source's entire permit pursuant to<del>under</del> subsection (a)(1) of this 2872 Section. 2873 2874 3) No CAIR NO<sub>\*</sub> Ozone Season permit mayshall be issued, and no CAIR NO<sub>x</sub> Ozone Season compliance account mayshall be established for a 2875 2876 CAIR NO<sub>x</sub> Ozone Seasonan affected source, until the Agency and USEPA 2877 have received a complete certificate of representation for a CAIR designated representative pursuant tounder 40 CFR -96, subpart BBBB, 2878 2879 for the CAIR NO<sub>x</sub> Ozone Seasonaffected source and the CAIR NO<sub>x</sub> Ozone Seasonaffected unit at the source. 2880 2881 2882 4) For all CAIR NO<sub>x</sub> Ozone Seasonaffected units that commenced operation 2883 before July 1, 2007, the owner or operator owner or operator of thesuch 2884 unit must submit a CAIR NO<sub>\*</sub> Ozone Season permit application meeting 2885 the requirements of this Section 225.520 on or before July 1, 2007. 2886 2887 For all affected units and that commence operation on or after July 1, 5) 2888 20078, the owner or operator owner or operator of these such units must submit applications for construction and operating permits pursuant to the 2889

requirements of Sections 39 and 39.5 of the Act, as applicable, and 35 Ill. 2890 2891 Adm. Code 201, and the such applications must specify that they are 2892 applying for CAIR NO. Ozone Season permits, and must address the 2893 CAIR NO<sub>\*</sub> Ozone Season permit application requirements of this Section 2894 225.520. 2895 2896 b) Permit applications: 2897 2898 Duty to apply. The owner or operator owner or operator of any source 1) 2899 with one or more CAIR NO<sub>x</sub> Ozone Season affected units mustshall 2900 submit to the Agency a CAIR NO<sub>\*</sub> Ozone Season permit application for 2901 the source covering each CAIR NO<sub>x</sub> Ozone Seasonaffected unit pursuant tounder subsection (b)(2) of this Section by the applicable deadline in 2902 subsection (a)(4) or (a)(5) of this Section. The owner or operator of any 2903 2904 source with one or more CAIR NO<sub>x</sub> Ozone Seasonaffeeted units mustshall 2905 reapply for a CAIR NO<sub>x</sub> Ozone Season permit for the source as required 2906 by this Subpart, 35 Ill. Adm. Code 201, and, as applicable, Sections 39 2907 and 39.5 of the Act. 2908 2909 2) Information requirements for CAIR-NO<sub>\*</sub>-Ozone Season permit 2910 applications. A complete CAIR NO<sub>x</sub> Ozone Season permit application 2911 mustshall include the following elements concerning the source for which the application is submitted: 2912 2913 2914 A) Identification of the source, including plant name. The ORIS 2915 (Office of Regulatory Information Systems) or facility code 2916 assigned to the source by the Energy Information Administration 2917 mustshall also be included, if applicable: 2918 2919 B) Identification of each CAIR NO<sub>x</sub> Ozone Seasonaffected unit at the 2920 source; and 2921 2922 The compliance requirements applicable to each CAIR NO<sub>x</sub> Ozone C) 2923 Seasonaffected unit as set forth in Section 225.510-of this Subpart. 2924 2925 3) An application for a CAIR NO. Ozone Season permit willshall be treated 2926 as a modification of the CAIR NO<sub>x</sub> Ozone Seasonaffected source's 2927 existing federally enforceable permit, if such a permit has been issued for 2928 that source, and will<del>shall</del> be subject to the same procedural requirements. 2929 When the Agency issues a CAIR NO<sub>x</sub> Ozone Season permit pursuant to 2930 the requirements of this Section 225.520, it willshall be incorporated into 2931 and become part of that source's existing federally enforceable permit. 2932 2933 Permit content. Each CAIR permit is deemed to incorporate automatically the definitions and terms pursuant to Section 225.130120 and, upon recordation of 2934

USEPA under 40 CFR 96, Subparts FFFF and GGGG as incorporated by

2935

2936 reference in Section 225.140, every allocation, transfer, or deduction of a CAIR
2937 NO<sub>x</sub> Ozone Season allowance to or from the compliance account of the CAIR
2938 NO<sub>x</sub> Ozone Season source covered by the permit.

Section 225.525 Ozone Season Trading Budget

The CAIR NO<sub>x</sub> Ozone Season Trading budget available for allowance allocations for each control period willshall be determined as follows:

- a) The total base CAIR NO<sub>x</sub> Ozone Season Trading budget is 30,701 tons per control period for the years 2009 through 2014, subject to a reduction for two setasides, the NUSA and the CASA. Five percent of the budget willshall be allocated to the NUSA and 25 percent willshall be allocated to the CASA, resulting in a CAIR NO<sub>x</sub> Ozone Season Trading budget available for allocation of 21,491 tons per control period pursuant to Section 225.540-of this Subpart. The requirements of the NUSA are set forth in Section 225.545-of this Subpart, and the requirements of the CASA are set forth in Sections 225.555 through 225.570 of this Subpart.
- b) The total base CAIR NO<sub>x</sub> Ozone Season Trading budget is 28,981 tons per control period for the year 2015 and thereafter, subject to a reduction for two setasides, the NUSA and the CASA. Five percent of the budget willshall be allocated to the NUSA and 25 percent willshall be allocated to the CASA, resulting, in a CAIR NO<sub>x</sub> Ozone Season Trading budget available for allocation of 20,287 tons per control period pursuant to Section 225.540-of this Subpart.
- c) If USEPA adjusts the total base CAIR NO<sub>x</sub> Ozone Season Trading budget for any reason, the Agency <u>willshall</u> adjust the base CAIR NO<sub>x</sub> Ozone Season Trading budget CAIR NO<sub>x</sub> Ozone Season Trading budget available for allocation, accordingly.

#### Section 225.530 Timing for Ozone Season Allocations

- a) No later than April 30By July 31, 2007October 31, 2006, the Agency willshall submit to USEPA the CAIR NO<sub>x</sub> Ozone Season allowance allocations, in accordance with Sections 225.535 and 225.540-of this Subpart for the 2009, 2010, and 2011 control periods.
- b) By October 31 July 31, 2008 2009, and October July 31 of each year thereafter, the Agency willshall submit to USEPA the CAIR NO<sub>x</sub> Ozone Season allowance allocations in accordance with Sections 225.535 and 225.540 of this Subpart, for the control period fourthree years after the year of the applicable deadline for submission pursuant tounder this Section 225.530. For example, by October on July 31, 2008 2009, the Agency willshall submit to USEPA the allocation for the 2012 control period.

- c) For The Agency willshall allocate allowances from the NUSA to CAIR NO<sub>x</sub>

  Ozone Seasonaffeeted units that commence commercial operation on or after May

  1, 2006, that have not been allocated allowances under Section 225.540 for the applicable or any preceding control period, the Agency will allocate allowances from the NUSA in accordance with Section 225.545. The Agency willshall report these allocations to USEPA by July 31 November 15 ofafter the applicable control period. For example, on July 31, 2009 November 15, 2009, the Agency willshall submit to USEPA the allocations from the NUSA for the 2009 control period.
- d) The Agency <u>willshall</u> 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-of this Subpart. The Agency <u>willshall</u> report these allocations to USEPA by <u>October December</u> 1 of each year. For example, on <u>October 1, 2009 December 1, 2010</u>, the Agency <u>willshall</u> submit to USEPA the allocations from the CASA for the <u>2009 2010</u> control period, based on reductions made in the <u>2008 2009</u> control period.

Section 225.535 Methodology for Calculating Ozone Season Allocations

 The Agency <u>willshall</u> calculate converted gross electrical output <u>(CGO)</u> (CGO), in MWh, for each <u>CAIR NO<sub>x</sub> Ozone Seasonaffected</u> 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's must submit in writing to the Agency by June 1, 2007, a statement that either gross electrical output data or heat input is to be used to calculate converted gross electrical output (CGO). The data shall be used calculate converted gross electrical output pursuant to either subsection (a)(1) or (a)(2) of this Section:
  - 1) Gross electrical output. If the unit has four or five control periods of data, then the gross electrical output (GO) willshall 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<del>shall</del> be the average of those control periods. If the unit does not have gross electrical output for the 2004 and 2005 control periods, the gross electrical output willshall be the gross electrical output from the 2005 control period. If the unit does not have gross electrical output, then heat input shall be used pursuant to subsection (a)(2) of this Section. If a generator is served by two or more units, then the gross electrical output of the generator willshall be attributed to each unit in proportion to the unit's share of the total control period heat input of thesesuch units for the control period. The unit's converted gross electrical output willshall be calculated as follows:
    - A) If the unit is coal-fired:

```
3028
                                       CGO (in MWh) = GO (in\times MWh) \times 1.0;
3029
3030
                                       If the unit is oil-fired:
                                B)
                                       CGO (in MWh) = GO (in\times MWh) \times 0.6; or
3031
3032
3033
                                C)
                                       If the unit is neither coal-fired nor oil-fired:
3034
                                       CGO (in MWh) = GO (in\times MWh) \times 0.4.
3035
3036
                        2)
                                If gross electrical output is not provided to the Agency, hHeat input. (HI)
                                shall be used. If the unit has four or five control periods of data, the
3037
3038
                                average of the unit's three highest control period heat inputs from 2001,
3039
                                2002, 2003, 2004, or 2005 willshall be used. If the unit has heat input
3040
                                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
3041
3042
                                the 2004 and 2005 control periods, the heat input from the 2005 control
                                period will<del>shall</del> be used. The unit's converted gross electrical output
3043
3044
                                willshall be calculated as follows:
3045
3046
                                A)
                                       If the unit is coal-fired:
3047
                                       CGO (in MWh) = HI (in mmBtu) \times 0.0967;
3048
3049
                                B)
                                       If the unit is oil-fired:
3050
                                       CGO (in MWh) = HI (in mmBtu) \times 0.0580; or
3051
3052
                                       If the unit is neither coal-fired nor oil-fired:
                                C)
                                       CGO (in MWh) = HI (in mmBtu) \times 0.0387.
3053
3054
3055
                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
3056
3057
                        output data or heat input data be used to calculate the unit's converted gross
3058
                        electrical output. The unit's converted gross electrical output shall be calculated
3059
                        pursuant to either subsection (b)(1) or (b)(2) of this Section:
3060
3061
                               Gross electrical output. The gross electrical output will be ##the average of
                        1)
                                the unit's two most recent years of control period gross electrical output, if
3062
3063
                                available: otherwise it will be the unit's most recent control period's gross
                                electrical output. If a generator is served by two or more units, the gross
3064
                                electrical output of the generator shall be attributed to each unit in
3065
                                proportion to the unit's share of the total control period heat input of such
3066
3067
                                units for the control period. The unit's converted gross electrical output
                                shallwill be calculated as follows:
3068
3069
3070
                                A) If the unit is coal-fired:
3071
                                       CGO (in MWh) = GO (in\times MWh) \times 1.0;
3072
3073
                                       If the unit is oil-fired:
```

3074 CGO (in MWh) = GO (in $\times$  MWh)  $\times$  0.6; 3075 3076 If the unit is neither coal-fired nor oil-fired: C) CGO (in MWh) = GO (in  $\times$  MWh)  $\times$  0.4. 3077 3078 3079 Heat input. The heat input used will be Tthe average of the unit's two most recent years of control period heat input; otherwise the unit's most 3080 3081 recent control period's heat input, e.g. for the 2012 control period the average of the unit's heat inputs from the 2006 and 2007 control periods. 3082 3083 If the unit does not have heat input from the 2006 and 2007 control 3084 periods, the heat input from the 2007 control period shallmust be used. The unit's converted gross electrical output shallwill be calculated as 3085 follows: 3086 3087 3088 If the unit is coal-fired: CGO (in MWh) = HI (in mmBtu)  $\times$  0.0967; 3089 3090 3091 If the unit is oil-fired: 3092 CGO (in MWh) = HI (in mmBtu)  $\times$  0.0580; or 3093 3094 C) If the unit is neither coal-fired nor oil-fired: 3095 CGO (in MWh) = HI (in mmBtu)  $\times$  0.0387. 3096 3097 For control period 2014<del>2012</del> and thereafter, the unit's gross electrical output 3098 willshall be the average of the unit's two most recent control period's gross 3099 electrical output, if available, otherwise it will be the unit's most recent control 3100 period gross electrical output. If a generator is served by two or more units, the 3101 gross electrical output of the generator willshall be attributed to each unit in proportion to the unit's share of the total control period heat input of thesesuch 3102 3103 units for the control period. The unit's converted gross electrical output will-shall 3104 be calculated as follows: 3105 3106 1) If the unit is coal-fired: 3107 CGO (in MWh) =  $GO \times 1.0$ ; 3108 3109 2) If the unit is oil-fired: 3110 CGO (in MWh) =  $GO \times 0.6$ ; or 3111 3112 3) If the unit is neither coal-fired nor oil-fired: 3113 CGO (in MWh) =  $GO \times 0.4$ . 3114 3115 For a unit that is a combustion turbine or boiler and has equipment used to de) produce electricity and useful thermal energy for industrial, commercial, heating, 3116 3117 or cooling purposes through the sequential use of energy, the Agency willshall add the converted gross electrical output calculated for electricity pursuant to 3118 3119 subsections (a), or (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 willshall determine the converted useful thermal energy by using the average of the unit's control period useful thermal energy for the prior two control periods, if available, otherwise the unit's control period useful thermal output for the prior year willshall be used. The converted useful thermal energy will<del>shall</del> be determined using the following equations: 1) If the unit is coal-fired: CUTE (in MWh) = UTE (in mmBtu)  $\times$  0.2930; 2) If the unit is oil-fired: CUTE (in MWh) = UTE (in mmBtu)  $\times$  0.1758; or 3) If the unit is neither coal-fired nor oil-fired: CUTE (in MWh) = UTE (in mmBtu)  $\times$  0.1172. The CAIR NO<sub>x</sub> Ozone Seasonaffected unit's converted gross electrical output and ed) converted useful thermal energy in subsections (a)(1), (b)(1), and (c), and (d) of this Section for each control period willshall be based on the best available data reported or available to the Agency for the CAIR NO<sub>x</sub> Ozone Seasonaffeeted unit pursuant to the provisions of Section 225.550-of this Subpart. The CAIR NO<sub>x</sub> Ozone Seasonaffected unit's heat input in subsections (a)(2) and f<del>-e</del>)

#### Section 225.540 Ozone Season Allocations

this Part.

a) For the 2009 control period, and each control period thereafter, the Agency willshall allocate CAIR NO<sub>x</sub> Ozone Season allowances to all CAIR NO<sub>x</sub> Ozone Seasonaffeeted units in Illinois for which the Agency has calculated the total converted gross electrical output, including converted useful thermal energy, if any, as determined inpursuant to Section 225.535-of this Subpart, a total amount of CAIR NO<sub>x</sub> Ozone Season allowances equal to tons of NO<sub>x</sub> emissions in the CAIR NO<sub>x</sub> Ozone Season Trading budget available for allocation as determined in Section 225.525-of this Subpart and as adjusted to add allowances not allocated pursuant to this Section 225.540(b) in the pervious year's allocation.-of this Subpart.

(b)(2) of this Section for each control period will<del>shall</del> be determined in

accordance with 40 CFR 75, as incorporated by reference in Section 225.140-of

b) The Agency willshall allocate CAIR NO<sub>x</sub> Ozone Season allowances to each CAIR NO<sub>x</sub> Ozone Seasonaffected unit on a pro-rata basis using the unit's total converted gross electrical output calculated pursuant to Section 225.535, to the extent whole allowances may be allocated. of this Subpart. The Agency will retain any additional allowances beyond this allocation of whole allowances for allocation pursuant to 225.540(a) in the next control periods. If there are

insufficient allowances to allocate whole allowances pro-rata, these such unallocated allowances will shall be retained by the Agency and will shall be available for allocation in later control periods.

Section 225.545 New Unit Set-Aside (NUSA)

For the 2009 control period and each control period thereafter, the Agency <u>willshall</u> allocate CAIR NO<sub>x</sub> Ozone Season allowances from the NUSA to <u>CAIR NO<sub>x</sub> Ozone Seasonaffected</u> units that commenced commercial operation on or after May 1, 2006, and do not yet have an allocation for the particular control period pursuant to Section 225.540-of this Subpart, in accordance with the following procedures:

- a) Beginning with the 2009 control period and each control period thereafter, the Agency willshall establish a separate NUSA for each control period. Each new unit set-aside willshall be allocated CAIR NO<sub>x</sub> Ozone Season allowances equal to 5 percent of the amount of tons of NO<sub>x</sub> emissions in the base CAIR NO<sub>x</sub> Ozone Season Trading budget in Section 225.525-of this Subpart.
- b) The CAIR designated representative of such a new CAIR NO<sub>x</sub> Ozone Seasonan affected unit may submit to the Agency a request, in a format specified by the Agency, to be allocated CAIR NO<sub>x</sub> Ozone Season allowances from the NUSA starting with the first control period after the control period in which the new unit commences commercial operation and until the first control period for which the unit may use CAIR NO<sub>x</sub> Ozone Season allowances allocated to the unit pursuant tounder Section 225.540-of this Subpart. 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 October 15 after the control period for which allowances from the NUSA are being requested.
- c) In a NUSA allowance allocation request <u>pursuant tounder</u> subsection (b) of this Section, the CAIR designated representative must <u>provide include</u> in its request <u>must provide in its request the</u> information for <u>the</u> gross electrical output and useful thermal energy, if any, for the new <u>CAIR NO<sub>x</sub> Ozone Seasonaffected</u> unit for that control period.
- d) The Agency <u>willshall</u> allocate allowances from the NUSA to a new <u>CAIR NO<sub>x</sub></u>

  <u>Ozone Seasonaffected</u> unit using the following procedures:
  - 1) For each new <u>CAIR NO<sub>x</sub> Ozone Seasonaffected</u> unit that has operated during at least one control period, the unit's gross electrical output for the most recent control period, <u>willshall</u> 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 <u>willshall</u> be attributed to each unit in proportion to the unit's share of the total control period heat input of <u>thesesuch</u> units for the control period. The new unit's converted gross electrical output <u>willshall</u> be calculated as follows:

3212 3213 A) If the unit is coal-fired: 3214 CGO (in MWh) =  $GO \times 1.0$ ; 3215 3216 B) If the unit is oil-fired: 3217 CGO (in MWh) = GO  $\times$  0.6; or 3218 3219 C) If the unit is neither coal-fired nor oil-fired: 3220 CGO (in MWh) =  $GO \times 0.4$ . 3221 3222 2) If the unit is a combustion turbine or boiler and has equipment used to 3223 produce electricity and useful thermal energy for industrial, commercial, 3224 heating, or cooling purposes through the sequential use of energy, the Agency will<del>shall</del> add the converted gross electrical output calculated for 3225 3226 electricity pursuant to subsection (de)(1) of this Section to the converted 3227 useful thermal energy to determine the total converted gross electrical 3228 output for the unit. The Agency willshall determine the converted useful 3229 thermal energy using the unit's useful thermal energy for the most recent control period. The converted useful thermal energy willshall be 3230 determined using the following equations: 3231 3232 3233 A) If the unit is coal-fired: CUTE (in MWh) = UTE (in mmBtu)  $\times$  0.2930; 3234 3235 3236 B) If the unit is oil-fired: 3237 CUTE (in MWh) = UTE (in mmBtu)  $\times$  0.1758; or 3238 3239 C) If the unit is neither coal-fired nor oil-fired: CUTE (in MWh) = UTE (in mmBtu)  $\times$  0.1172. 3240 3241 3242 3) The gross electrical output and useful thermal energy in subsections (d)(1) and (d)(2) of this Section for the control period in each year willshall be 3243 3244 based on the best available data reported or available to the Agency for the 3245 CAIR NO<sub>x</sub> Ozone Seasonaffected unit pursuant to the provisions of 3246 Section 225.550-of this Subpart. 3247 3248 The Agency willshall determine a unit's un-prorated allocation  $(UA_{\nu})$ 4) 3249 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 3250 3251 this Section, converted to approximate NO<sub>x</sub> tons (the unit's un-prorated 3252 allocation), as follows: 3253  $UA_{y} = \frac{TCGO_{y} \times (1.0lbs/MWh)}{2000lbs/ton}$ 3254 3255

3256			Where:		
3257					
3258			$UA_y$	=	un-prorated allocation to a new <u>CAIR NO<sub>x</sub></u>
3259					Ozone Seasonaffected unit.
3260			$TCGO_y$	=	total converted gross electrical output for a
3261					new CAIR NO <sub>x</sub> Ozone Seasonaffected unit.
3262					<del></del>
3263	5)	The A	lgency <u>will</u> sha	H alloca	te CAIR NO <sub>x</sub> Ozone Season allowances from
3264		the N	USA to new <u>C</u>	AIR NO	<u>x Ozone Seasonaffected</u> units as follows:
3265					
3266		A)			control period for which CAIR NO <sub>x</sub> Ozone
3267					re requested has a number of allowances
3268			-	_	to the total un-prorated allocations for all new
3269					g allowances, the Agency willshall allocate the
3270					s using the un-prorated allocation determined
3271 3272			-	-	toin subsection (d)(4) of this Section, to the owances may be allocated. For any additional
3272			•		nis allocation of whole allowances, the
3274					e additional allowances in the NUSA for
3275					o Section 225.545 in later control periods. If
3276					allowances to allocate whole allowances,
3277					wances shall be retained by the Agency and
3278					allocation in a later control period.
3279					-
3280		B)	If the NUSA	for the	control period for which the allowances are
3281					per of CAIR NO <sub>x</sub> Ozone Season allowances
3282					-prorated allocation to all new <u>CAIR NO<sub>x</sub></u>
3283					ed units requesting allocations, the Agency
3284					available allowances for new <u>CAIR NO<sub>x</sub></u>
3285					d units on a pro-rata basis, using the un-
3286 3287					etermined for that unit pursuant to subsection to the extent that whole allowances may be
3288					ditional allowances beyond this allocation of
3289					e Agency will retain the additional allowances
3290					cation pursuant to Section 225.545 in later
3291					here are insufficient allowances to allocate
3292					esuch unallocated allowances willshall be
3293					cy and willshall be available for allocation in
3294			a later contro		
3295					
3296		<del>C)</del>			output or useful thermal energy reported to
3297			the Agency p	<del>oursuant</del>	to subsection (d) of this Section is later
3298					ater than the unit's actual gross electrical
3299					mal energy for the applicable control period,
3300					reduce the unit's allocation from the NUSA
3301			tor the curren	<del>nt contro</del>	ol period to account for the excess allowances

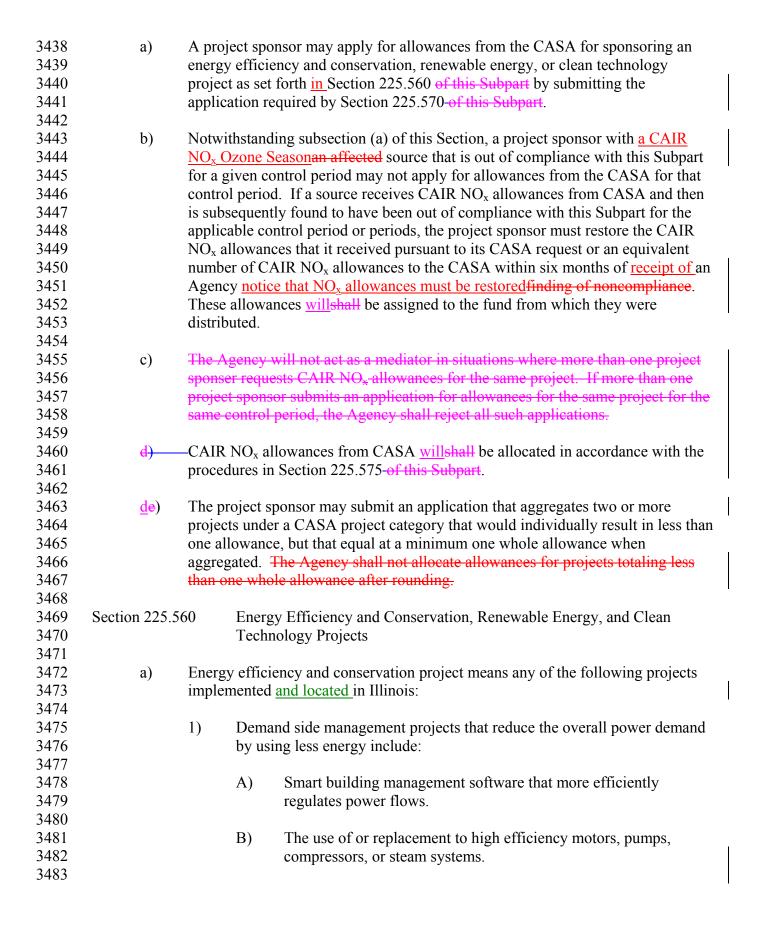
allocated in the prior control period or periods. 3302 3303 3304 The Agency willshall review each NUSA allowance allocation request pursuant e) 3305 tounder subsection (b) of this Section. The Agency willshall accept a NUSA allowance allocation request only if the request meets, or is adjusted by the 3306 3307 Agency as necessary to meet, the requirements of this Section 225.545. 3308 3309 f) By June 1 of November 8 after the applicable control period, the Agency willshall 3310 notify each CAIR designated representative that submitted a NUSA allowance 3311 request of the amount of CAIR NO<sub>x</sub> Ozone Season allowances from the NUSA, if 3312 any, allocated for the control period to the new unit covered by the request. 3313 3314 The Agency willshall allocate CAIR NO<sub>x</sub> Ozone Season allowances to new units g) 3315 from the NUSA no later than July 31 of November 15 after the applicable control 3316 period. 3317 3318 h) After a new CAIR NO<sub>\*X</sub> Ozone Seasonaffected unit has operated in one control 3319 period, it becomes an existing unit for the purposes of Section 225.540 of this 3320 Subpart only, and the Agency willshall allocate CAIR NO<sub>x</sub> Ozone Season 3321 allowances for that unit, for the control period commencing four years in the 3322 future pursuant to Section 225.540 of this Subpart. The new CAIR NO<sub>x</sub> Ozone 3323 Seasonaffected unit willshall continue to receive CAIR NO<sub>x</sub> Ozone Season 3324 allowances from the NUSA according to this Section until the unit is eligible to 3325 use the CAIR NO<sub>x</sub> Ozone Season allowances allocated to the unit pursuant to 3326 Section 225.540 of this Subpart. 3327 3328 i) If, after the completion of the procedures in subsection (c) of this Section for a 3329 control period any unallocated CAIR NO<sub>x</sub> Ozone Season allowances remain in 3330 the NUSA for the control period, the Agency willshall, at a minimum, accrue 3331 those CAIR NO<sub>x</sub> Ozone Season allowances for future control period allocations to 3332 new CAIR NO<sub>\*X</sub> Ozone Seasonaffected units. The Agency may from time to time elect to retire CAIR NO<sub>x</sub> Ozone Season allowances in the NUSA that are in 3333 3334 excess of 7,245 for the purposes of continued progress toward attainment and 3335 maintenance of National Ambient Air Quality Standards pursuant to the CAA. 3336 Section 225.550 3337 Monitoring, Recordkeeping and Reporting Requirements for Gross 3338 Electrical Output and Useful Thermal Energy 3339 3340 a) By January 1, 2008 2007, or by the date of commercial operation, 3341 whichever is later, the owner or operator of a CAIR NO<sub>x</sub> Ozone Seasonan 3342 affected -unit mustshall install, calibrate, maintain, and operate a system for 3343 accurately measuring gross electrical output that is consistent with the 3344 requirements of either 40 CFR 60 or 75 wattmeter; and mustshall measure gross 3345 electrical output in MW-hrs using such a system at all times<del>megawatt-hours on a</del> 3346 continuous basis; and mustshall record the output of the measurement 3347 system wattmeter. If a generator is served by two or more units, the information

to determine each unit's heat input for that control period <u>mustshall</u> also be recorded, so as to allow each unit's share of gross electrical output to be determined. If heat input data is used, the owner or operator <u>mustshall</u> comply with the applicable provisions 40 CFR 75, as incorporated by reference in Section 225.140-of this Part.

- b) For a CAIR NO<sub>x</sub> Ozone Seasonan affected unit that is a cogeneration unit: by 60 days after the effective date of this rule, January 1, 2007, or by the date the CAIR NO<sub>x</sub> Ozone Seasonaffected unit commences to produce useful thermal energy, whichever is later, the owner or operator of a CAIR NO<sub>x</sub> Ozone Season<del>an</del> affected unit with cogeneration capabilities mustshall 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<sub>x</sub> Ozone Seasonan affected unit that produces useful thermal energy but uses an energy transfer medium other than steam, e.g., hot water, or glycol, mustshall 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<sub>x</sub> Ozone Seasonaffeeted unit ceases to produce useful thermal energy, the owner or operator may cease operation of these meters, provided that operation of such meters mustshall be resumed if the CAIR NO<sub>x</sub> Ozone Seasonaffected unit resumes production of useful thermal energy.
- c) By September 30, 2006, tThe owner or operator of a CAIR NO<sub>x</sub> Ozone Seasonan affected unit must shall either report gross electrical output data to the Agency or comply with the applicable provisions for providing heat input data to USEPA as follows:
  - 1) By June 1, 2007, -the gross electrical output for control periods 2001, 2002, 2003, 2004, and 2005, if available, and, the unit's useful thermal energy data, if applicable. If gross electric output is not available, heat input shall be used for control periods 2001, 2002, 2003, 2004, and 2005 that gross electrical output is not available. 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 mustshall also be submitted. If heat input data is used, the owner or operator mustshall comply with the applicable provisions 40 CFR 75, as incorporated by reference in Section 225.140-of this Part.
  - 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

3393 operator must comply with t-he applicable provisions of 40 CFR 75, as 3394 incorporated by reference in Section 225.140. 3395 3396 Beginning with calendar year 20082007, the CAIR designated representative of 3397 d) 3398 the CAIR NO<sub>x</sub> Ozone Seasonaffected unit mustshall submit to the Agency 3399 quarterly, by no later than January 31, April 30, July 31, and October 31, and 3400 January 31 of each year, information for the CAIR NO<sub>x</sub> Ozone Seasonaffected 3401 unit's gross electrical output, on a monthly basis for the prior quarter, and, if 3402 applicable, the unit's useful thermal energy for each month. 3403 3404 e) The owner or operator of a CAIR NO<sub>x</sub> Ozone Seasonan affected unit mustshall 3405 maintain on-site the monitoring plan detailing the monitoring system, 3406 maintenance of the monitoring system, including quality assurance activities-3407 pursuant to the requirements of 40 CFR 60 or<del>and</del> 75, as applicable, including the 3408 applicable provisions for the measurement of gross electrical output for the CAIR 3409 NO<sub>x</sub> Ozone Season trading program and, if applicable, for new units. The 3410 monitoring plan must include, but is not limited to: 3411 3412 A description of the system to be used for the measurement of gross 3413 electrical output pursuant to Section 225.5450(a), including a list of any 3414 data logging devices, solid-state kW meters, rotating kW meters, 3415 electromechanical kW meters, current transformers, transducers, potential 3416 transformers, pressure taps, flow-venture venturi, orifice plates, flow 3417 nozzles, vortex meters, turbine meters, pressure transmitters, differential 3418 pressure transmitters, termperature transmitters, thermocouples, and 3419 resistance temperature detectors and any other equipment or methods used 3420 to accurately measure gross electrical output. 3421 3422 A certification statement by the CAIR designated representative that all 3423 components of the gross electrical output system have been tested to be 3424 accurate within three percent and that the gross electrical output system is 3425 accurate to within ten percent. 3426 3427 f) The owner or operator of a CAIR NO<sub>x</sub> Ozone Seasonan affected unit mustshall retain records for at least 5 years from the date the record is created or the data 3428 collected in subsections (a) and (b) of this Section, and the reports submitted to 3429 3430 the Agency and USEPA in accordance with subsections (c) and (d) of this Section. The owner or operator of a CAIR NO<sub>x</sub> Ozone Seasonan affected unit 3431 3432 mustshall retain the monitoring plan required in subsection (e) of this Section for 3433 at least five years from the date that it is replaced by a new or revised monitoring 3434 plan. 3435 3436 Section 225.555 Clean Air Set-Aside (CASA)

3437



3484			<u>C)</u>	Lighting retrofits.
3485				
3486		2)	Energy	efficient new building construction projects include:
3487				
3488			A)	ENERGY STAR qualified new home projects.
3489			,	1 1
3490			B)	Measures to reduce or conserve energy consumption beyond the
3491			,	requirements of the Illinois Energy Conservation Code for
3492				Commercial Buildings (20 ILCS 687/6-3).
3493				8 ( 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
3494			C)	New residential construction projects that qualify for Energy
3495			- /	Efficient Tax Incentives pursuant tounder the Energy Policy Act of
3496				2005, 42 U.S.C. §15801 (2005).
3497				2000, 12 0.0.0. (2000).
3498		3)	Supply	r-side energy efficiency projects include projects implemented to
3499		<i>- ,</i>		we the efficiency in electricity generation by coal-fired power plants,
3500				e efficiency of electrical transmission and distribution systems.
3501			001107 0110	
3502		4)	Highly	efficient power generation project, such as, but not limited to,
3503		.,		ned cycle projects, combined heat and power, and microturbines.
3504				considered a highly efficient power generation project pursuant
3505				this subsection (a)(4), a project must meet the thresholds and
3506				listed below:
3507			<u></u>	
3508			A)	For combined heat and power projects generating both electricity
3509			)	and useful thermal energy for space, water, or industrial process
3510				heat, a rated-energy efficiency of at least 60 percent and is not a
3511				CAIR NO <sub>x</sub> Ozone Season unit.
3512				<u>Ormerox</u> <u>Ozone Season ann</u> .
3513			B)	For combined cycle projects rated at greater than 0.50 MW, a
3514			2)	rated-energy efficiency of at least 50 percent.
3515				ration energy errorency of at reast 20 percent.
3516			C)	For microturbine projects rated at or below 0.50 MW and all other
3517			<i>-</i> )	projects rated-energy efficiency of at least 40 percent.
3518				projecto ration energy enterency or at react to percent
3519	b)	Renew	able en	ergy unit means any of the following projects implemented and
3520	0)		l in Illin	<del>-</del>
3521		100000		
3522		1)	Zero-e	mission electric generating units, including wind, solar (thermal or
3523		-)		oltaic), and hydropower projects. Eligible hydropower plants are
3524			-	ted to new generators, that are not replacements of existing
3525				tors, that commence operation on or after January 1, 2006, and do
3526			_	volve the significant expansion of an existing dam or the
3527				action of a new dam.
3528			Constit	action of a new dum.
3529		2)	Renew	rable energy units are those units that generate electricity using more
, <u>, , , , , , , , , , , , , , , , , , </u>		<i>-,</i>	TCTTCW	acte chergy aims are mose aims that generate electricity asing more

than 50 percent of the heat input, on an annual basis, from dedicated crops grown for energy production or the capture systems for methane gas from landfills, water treatment plants or sewage treatment plants, and organic waste biomass, and other similar sources of non-fossil fuel energy. Renewable energy projects do not include energy from incineration by burning or heating of waste wood, tires, garbage, general household, institutional lunchroom or office waste, landscape waste, or construction or demolition debris.

- c) Clean technology project for reducing emissions from producing electricity and useful thermal energy means any of the following projects implemented <u>and</u> located in Illinois:
  - Air pollution control equipment upgrades for control of NO<sub>x</sub> emissions at existing coal-fired electric generating unitEGUs, 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<sub>x</sub> burners, overfired air techniques, gas reburning techniques, flue gas conditioning techniques for the control of NO<sub>x</sub> emissions, projects involving upgrades or replacement of electrostatic precipitators, or addition of control equipment, such as activated carbon injection, or other sorbent injectionspecifically used for control of mercury. For this purpose, a unit willshall 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) <u>In addition to those projects excluded in subsections (a) through (c) of this Section, the following projects are also not e</u>Energy efficiency and conservation, renewable energy, or clean technology projects <u>listed in subsection (a) through (c) of this Section shall not include:</u>
  - 1) <u>N</u>nuclear power projects.;
  - <u>P</u>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 <u>F</u>.

3576 3577		<u>3)</u>	<u>P</u> projects used to meet the requirements of a court order or consent decree except that allowances may be allocated for:	3,
3578			<u> </u>	
3579			A) Emission rates or limits achieved that are lower than what is	
3580			required to meet the emission rates or limits for $SO_2$ or $NO_x$ or for	r
3581			installing a baghouse as provided for in a court order or consent	=
3582			decree entered into before May 30, 2006.	
3583			decree effected into before way 30, 2000.	
3584			B) Projects used to meet the requirements of a court order or consent	
3585			, ·	
			decree entered into on or after May 30, 2006, if the court order or	
3586			consent decree does not specifically preclude such allocations.	
3587		4)	A C 1 (1E ' (1D ' (CED) CACA II 1 1 1 1	
3588		<u>4)</u>	Aa Supplemental Environmental Project (SEP). CASA allowances shall	
3589			not be allocated to such projects.	
3590				ĺ
3591	e)		cations for projects <u>implemented and located in Illinois that</u> that are not	
3592		-	ically listed in subsections (a) through (c) of this Section, and that are not	1
3593		-	ically excluded by <u>definition in subsections (a) through (c) of this Section c</u>	<u>)r</u>
3594			ecific exclusion in subsection (d) of this Section, may be submitted to the	
3595		Agenc	cy. The Such application must shall designate which category or categories	
3596		from t	hose listed in subsections (a)(1) through (c)(2)(B) of this Section best fits	
3597		the pro	oposed project and the applicable formula <u>pursuant tounder</u> Section	
3598		225.56	65(b) of this Section to calculate the number of allowances that it is	
3599			sting. The Agency willshall determine whether the application is approvable	e
3600			on a sufficient demonstration by the project sponsor that the project is a	Ų.
3601			ype of energy efficiency, renewable energy, or clean technology project,	
3602		-	r in its effects as the projects specifically listed in subsection (a) through (c	)
3603			s Section.	,
3604		01 11110		
3605	f)	Farly :	adopter projects include projects that meet the criteria for any energy	
3606	1)		ency and conservation, renewable energy, or clean technology projects listed	А
3607			sections (a)-, (b), (c), and (e) of this Section and commence construction	u 
3608			en July 1, 2006, and December 31, 2012.	l
3609		Detwee	en July 1, 2000, and December 31, 2012.	
	Section 225 54	<i>c 5</i>	CASA Allowances	
3610	Section 225.56	03	CASA Allowances	
3611	`	TI C	ATRINO II CAGAGA CAGAGA I A I I I II III	ĺ
3612	a)		AIR NO <sub>x</sub> allowances for the CASA for each control period <u>willshall</u> be	
3613		assign	ed to the following categories of projects:	
3614			~, · · · · · · · · · · · · · · · · · · ·	
3615			Phase I Phase II	
3616			(2009-2014) (2015 and	
3617			thereafter)	
3618				
3619		1)	Energy Efficiency and Conservation/ 3684 3479	
3620			Renewable Energy	
3621				

3622 3623		2)	Air Poll Upgrade	ution Control es	l Equipment	1535	1448
3624 3625		3)	Clean C	oal Technolo	gy Projects	1842	1738
3626 3627		4)	Early A	dontars		614	580
3628		4)	Larry A	dopters		014	360
3629	b)	The fo	ollowing f	formulas mus	tshall be used to d	etermine the nun	nber of CASA
3630	0)		_		eated to a project p		
3631		unowe	inces inai	may be unoc	acea to a project p	er control period	•
3632		1)	For an e	nergy efficie	ncy and conservati	ion project pursu	ant to Sections
3633		-)			h (a)( <u>4)(A)</u> 3) of th		
3634							megawatt hours of
3635					ot consumed durin	_	_
3636				ng formula:		O I	
3637				S			
3638			A =	= (MWł	$n_c$ ) × (1.5 lb/MWh)	) / 2000 lb	
3639				(		,,	
3640			7	Where:			
3641							
3642			1	<b>A</b> =	The number of a	llowances for a p	particular project.
3643				$MWh_c =$	The number of m	-	2 2
3644				v		_	control period by a
3645					project.		1 3
3646					1 3		
3647		2)	For a ze	ro emission e	electric generating	projects pursuan	t to Section
3648		,			Subpart, the number		
3649				` / ` /	number of megawa		
3650					od and the following		, 0
3651				•			
3652			A =	= (MWł	(2.0  lb/MWh)	) / 2000 lb	
3653					<i>y</i> , ,		
3654			7	Where:			
3655							
3656			1	<b>A</b> =	The number of a	llowances for a p	particular project
3657			I	$MWh_g =$	The number of m	negawatt hours o	f electricity
3658				-	generated during	a control period	by a project.
3659							
3660		3)	For a rea	newable ener	gy emission unit p	ursuant to Section	on 225.560(b)(2)-of
3661			this Sub	<del>part</del> , the num	ber of allowances	mustshall be cal	culated using the
3662			number	of megawatt	hours of electricity	y generated durir	ng a control period
3663			and the	following for	mula:		
3664							
2665				(3.633.71	\ (0.5.11./b.63371.)	/ 2000 11	

 $(MWh_g) \times (0.5 lb/MWh) / 2000 lb$ 

3665

3666 3667 A

Where:

3668						i
3669			A	=	The number of -allowances for a particular project.	
3670			MWh	g =	The number of MW hours of electricity generated	
3671					during a control period by a project.	
3672						
3673	4)	For an	air nol	lution c	control equipment upgrade project pursuant to Section	
3674	• )				Subpart, the number of allowances mustshall be	1
3675					emission rate before and after replacement or	J
				_	•	
3676		impro	vement,	, and the	e following formula:	ı
3677						J
3678		A	=	(MWł	$(h_g) \times 0.10 \times (ER_B lb/MWh - ER_A lb/MWh) / 2000 lb$	
3679						
3680			Where	e:		
3681						
3682			A	=	The number of allowances for a particular project.	
3683			MWh	, =	The number of MWhmegawatt hours of electricity	
3684				5	generated during a control period by a project.	ı
3685			$ER_{\scriptscriptstyle B}$	=	Average NO <sub>x</sub> emission rate based on CEMS data	
3686			LICE		from the most recent two control periods prior to	
3687						1
					the replacement or improvement of the control	
3688					equipment in lb/MWh, unless subject to a consent	
3689					decree or court order. For units subject to a consent	
3690					decree or court order, entered into before May 30,	
3691					2006, ER <sub>B</sub> is limited to emission rates or limits that	
3692					are lower than the emission rate or limit required in	
3693					the consent decree or court order. On or after May	
3694					30, 2006, ER <sub>B</sub> is limited to emission rates or limits	
3695					specified in the consent decree or court order. If	
3696					such limit is not expressed in lb/MWh, the limit	
3697					shall be converted into lb/MWh using a heat rate of	
3698					10 mmBtu/1 MW.	
3699			$ER_A$	=	Average NO <sub>x</sub> emission rate for the applicable	ļ
3700			LICA		control period data based on CEMS data in	
3700					lb/MWh.	
3702					10/1 <b>V1 VV 11.</b>	
	<i>5</i> )	A >	E 1. :	- 1- 1 C	C-:4	ı
3703	5)	<u>A)</u>			ficient power generation and <u>clean coal</u>	
3704			techno	ology <del>IG</del>	FCC projects:	
3705						
3706		<u>A)</u>	_	•	other than fluidized bed coal combustion	
3707					ections $225.560(a)(4)(B)$ , $(a)(4)(C)$ and $(c)(2)$	
3708					rt, the number of allowances mustshall be calculated _	
3709					nber of megawatt hours MWh of electricity the	
3710					generates during a control period and	
3711		the fol	llowing		<del></del>	,
3712		3 -				
3713		A	=	(MW/	(1.0  lb/MWh - ER lb/MWh) / 2000  lb	
5/15		11		(141 44 1	$\log f \propto (1.0 \text{ 10/141 WH}) = \text{Lix 10/141 WH} f / 2000 H$	

3714				
3715			Where:	
3716				
3717			A =	The number of allowances for a particular project.
3718			$MWh_g =$	The number of megawatt hours of electricity
3719			IVI VV IIg	generated during a control period by a project.
3720			ER =	Average NO <sub>x</sub> emission rate for the control period
3720			EK –	based on CEMS data in 1b/MWh.
				based on CEMS data in 10/191 will.
3722		D)	E 0 : 1: 1	
3723		<u>B)</u>		bed coal combustion projects pursuant to Section
3724				) of this Subpart, the number of allowances shall be
3725				ing the number of megawatt hours gross MWh of
3726			•	e -project generates during a control period and the
3727			following for	r <u>mula:</u>
3728				
3729		A	= (MW	$(h_g) \times (1.4 \text{ lb/MWh} - \text{ER lb/MWh}) / 2000 \text{ lb}$
3730			•	
3731			Where:	
3732				
3733			A =	The number of allowances for a particular project.
3734		-	$MWh_g =$	The number of megawatt hours gross MWh of
3735			111 11 11 <u>g</u>	electricity generated during a control period by a
3736				project.
3737			ER =	Average NO <sub>x</sub> emission rate for the control period
3738			LK –	based on CEMS data in 1b/MWh.
3739				based off CEIVIS data III 10/1VI W II.
	()	Earla	CASA musicat	that agreement and agreementian hafara Dagambar 21
3740 3741	6)			that commencesed construction before December 31,
				the allowances allocated <u>pursuant tounder</u> subsections
3742				of this Section, a project sponsor may also request
3743				es under the early adopter project category pursuant to
3744		Section	on 225.460(e)	of this Section based on the following formula:
3745				
3746		A	= 1.0 +	$0.10 \times \Sigma A_i$
3747				
3748			Where:	
3749				
3750			A =	The number of allowances for a particular project as
3751				determined in subsections (b)(1) through (b)(5) of
3752				this Section.
3753			$A_i =$	The number of allowances as determined in
3754			•	subsection (b)(1), (b)(2), (b)(3), (b)(4), or (b)(5) of
3755				this Section for a given project.
3756				200000 101 # 51100 project.
3757	Section 225.570	CASA	A Applications	
3758	55000011 225.570	C1 101	1 1ppiications	
2130				

- a) A project sponsor may request allowances if the project commenced construction on or after the dates listed below. The project sponsor may request and be allocated allowances from more than one CASA category for a project, if applicable.
  - 1) Demand side management, energy efficient new construction, and supply side energy efficiency and conservation projects that commenced construction on or after January 1, 2003;
  - 2) Fluidized bed coal combustion projects, <u>highly</u> efficient <u>power generation</u> operations projects, or renewable energy emission units, which commenced construction on or after January 1, 2001; and
  - 3) All other projects on or after July 1, 2006.
- b) Beginning with the 2009 control period and each control period thereafter, a project sponsor may request allowances from the CASA. The application must be submitted to the Agency by May 1 of the control period for which the allowances are being requested.
- c) The allocation <u>willshall</u> 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<sub>x</sub> allocation from the CASA, project sponsors must provide the Agency with the following information:
  - 1) Identification of the project sponsor, including name, address, type of organization, certification that the project sponsor has met the definition of "project sponsor" as set forth in Section 225.130, and name(s) of the principals or corporate officials.
  - 2) The number of the CAIR  $NO_x$  general or compliance account for the project and the name of the associated CAIR account representative.
  - 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 and the supporting calculations. The number of allowances requested willshall be calculated using the applicable formula from Section 225.570(b)-of this Section.
  - 4) Detailed information to support the request for allowances, including the following types of documentation for the measurement and verification of the NO<sub>x</sub> emissions reductions, electricity generated, or electricity conserved using established measurement verification procedures, as applicable. The measurement and verification required <u>willshall</u> depend on the type of project proposed.

3805				
3806		A)	As ap	oplicable, documentation of the project's base and control
3807			perio	d conditions and resultant base and control period energy
3808			data,	using the procedures and methods included in $M\&V$
3809			Guid	elines: Measurement and Verification for Federal Energy
3810			$Proj\epsilon$	ects, incorporated by reference in Section 225.140-of this Part,
3811			or otl	her method approved by the Agency. Examples include:
3812				
3813			i)	Energy consumption and demand profiles;
3814				
3815			ii)	Occupancy type;
3816				
3817			iii)	Density and periods;
3818				
3819			iv)	Space conditions or plant throughput for each operating
3820			,	period and season. (For example, in a building this would
3821				include the light level and color, space temperature,
3822				humidity and ventilation);
3823				,,
3824			v)	Equipment inventory, nameplate data, location, condition;
3825			,	and
3826				
3827			vi)	Equipment operating practices (schedules and set points,
3828				actual temperatures/pressures).
3829				1 /
3830		B)	Emis	sions data, including, if applicable, CEMS data;
3831		,		, 6, 11
3832		C)	Infor	mation for rated–energy efficiency including supporting
3833		,		mentation and calculations; and
3834				,
3835		D)	Elect	ricity, in MWh, generated or conserved for the applicable
3836		,		rol period.
3837				•
3838	5)	Notw	ithstan	ding the requirements of subsections (c)(4) of this Section,
3839	,			for fewer than five allowances may propose other reliable and
3840				nethods of quantification acceptable to the Agency.
3841		11		
3842	6)	Any a	additior	nal information requested by the Agency to determine the
3843	,			of the requested number of allowances, including site
3844				project specifications, supporting calculations, operating
3845				and maintenance procedures.
3846		1		•
3847	7)	The fe	ollowin	ng certification by the responsible official for the project
3848	,			the applicable CAIR account representative for the project:
3849		1		

3850 "I am authorized to make this submission on behalf of the project sponsor 3851 and the holder of the CAIR NO<sub>x</sub> general account or compliance account 3852 for which the submission is made. I certify under penalty of law that I 3853 have personally examined, and am familiar with the statements and information submitted in this application and all its attachments. Based on 3854 3855 my inquiry of those individuals with primary responsibility for obtaining 3856 the information, I certify that the statements and information are to the 3857 best of my knowledge and belief true, accurate, and complete. I am aware 3858 that there are significant penalties for submitting false statements and 3859 information or omitting required statements and information." 3860 3861 d) A project sponsor may request allowances from the CASA for each project a total 3862 number of control periods not to exceed the number of control periods listed 3863 below. After a project has been allocated allowances from CASA, subsequent 3864 requests for the project from the project sponsor mustshall include the information 3865 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 3866 information specified in subsections (c)(5) and (c)(6) as specifically requested by 3867 the Agency. 3868 3869 3870 For energy efficiency and conservation projects (except for efficient 1) 3871 operation and renewable energy projects), for a total of eight control periods. 3872 3873 3874 2) For early adopter projects, for a total of ten control periods. 3875 3876 3) For air pollution control equipment upgrades for a total of 15 control periods. 3877 3878 3879 For renewable energy projects, clean coal technology, and highly efficient 43) 3880 power generation projects, for each year that the project is in operation. 3881 3882 A project sponsor must keep copies of all CASA applications and the e) 3883 documentation used to support the application for at least five years. 3884 3885 Section 225.575 Agency Action on CASA Applications 3886 3887 a) By September October 1, 2009, and each September October 1 thereafter, the Agency will<del>shall</del> determine the total number of allowances that are approvable for 3888 3889 allocation to project sponsors based upon the applications submitted pursuant to 3890 Section 225.570-of this Subpart. 3891 3892 1) The Agency will<del>shall</del> determine the number of CAIR NO<sub>x</sub> allowances that 3893 are approvable based on the formulas and the criteria for such projects. 3894 The Agency will<del>shall</del> notify a project sponsor within 90 days after receipt 3895 of an application if the project is not approvable, the number of

3896 allowances requested is not approvable, or additional information is 3897 needed by the Agency to complete its review of the application. 

- 2) If the total number of CAIR NO<sub>x</sub> allowances requested for approved projects is less than or equal to the number of CAIR NO<sub>x</sub> allowances in the CASA project category, the number of allowances that are approved shall be allocated to each CAIR NO<sub>x</sub> compliance or general account.
- 3) If more CAIR NO<sub>x</sub> allowances are requested than the number of CAIR NO<sub>x</sub> allowances in a given CASA project category, allowances willshall 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<sub>x</sub> allowances willshall be allocated, transferred, or used as whole allowances. The number of whole allowances willshall be determined by rounding down for decimals less than 0.5 and rounding up for decimals of 0.5 or greater.
- b) <u>For control periods 2011 and thereafter, Iif</u> there are, after the completion of the procedures in subsection (a) of this Section for a control period, any CAIR NO<sub>x</sub> allowances not allocated to a CASA project for the control period:
  - The remaining allowances <u>will accrue</u> in each CASA project category <del>will accrue</del> up to twice the number of allowances that are assigned to the project category each control period as set forth in Section 225.565-of this Subpart.
  - 2) For control period 2011 and thereafter, 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 in a project category that are in excess of twice the number assign for the control period as set forth in Section 225.565 of this Subpart shall be redistributed to project categories that have fewer than twice the number of allowances assigned to that project category for the control period.
  - 3) For control period 2011 and thereafter, If any allowances remain after the allocation of allowances pursuant to subsection (b)(2) of this Section the Agency will then distribute pro-rate the remaining shall then reallocate allowances to projects that received fewer allowances than requested and approved on a pro-rate basis, based on the total number of approved allowances for the projectsproject categories that have fewer than twice the number of allowances assigned to the project category. The pro-rate

3941 distribution will be based on the difference between two times the project 3942 category and the number of allowances that remain in the project category. 3943 3944 4) For control period 2011 and thereafter, if after the redistribution of allowances pursuant to subsection (b)(2) any allowances remain, these 3945 3946 allowances shall be reassigned to project categories that have fewer than 3947 twice the number of allowances annually assigned to that project category 3948 as set forth in Section 225.565 of this Subpart, after the allocation in subsection (b)(3) of this Section. 3949 3950 3951 The Agency shall repeat the process of allocating allowances to CASA <del>5)</del> 3952 projects that received fewer allowances than requested and approved, and 3953 to reassigning allowances to project categories as set forth in subsections 3954 (b)(2), (b)(3), and (b)(4) of this Section, until no allowances remain to be 3955 reassigned between project categories and the approved allowance 3956 requests have been filled. If allowances still remain undistributed after the 3957 allocations and distributions in the above subsections are 3958 completedunallocated, the Agency may elect to retire any CAIR NO<sub>x</sub> 3959 allowances that have not been distributed to any CASA category, remain 3960 after all approved requests for allowances have been met and each project 3961 category has accrued twice the number of allowances assigned for that 3962 project category to continue progress toward attainment or maintenance of the National Ambient Air Quality Standards pursuant to the CAA. 3963

ELECTRONIC FILING,	RECEIVED, C	CLERK'S OFFIC	E, JANUARY 5	, 2007
	* * * * * pc	#5 * * * * *		

STATE OF ILLINOIS	)	
	)	SS
COUNTY OF SANGAMON	)	
	)	

#### **CERTIFICATE OF SERVICE**

I, the undersigned, an attorney, state that I have served electronically the attached

#### POST-HEARING COMMENTS OF THE ILLINOIS ENVIRONMENTAL

PROTECTION AGENCY upon the following person:

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

and mailing it by first-class mail from Springfield, Illinois, with sufficient postage affixed to the following persons:

#### **SEE ATTACHED SERVICE LIST**

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

\_\_\_\_

John J. Kim
Managing Attorney
Air Regulatory Unit
Division of Legal Counsel

Dated: January 5, 2007

1021 North Grand Avenue East Springfield, Illinois 62794-9276 (217) 782-5544

#### SERVICE LIST R06-26

John Vnittle Hagging Officer	Matthew I Dunn Division Chief
John Knittle, Hearing Officer	Matthew J. Dunn, Division Chief
Illinois Pollution Control Board	Office of Attorney General
James R. Thompson Center	Environmental Bureau
100 West Randolph St., Suite 11-500	188 W. Randolph, 20 <sup>th</sup> Floor
Chicago, IL 60601-3218	Chicago, IL 60601
Virginia Yang, Deputy Legal Counsel	Keith I. Harley
Illinois Dept. of Natural Resources	Chicago Legal Clinic
One Natural Resources Way	205 West Monroe Street, 4th Floor
Springfield, IL 62702-1271	Chicago, IL 60606
James T. Harrington	William A. Murray
David L. Rieser	Special Assistant Corporation Counsel
Jeremy R. Hojnicki	Office of Public Utilities
McGuire Woods LLP	800 East Monroe
77 West Wacker, Suite 4100	Springfield, IL 62757
Chicago, IL 60601	8 1 1 1
S. David Farris	Faith E. Bugel
Environmental, Health and Safety	Environmental Law and Policy Center
Manager	35 East Wacker Drive, Suite 1300
Office of Public Utilities	Chicago, IL 60601
201 East Lake Shore Drive	emengo, 12 ocoor
Springfield, IL 62757	
Kathleen C. Bassi	Katherine D. Hodge
Sheldon A. Zabel	N. LaDonna Driver
Stephen J. Bonebrake	Hodge Dwyer Zeman
Schiff Hardin LLP	3150 Roland Avenue
6600 Sears Tower	Springfield, IL 62705-5776
233 South Wacker Drive	Springheid, in 02703 3770
Chicago, IL 60606	
Bill S. Forcade	Sasha M. Reyes
Katherine M. Rahill	Steven J. Murawski
	One Prudential Plaza, Suite 3500
JENNER & BLOCK, LLP	,
One IBM Plaza	130 E. Randolph Dr.
Chicago, IL 60611	Chicago, IL 60601
Daniel McDevitt	Bruce Nilles
Midwest Generation	Sierra Club
440 S. LaSalle St., Suite 3500	122 W. Washington Ave., Suite 830
Chicago, IL 60605	Madison, WI 53703
James H. Russell	
Winston & Strawn, LLP	
35 W. Wacker Drive, 40 <sup>th</sup> Floor	
Chicago, IL 60601	