

TITLE 35: ENVIRONMENTAL PROTECTION  
SUBTITLE B: AIR POLLUTION  
CHAPTER I: POLLUTION CONTROL BOARD  
SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS  
FOR STATIONARY SOURCES

PART 225  
CONTROL OF EMISSIONS FROM LARGE COMBUSTION SOURCES

SUBPART A: GENERAL PROVISIONS

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

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

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

SUBPART C: CLEAN AIR ACT INTERSTATE  
RULE (CAIR) SO<sub>2</sub> TRADING PROGRAM

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

SUBPART D: CAIR NO<sub>x</sub> ANNUAL TRADING PROGRAM

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

SUBPART E: CAIR NO<sub>x</sub> OZONE SEASON TRADING PROGRAM

Section	
225.500	Purpose
225.505	Applicability
225.510	Compliance Requirements
225.515	Appeal Procedures
225.520	Permit Requirements
225.525	Ozone Season Trading Budget
225.530	Timing for Ozone Season Allocations

- 225.535 Methodology for Calculating Ozone Season Allocations
- 225.540 Ozone Season Allocations
- 225.545 New Unit Set-Aside (NUSA)
- 225.550 Monitoring, Recordkeeping and Reporting Requirements for Gross Electrical Output and Useful Thermal Energy
- 225.555 Clean Air Set-Aside (CASA)
- 225.560 Energy Efficiency and Conservation, Renewable Energy, and Clean Technology Projects
- 225.565 Clean Air Set-Aside (CASA) Allowances
- 225.570 Clean Air Set-Aside (CASA) Applications
- 225.575 Agency Action on Clean Air Set-Aside (CASA) Applications

#### SUBPART F: COMBINED POLLUTANT STANDARDS

- 225.600 Purpose
- 225.605 Applicability
- 225.610 Notice of Intent
- 225.615 Control Technology Requirements and Emissions Standards for Mercury
- 225.620 Emissions Standards for NO<sub>x</sub> and SO<sub>2</sub>
- 225.625 Control Technology Requirements for NO<sub>x</sub>, SO<sub>2</sub>, and PM Emissions
- 225.630 Permanent Shut-Downs
- 225.635 Requirements for CAIR SO<sub>2</sub>, CAIR NO<sub>x</sub>, and CAIR NO<sub>x</sub> Ozone Season Allowances
- 225.640 Clean Air Act Requirements

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

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

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

#### SUBPART A: GENERAL PROVISIONS

Section 225.120 Abbreviations and Acronyms

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

Act	Environmental Protection Act [415 ILCS 5]
ACI	activated carbon injection

Agency	Illinois Environmental Protection Agency
Btu	British thermal unit
CAA	Clean Air Act [42 USC 7401 et seq.]
CAIR	Clean Air Interstate Rule
CAAPP	Clean Air Act Permit Program
CASA	Clean Air Set-Aside
CEMS	continuous emission monitoring system
CPS	Combined Pollutant Standards
CGO	converted gross electrical output
CUTE	converted useful thermal energy
CO <sub>2</sub>	carbon dioxide
EGU	electric generating unit
ESP	electrostatic precipitator
FGD	flue gas desulfurization
GO	gross electrical output
GWh	gigawatt hour
HI	heat input
hr	hour
kg	kilogram
lb	pound
MPS	Multi-Pollutant Standard
MW	megawatt
MWe	megawatt electrical
MWh	megawatt hour
NAAQS	National Ambient Air Quality Standard
NO <sub>x</sub>	nitrogen oxides
NUSA	New Unit Set-Aside
ORIS	Office of Regulatory Information Systems
O <sub>2</sub>	oxygen
PM <sub>2.5</sub>	Particles less than 2.5 micrometers in diameter
RATA	relative accuracy test audit
SNCR	selective noncatalytic reduction
SO <sub>2</sub>	sulfur dioxide
TTBS	Temporary Technology Based Standard
TCGO	total converted useful thermal energy
UTE	useful thermal energy
USEPA	United States Environmental Protection Agency
yr	year

### **Section 225.130 Definitions**

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

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

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

"Base Emission Rate" means, for a group of EGUs subject to emission standards for NO<sub>x</sub> and SO<sub>2</sub> pursuant to Section 225.233, the average emission rate of NO<sub>x</sub> or SO<sub>2</sub> from the EGUs, in pounds per million Btu heat input, for calendar years 2003 through 2005 (or, for seasonal NO<sub>x</sub>, the 2003 through 2005 ozone seasons), as determined from the data collected and quality assured by the USEPA, pursuant to the 40 CFR 72 and 96 federal Acid Rain and NO<sub>x</sub> Budget Trading Programs, for the emissions and heat input of that group of EGUs.

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

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

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

"CAIR authorized account representative" means, for the purpose of general accounts, a responsible natural person who is authorized, in accordance with 40 CFR 96, subparts BB, FF, BBB, FFF, BBBB, and FFFF to transfer and otherwise dispose of CAIR NO<sub>x</sub>, SO<sub>2</sub>, and NO<sub>x</sub> Ozone Season allowances, as applicable, held in the CAIR NO<sub>x</sub>, SO<sub>2</sub>, and NO<sub>x</sub> Ozone Season general account, and for the purpose of a CAIR NO<sub>x</sub> compliance account, a CAIR SO<sub>2</sub> compliance account, or a CAIR NO<sub>x</sub> Ozone Season compliance account, the CAIR designated representative of the source.

"CAIR designated representative" means, for a CAIR NO<sub>x</sub> source, 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, 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, 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 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, CAIR SO<sub>2</sub> Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program, or the federal Acid Rain Program, the designated representative for the unit must be the same natural person for all programs applicable to the unit.

"Coal" means any solid fuel classified as anthracite, bituminous, subbituminous, or lignite by the American Society for Testing and Materials (ASTM) Standard Specification for Classification of Coals by Rank D388-77, 90, 91, 95, 98a, or 99 (Reapproved 2004).

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

"Coal-fired" means:

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

Except as provided above, combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel.

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

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

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

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

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

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

percent of total energy input if useful thermal energy produced is less than 15 percent of total energy output; or

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

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

"Combustion turbine" means:

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

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

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

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

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

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

For purposes of this definition:

"Construction" shall be determined as any physical change or

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

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

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

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

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

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

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

"Compliance account" means:

For the purposes of Subparts D and E, a CAIR NO<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; or

For the purposes of Subpart C, a “compliance account” means a CAIR SO<sub>2</sub> compliance 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, the period beginning January 1 of a calendar year, except as provided in Sections 225.310(d)(3) and 225.410(d)(3), and ending on December 31 of the same year, inclusive; or

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

"Designated representative" means, for the purposes of Subpart B of this Part, the natural person as defined in 40 CFR 60.4102, and is the same natural person as the person who is the designated representative for the CAIR trading and Acid Rain programs.

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

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

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

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

"Generator" means a device that produces electricity.

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

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

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

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

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

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

seasonal or other deratings), such increased maximum amount as of 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.

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

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

"Project sponsor" means a person or an entity, including but not limited to the owner or operator of an EGU or a not-for-profit group, that provides the majority of funding for an energy efficiency and conservation, renewable energy, or clean technology project as listed in Sections 225.460 and 225.560, unless another person or entity is designated by a written agreement as the project sponsor for the purpose of applying for NO<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:

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

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

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

Where:

REE = Rated-energy efficiency, expressed as percentage.

GO = Gross electrical output of the system expressed in Btu/hr.

UTE = Useful thermal output from the system that is used for heating, cooling, industrial processes or other beneficial uses, expressed in Btu/hr.

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

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

Atmospheric or pressurized fluidized bed combustion;

Integrated gasification combined cycle;

Magnetohydrodynamics;

Direct and indirect coal-fired turbines;

Integrated gasification fuel cells; or

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

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

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

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

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

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

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

### **Section 225.140 Incorporations by Reference**

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

- a) 40 CFR 60, 60.17, 60.45a, 60.49a(k)(1) and (p), 60.50a(h), and 60.4170 through 60.4176 (2005).
- b) 40 CFR 75 (2006).
- c) 40 CFR 78 (2006).
- d) 40 CFR 96, CAIR SO<sub>2</sub> Trading Program, subparts AAA (excluding 40 CFR 96.204 and 96.206), BBB, FFF, GGG, and HHH (2006).
- e) 40 CFR 96, CAIR NO<sub>x</sub> Annual Trading Program, subparts AA (excluding 40 CFR 96.104, 96.105(b)(2), and 96.106), BB, FF, GG, and HH (2006).
- f) 40 CFR 96, CAIR NO<sub>x</sub> Ozone Season Trading Program, subparts AAAA (excluding 40 CFR 96.304, 96.305(b)(2), and 96.306), BBBB, FFFF, GGGG, and HHHH (2006).
- g) ASTM. The following methods from the American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken PA 19428-2959, (610) 832-9585:
  - 1) ASTM D388-77 (approved February 25, 1977), D388-90 (approved March 30, 1990), D388-91a (approved April 15, 1991), D388-95 (approved January 15, 1995), D388-98a (approved September 10, 1998), or D388-99 (approved September 10, 1999, reapproved in 2004), Classification of Coals by Rank.

- 2) ASTM D3173-03, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke (Approved April 10, 2003).
  - 3) ASTM D3684-01, Standard Test Method for Total Mercury in Coal by the Oxygen Bomb Combustion/Atomic Absorption Method (Approved October 10, 2001).
  - 4) ASTM D5865-04, Standard Test Method for Gross Calorific Value of Coal and Coke (Approved April 1, 2004).
  - 5) ASTM D6414-01, Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by Acid Extraction or Wet Oxidation/Cold Vapor Atomic Absorption (Approved October 10, 2001).
  - 6) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method) (Approved April 10, 2002).
- h) Federal Energy Management Program, M&V Guidelines: Measurement and Verification for Federal Energy Projects, US Department of Energy, Office of Energy Efficiency and Renewable Energy, Version 2.2, DOE/GO-102000-0960 (September 2000).

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

### **Section 225.150 Commence Commercial Operation**

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

- a) To have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation, except as provided in 40 CFR 96.105, 96.205, or 96.305, as incorporated by reference in Section 225.140.
  - 1) For a unit that is a CAIR SO<sub>2</sub> unit, CAIR NO<sub>x</sub> unit, or a CAIR NO<sub>x</sub> Ozone Season unit pursuant to Sections 225.305, 225.405, and 225.505, respectively, on the date the unit commences commercial operation on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subsection (a) of this Section and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date will remain the unit's date of commencement of commercial operation, which will continue to be treated as the same unit.

- 2) For a unit that is a CAIR SO<sub>2</sub> unit, CAIR NO<sub>x</sub> unit, or a CAIR NO<sub>x</sub> Ozone Season unit pursuant to Sections 225.305, 225.405, and 225.505, respectively, on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subsection (a) of this Section and that is subsequently replaced by a unit at the same source (e.g., repowered), such date will remain the replaced unit's date of commencement of commercial operation, and the replacement unit will be treated as a separate unit with a separate date for commencement of commercial operation as defined in subsection (a) or (b) of this Section as appropriate.
- b) Notwithstanding subsection (a) of this Section and except as provided in 40 CFR 96.105, 96.205, or 96.305 for a unit that is not a CAIR SO<sub>2</sub> unit, CAIR NO<sub>x</sub> unit, or a CAIR NO<sub>x</sub> Ozone Season unit pursuant to Section 225.305, 225.405, or 225.505, respectively, on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subsection (a) of this Section, the unit's date for commencement of commercial operation will be the date on which the unit becomes a CAIR SO<sub>2</sub> unit, CAIR NO<sub>x</sub> unit, or CAIR NO<sub>x</sub> Ozone Season unit pursuant to Section 225.305, 225.405, or 225.505, respectively.
- 1) For a unit with a date for commencement of commercial operation as defined in subsection (b) of this Section and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date will remain the unit's date of commencement of commercial operation, which shall continue to be treated as the same unit.
  - 2) For a unit with a date for commencement of commercial operation as defined in subsection (b) of this Section and that is subsequently replaced by a unit at the same source (e.g., repowered), such date will remain the replaced unit's date of commencement of commercial operation, and the replacement unit will be treated as a separate unit with a separate date for commencement of commercial operation as defined in subsection (a) or (b) of this Section as appropriate.

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

SUBPART C: CLEAN AIR ACT INTERSTATE  
RULE (CAIR) SO<sub>2</sub> TRADING PROGRAM

**Section 225.300 Purpose**

The purpose of this Subpart C is to control the emissions of sulfur dioxide (SO<sub>2</sub>) from 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.

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

### **Section 225.305 Applicability**

- a) Except as provided in subsections (b)(1), (b)(3), and (b)(4) of this Section:
  - 1) The following units are CAIR SO<sub>2</sub> units, and any source that includes one 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, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.
  - 2) If a stationary boiler or stationary combustion turbine that, pursuant to subsection (a)(1) of this Section, is not a CAIR SO<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:
  - 1) Any unit that would otherwise be classified as a CAIR SO<sub>2</sub> unit pursuant to subsection (a)(1) or (a)(2) of this Section and:
    - A) Qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit; and
    - B) Does not serve at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe supplying any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution for sale.
  - 2) If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and meets the requirements of subsection (b)(1) of this Section for at least one calendar

year, but subsequently no longer meets all such requirements, the unit shall become a CAIR SO<sub>2</sub> unit starting on the earlier of January 1 after the first calendar year during which the unit no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of subsection (b)(1)(B) of this Section.

- 3) Any unit that would otherwise be classified as a CAIR SO<sub>2</sub> unit pursuant to subsection (a)(1) or (a)(2) of this Section commencing operation before January 1, 1985 and:
  - A) Qualifies as a solid waste incineration unit; and
  - B) Has an average annual fuel consumption of non-fossil fuel for 1985-1987 exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).
- 4) Any unit that would otherwise be classified as a CAIR SO<sub>2</sub> unit under subsection (a)(1) or (a)(2) of this Section commencing operation on or after January 1, 1985 and:
  - A) Qualifies as a solid waste incineration unit; and
  - B) Has an average annual fuel consumption of non-fossil fuel the first three years of operation exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).
- 5) If a unit qualifies as a solid waste incineration unit and meets the requirements of subsection (b)(3) or (b)(4) of this Section for at least three consecutive years, but subsequently no longer meets all such requirements, the unit shall become a CAIR SO<sub>2</sub> unit starting on the earlier of January 1 after the first three consecutive calendar years after 1990 for which the unit has an average annual fuel consumption of 20 percent or more.

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

### **Section 225.310 Compliance Requirements**

- a) The owner or operator of a CAIR SO<sub>2</sub> unit must comply with the requirements of the CAIR SO<sub>2</sub> Trading Program for Illinois as set forth in this Subpart C and 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); as incorporated by reference in Section 225.140 .
- b) Permit requirements:
  - 1) The designated representative of each source with one or more CAIR SO<sub>2</sub> 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 permit") that complies with the requirements of Section 225.320 (Permit Requirements).
  - 2) The owner or operator of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source must operate the CAIR SO<sub>2</sub> unit in compliance with its CAIR permit.
- c) Monitoring requirements:
  - 1) The owner or operator of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source must comply with the monitoring, reporting and recordkeeping requirements of 40 CFR 96, subpart HHH. The CAIR designated representative of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the CAIR SO<sub>2</sub> source must comply with those sections of the monitoring, reporting and recordkeeping requirements of 40 CFR 96, subpart HHH, applicable to the CAIR designated representative.
  - 2) The compliance of each CAIR SO<sub>2</sub> source with the emissions limitation pursuant to subsection (d) of this Section will be determined by the emissions measurements recorded and reported in accordance with 40 CFR 96, subpart HHH and 40 CFR 75.
- d) Emission requirements:
  - 1) By the allowance transfer deadline, midnight of March 1, 2011, and by midnight of March 1 of each subsequent year if March 1 is a business day, the owner or operator of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source must hold a tonnage equivalent in CAIR SO<sub>2</sub> allowances available for compliance deductions pursuant to 40 CFR 96.254(a) and (b) in the CAIR SO<sub>2</sub> source's CAIR SO<sub>2</sub> compliance account. If March 1 is

not a business day, the allowance transfer deadline means by midnight of the first business day thereafter. The number of allowances held on the allowance transfer deadline may not be less than the total tonnage equivalent of the tons of SO<sub>2</sub> emissions for the control period from all CAIR SO<sub>2</sub> units at the CAIR SO<sub>2</sub> source, as determined in accordance with 40 CFR 96, subpart HHH.

- 2) Each ton of excess emissions of a CAIR SO<sub>2</sub> source for each day of a control period, starting in 2010 constitutes a separate violation of this Subpart C, the Clean Air Act, and the Act.
  - 3) Each CAIR SO<sub>2</sub> unit will be subject to the requirements of subsection (d)(1) of this Section for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitoring certification requirements pursuant to 40 CFR 96.270(b)(1) or (2) and for each control period thereafter.
  - 4) CAIR SO<sub>2</sub> allowances must be held in, deducted from, or transferred into or among allowance accounts in accordance with this Subpart and 40 CFR 96, subparts FFF and GGG.
  - 5) In order to comply with the requirements of subsection (d)(1) of this Section, a CAIR SO<sub>2</sub> allowance may not be deducted for compliance according to subsection (d)(1) of this Section for a control period in a calendar year before the year for which the allowance is allocated.
  - 6) A CAIR SO<sub>2</sub> allowance 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 permit application, the CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.205, and no provision of law, will be construed to limit the authority of the United States or the State to terminate or limit this authorization.
  - 7) A CAIR SO<sub>2</sub> allowance does not constitute a property right.
  - 8) Upon recordation by USEPA pursuant to 40 CFR 96, subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> source's compliance account is deemed to amend automatically, and become a part of, any CAIR permit of the CAIR SO<sub>2</sub> source. This automatic amendment of the CAIR permit will be deemed an operation of law and will not require any further review.
- e) Recordkeeping and reporting requirements:

- 1) Unless otherwise provided, the owner or operator of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source must keep on site at the source each of the documents listed in subsections (e)(1)(A) through (e)(1)(D) of this Section for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Agency or USEPA.
    - A) The certificate of representation for the CAIR designated representative for the source and each CAIR SO<sub>2</sub> unit at the source, all documents that demonstrate the truth of the statements in the certificate of representation, provided that the certificate and documents must be retained on site at the source beyond such five-year period until the documents are superseded because of the submission of a new certificate of representation, pursuant to 40 CFR 96.213, changing the CAIR designated representative.
    - B) All emissions monitoring information, in accordance with 40 CFR 96, subpart HHH.
    - C) Copies of all reports, compliance certifications, and other submissions and all records made or required pursuant to the CAIR SO<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 C.
    - D) Copies of all documents used to complete a CAIR permit application and any other submission or documents used to demonstrate compliance pursuant to the CAIR SO<sub>2</sub> Trading Program.
  - 2) The CAIR designated representative of a CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source must submit to the Agency and USEPA the reports and compliance certifications required pursuant to the CAIR SO<sub>2</sub> Trading Program, including those pursuant to 40 CFR 96, subpart HHH.
- f) Liability:
- 1) No revision of a permit for a CAIR SO<sub>2</sub> unit may excuse any violation of the requirements of this Subpart C or the requirements of the CAIR SO<sub>2</sub> Trading Program.
  - 2) Each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit must meet the requirements of the CAIR SO<sub>2</sub> Trading Program.

- 3) Any provision of the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR SO<sub>2</sub> source (including any provision applicable to the CAIR designated representative of a CAIR SO<sub>2</sub> source) will also apply to the owner and operator of the CAIR SO<sub>2</sub> source and to the owner and operator of each CAIR SO<sub>2</sub> unit at the source.
- 4) Any provision of the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR SO<sub>2</sub> unit (including any provision applicable to the CAIR designated representative of a CAIR SO<sub>2</sub> unit) will also apply to the owner and operator of the CAIR SO<sub>2</sub> unit.
- 5) The CAIR designated representative of a CAIR SO<sub>2</sub> unit that has excess SO<sub>2</sub> emissions in any control period must surrender the allowances as required for deduction pursuant to 40 CFR 96.254(d)(1).
- 6) The owner or operator of a CAIR SO<sub>2</sub> unit that has excess SO<sub>2</sub> emissions in any control period must pay any fine, penalty, or assessment or comply with any other remedy imposed pursuant to the Act and 40 CFR 96.254(d)(2).
- g) Effect on other authorities: No provision of the CAIR SO<sub>2</sub> Trading Program, a CAIR permit application, a CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.205 will be construed as exempting or excluding the owner and operator and, to the extent applicable, the CAIR designated representative of a CAIR SO<sub>2</sub> source or a CAIR SO<sub>2</sub> unit from compliance with any other regulation promulgated pursuant to the CAA, the Act, any State regulation or permit, or a federally enforceable permit.

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

### **Section 225.315 Appeal Procedures**

The appeal procedures for decisions of USEPA pursuant to the CAIR SO<sub>2</sub> Trading Program are set forth in 40 CFR 78, as incorporated by reference in Section 225.140.

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

### **Section 225.320 Permit Requirements**

- a) Permit requirements:
  - 1) The owner or operator of each source with a CAIR SO<sub>2</sub> unit is required to submit:

- A) A complete permit application addressing all applicable CAIR SO<sub>2</sub> Trading Program requirements for a permit meeting the requirements of this Section, applicable to each CAIR SO<sub>2</sub> unit at the source. Each CAIR permit must contain elements required for a complete CAIR permit application pursuant to subsection (b)(2) of this Section.
  - B) Any supplemental information that the Agency determines is necessary in order to review a CAIR permit application and issue a CAIR permit.
- 2) Each CAIR permit will be issued pursuant to Section 39 or 39.5 of the Act, must contain federally enforceable conditions addressing all applicable CAIR SO<sub>2</sub> Trading Program requirements, and will be a complete and segregable portion of the source's entire permit pursuant to subsection (a)(1) of this Section.
  - 3) No CAIR permit may be issued until the Agency and USEPA have received a complete certificate of representation for a CAIR designated representative or alternate designated representative pursuant to 40 CFR 96, subpart BBB, for a source and the CAIR SO<sub>2</sub> unit at the source.
  - 4) For all CAIR SO<sub>2</sub> units that commenced operation before July 1, 2008, the owner or operator of the unit must submit a CAIR permit application meeting the requirements of this Section on or before July 1, 2008.
  - 5) For CAIR SO<sub>2</sub> units that commence operation on or after July 1, 2008, and that are and are not subject to Section 39.5 of the Act, the owner or operator of such units must submit applications for construction and operating permits pursuant to the requirements of Sections 39 and 39.5 of the Act, as applicable, and 35 Ill. Adm. Code 201 and the applications must specify that they are applying for CAIR permits and must address the CAIR permit application requirements of this Section.
- b) Permit applications:
- 1) Duty to apply: The owner or operator of any source with one or more CAIR SO<sub>2</sub> units must submit to the Agency a CAIR permit application for the source covering each CAIR SO<sub>2</sub> unit pursuant to subsection (b)(2) of this Section by the applicable deadline in subsection (a)(4) or (a)(5) of this Section. The owner or operator of any source with one or more CAIR SO<sub>2</sub> units must reapply for a CAIR permit for the source as required by this Subpart, 35 Ill. Adm. Code 201, and, as applicable, Sections 39 and 39.5 of the Act.

- 2) Information requirements for CAIR permit applications: A complete CAIR permit application must include the following elements concerning the source for which the application is submitted:
  - A) Identification of the source, including plant name. The ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the Energy Information Administration must also be included, if applicable;
  - B) Identification of each CAIR SO<sub>2</sub> unit at the source; and
  - C) The compliance requirements applicable to each CAIR SO<sub>2</sub> unit as set forth in Section 225.310.
- 3) An application for a CAIR permit will be treated as a modification of the CAIR SO<sub>2</sub> source's existing federally enforceable permit, if such a permit has been issued for that CAIR SO<sub>2</sub> source, and will be subject to the same procedural requirements. When the Agency issues a CAIR permit pursuant to the requirements of this Section, it will be incorporated into and become part of that CAIR SO<sub>2</sub> source's existing federally enforceable permit.
- c) Permit content: Each CAIR permit is deemed to incorporate automatically the definitions and terms specified in Section 225.130 and 40 CFR 96.202, as incorporated by reference in Section 225.140, and, upon recordation of USEPA under 40 CFR 96, subparts FFF and GGG, as incorporated by reference in Section 225.140, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from the compliance account of the CAIR SO<sub>2</sub> source covered by the permit.

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

### **Section 225.325 Trading Program**

- a) The CAIR SO<sub>2</sub> Trading Program is administered by USEPA. CAIR SO<sub>2</sub> allowances are issued as described by the definition for allocate in 40 CFR 96.202, as incorporated by reference in Section 225.140. The amount of CAIR SO<sub>2</sub> allowances to be credited to a CAIR SO<sub>2</sub> source's CAIR SO<sub>2</sub> Allowance Tracking System account for a CAIR SO<sub>2</sub> unit will be determined in accordance with 40 CFR 96.253, as incorporated by reference in Section 225.140.
- b) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit SO<sub>2</sub> during the calendar year for which the allowance is allocated or any calendar year thereafter pursuant to the CAIR SO<sub>2</sub> Trading Program as follows:

- 1) For one CAIR SO<sub>2</sub> allowance allocated for a control period in a year before 2010, one ton of SO<sub>2</sub>, except as provided for in the compliance deductions pursuant to 40 CFR 96.254(b);
- 2) For one CAIR SO<sub>2</sub> allowance allocated for a control period in 2010 through 2014, 0.50 ton of SO<sub>2</sub>, except as provided for in the compliance deductions pursuant to 40 CFR 96.254(b); and
- 3) For one CAIR SO<sub>2</sub> allowance allocated for a control period in 2015 or later, 0.35 ton of SO<sub>2</sub>, except as provided for in the compliance deductions pursuant to 40 CFR 96.254(b).

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

#### SUBPART D: CAIR NO<sub>x</sub> ANNUAL TRADING PROGRAM

##### **Section 225.400 Purpose**

The purpose of this Subpart D is to control the annual emissions of nitrogen oxides (NO<sub>x</sub>) from EGUs by determining allocations and implementing the CAIR NO<sub>x</sub> Annual Trading Program.

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

##### **Section 225.405 Applicability**

- a) Except as provided in subsections (b)(1), (b)(3), and (b)(4) of this Section:
  - 1) The following units are CAIR NO<sub>x</sub> units, and any source that includes one or more such units is a CAIR NO<sub>x</sub> source subject to the requirements of this Subpart D: any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.
  - 2) If a stationary boiler or stationary combustion turbine that, pursuant to subsection (a)(1) of this Section, is not a CAIR NO<sub>x</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 NO<sub>x</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 NO<sub>x</sub> units and units that meet the requirements of subsections (b)(2) and (b)(5) of this Section are CAIR NO<sub>x</sub> units:
- 1) Any unit that would otherwise be classified as a CAIR NO<sub>x</sub> unit pursuant to subsection (a)(1) or (a)(2) of this Section and:
    - A) Qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit; and
    - B) Does not serve at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe supplying any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution for sale.
  - 2) If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and meets the requirements of subsection (b)(1) of this Section for at least one calendar year, but subsequently no longer meets all such requirements, the unit shall become a CAIR NO<sub>x</sub> unit starting on the earlier of January 1 after the first calendar year during which the unit no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of subsection (b)(1)(B) of this Section.
  - 3) Any unit that would otherwise be classified as a CAIR NO<sub>x</sub> unit pursuant to subsection (a)(1) or (a)(2) of this Section commencing operation before January 1, 1985 and:
    - A) Qualifies as a solid waste incineration unit; and
    - B) Has an average annual fuel consumption of non-fossil fuel for 1985-1987 exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).
  - 4) Any unit that would otherwise be classified as a CAIR NO<sub>x</sub> unit under subsection (a)(1) or (a)(2) of this Section commencing operation on or after January 1, 1985 and:

- A) Qualifies as a solid waste incineration unit; and
  - B) Has an average annual fuel consumption of non-fossil fuel the first three years of operation exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).
- 5) If a unit qualifies as a solid waste incineration unit and meets the requirements of subsection (b)(3) or (b)(4) of this Section for at least three consecutive years, but subsequently no longer meets all such requirements, the unit shall become a CAIR NO<sub>x</sub> unit starting on the earlier of January 1 after the first three consecutive calendar years after 1990 for which the unit has an average annual fuel consumption of 20 percent or more.

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

#### **Section 225.410 Compliance Requirements**

- a) The designated representative of a CAIR NO<sub>x</sub> unit must comply with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program for Illinois as 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.
- b) Permit requirements:
  - 1) The designated representative of each source with one or more CAIR NO<sub>x</sub> 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 permit") that complies with the requirements of Section 225.420 (Permit Requirements).
  - 2) The owner or operator of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source must operate the CAIR NO<sub>x</sub> unit in compliance with its CAIR permit.
- c) Monitoring requirements:
  - 1) The owner or operator of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit

at the source must comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 96, subpart HH and Section 225.450. The CAIR designated representative of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the CAIR NO<sub>x</sub> source must comply with those sections of the monitoring, reporting and recordkeeping requirements of 40 CFR 96, subpart HH, applicable to a CAIR designated representative.

- 2) The compliance of each CAIR NO<sub>x</sub> source with the NO<sub>x</sub> emissions limitation pursuant to subsection (d) of this Section will be determined by the emissions measurements recorded and reported in accordance with 40 CFR 96, subpart HH.

d) Emission requirements:

- 1) By the allowance transfer deadline, midnight of March 1, 2010, and by midnight March 1 of each subsequent year if March 1 is a business day, the owner or operator of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source must hold CAIR NO<sub>x</sub> allowances available for compliance deductions pursuant to 40 CFR 96.154(a) in the CAIR NO<sub>x</sub> source's CAIR NO<sub>x</sub> compliance account. If March 1 is not a business day, the allowance transfer deadline means by midnight of the first business day thereafter. The number of allowances held on the allowance transfer deadline may not be less than the tons of NO<sub>x</sub> emissions for the control period from all CAIR NO<sub>x</sub> units at the source, as determined in accordance with 40 CFR 96, subpart HH.
- 2) Each ton of excess emissions of a CAIR NO<sub>x</sub> source for each day in a control period, starting in 2009, will constitute a separate violation of this Subpart D, the Act, and the CAA.
- 3) Each CAIR NO<sub>x</sub> unit will be subject to the requirements of subsection (d)(1) of this Section for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitoring certification requirements pursuant to 40 CFR 96.170(b)(1) or (b)(2) and for each control period thereafter.
- 4) CAIR NO<sub>x</sub> allowances must be held in, deducted from, or transferred into or among allowance accounts in accordance with this Subpart and 40 CFR 96, subparts FF and GG.
- 5) In order to comply with the requirements of subsection (d)(1) of this Section, a CAIR NO<sub>x</sub> allowance may not be deducted for compliance according to subsection (d)(1) of this Section for a control period in a year before the calendar year for which the allowance is allocated.

- 6) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one ton of NO<sub>x</sub> in accordance with the CAIR NO<sub>x</sub> Trading Program. No provision of the CAIR NO<sub>x</sub> Trading Program, the CAIR NO<sub>x</sub> permit application, the CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.105, and no provision of law, will be construed to limit the authority of the United States or the State to terminate or limit this authorization.
  - 7) A CAIR NO<sub>x</sub> allowance does not constitute a property right.
  - 8) Upon recordation by USEPA pursuant to 40 CFR 96, subpart FF or GG, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> 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<sub>x</sub> permit of the CAIR NO<sub>x</sub> source. This automatic amendment of the CAIR permit will be deemed an operation of law and will not require any further review.
- e) Recordkeeping and reporting requirements:
- 1) Unless otherwise provided, the owner or operator of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source must keep on site at the source each of the documents listed in subsections (e)(1)(A) through (e)(1)(E) of this Section for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Agency or USEPA.
    - A) The certificate of representation for the CAIR designated representative for the source and each CAIR NO<sub>x</sub> unit at the source, all documents that demonstrate the truth of the statements in the certificate of representation, provided that the certificate and documents must be retained on site at the source beyond such five-year period until the documents are superseded because of the submission of a new certificate of representation, pursuant to 40 CFR 96.113, changing the CAIR designated representative.
    - B) All emissions monitoring information, in accordance with 40 CFR 96, subpart HH.
    - C) Copies of all reports, compliance certifications, and other submissions and all records made or required pursuant to the CAIR NO<sub>x</sub> Annual Trading Program or documents necessary to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program or with the requirements of this Subpart D.

- D) Copies of all documents used to complete a CAIR NO<sub>x</sub> permit application and any other submission or documents used to demonstrate compliance pursuant to the CAIR NO<sub>x</sub> Annual Trading Program.
  - E) Copies of all records and logs for gross electrical output and useful thermal energy required by Section 225.450.
- 2) The CAIR designated representative of a CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source must submit to the Agency and USEPA the reports and compliance certifications required pursuant to the CAIR NO<sub>x</sub> Annual Trading Program, including those pursuant to 40 CFR 96, subpart HH.
- f) Liability:
- 1) No revision of a permit for a CAIR NO<sub>x</sub> unit may excuse any violation of the requirements of this Subpart D or the requirements of the CAIR NO<sub>x</sub> Annual Trading Program.
  - 2) Each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit must meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program.
  - 3) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program that applies to a CAIR NO<sub>x</sub> source (including any provision applicable to the CAIR designated representative of a CAIR NO<sub>x</sub> source) will also apply to the owner and operator of the CAIR NO<sub>x</sub> source and to the owner and operator of each CAIR NO<sub>x</sub> unit at the source.
  - 4) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program that applies to a CAIR NO<sub>x</sub> unit (including any provision applicable to the CAIR designated representative of a CAIR NO<sub>x</sub> unit) will also apply to the owner and operator of the CAIR NO<sub>x</sub> unit.
  - 5) The CAIR designated representative of a CAIR NO<sub>x</sub> unit that has excess emissions in any control period must surrender the allowances as required for deduction pursuant to 40 CFR 96.154(d)(1).
  - 6) The owner or operator of a CAIR NO<sub>x</sub> unit that has excess NO<sub>x</sub> emissions in any control period must pay any fine, penalty, or assessment or comply with any other remedy imposed pursuant to the Act and 40 CFR 96.154(d)(2).

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

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

### **Section 225.415 Appeal Procedures**

The appeal procedures for decisions of USEPA pursuant to the CAIR NO<sub>x</sub> Annual Trading Program are set forth in 40 CFR 78, as incorporated by reference in Section 225.140.

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

### **Section 225.420 Permit Requirements**

- a) Permit requirements:
- 1) The owner or operator of each source with a CAIR NO<sub>x</sub> unit is required to submit:
    - A) A complete permit application addressing all applicable CAIR NO<sub>x</sub> Annual Trading Program requirements for a permit meeting the requirements of this Section, applicable to each CAIR NO<sub>x</sub> unit at the source. Each CAIR permit must contain elements required for a complete CAIR permit application pursuant to subsection (b)(2) of this Section.
    - B) Any supplemental information that the Agency determines necessary in order to review a CAIR permit application and issue any CAIR permit.
  - 2) Each CAIR permit will be issued pursuant to Sections 39 and 39.5 of the Act, must contain federally enforceable conditions addressing all applicable CAIR NO<sub>x</sub> Annual Trading Program requirements, and will be a complete and segregable portion of the source's entire permit pursuant to subsection (a)(1) of this Section.
  - 3) No CAIR permit may be issued until the Agency and USEPA have received a complete certificate of representation for a CAIR designated

representative pursuant to 40 CFR 96, subpart BB, for the CAIR NO<sub>x</sub> source and the CAIR NO<sub>x</sub> unit at the source.

- 4) For all CAIR NO<sub>x</sub> units that commenced operation before December 31, 2007, the owner or operator of the unit must submit a CAIR permit application meeting the requirements of this Section on or before December 31, 2007.
  - 5) For all CAIR NO<sub>x</sub> units that commence operation on or after December 31, 2007, the owner or operator of these units must submit applications for construction and operating permits pursuant to the requirements of Sections 39 and 39.5 of the Act, as applicable, and 35 Ill. Adm. Code 201 and the applications must specify that they are applying for CAIR permits and must address the CAIR permit application requirements of this Section.
- b) Permit applications:
- 1) Duty to apply: The owner or operator of any source with one or more CAIR NO<sub>x</sub> units must submit to the Agency a CAIR permit application for the source covering each CAIR NO<sub>x</sub> unit pursuant to subsection (b)(2) of this Section by the applicable deadline in subsection (a)(4) or (a)(5) of this Section. The owner or operator of any source with one or more CAIR NO<sub>x</sub> units must reapply for a CAIR permit for the source as required by this Subpart, 35 Ill. Adm. Code 201, and, as applicable, Sections 39 and 39.5 of the Act.
  - 2) Information requirements for CAIR permit applications: A complete CAIR permit application must include the following elements concerning the source for which the application is submitted:
    - A) Identification of the source, including plant name. The ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the Energy Information Administration must also be included, if applicable;
    - B) Identification of each CAIR NO<sub>x</sub> unit at the source; and
    - C) The compliance requirements applicable to each CAIR NO<sub>x</sub> unit as set forth in Section 225.410.
  - 3) An application for a CAIR permit will be treated as a modification of the CAIR NO<sub>x</sub> source's existing federally enforceable permit, if such a permit has been issued for that source, and will be subject to the same procedural

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

- c) Permit content: Each CAIR permit is deemed to incorporate automatically the definitions and terms specified in Section 225.130 and 40 CFR 96.102, as incorporated by reference in section 225.140, and, upon recordation of USEPA under 40 CFR 96, subparts FF and GG, as incorporated by reference in Section 225.140, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> allowance to or from the compliance account of the CAIR NO<sub>x</sub> source covered by the permit.

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

### **Section 225.425 Annual Trading Budget**

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

- a) The total base CAIR NO<sub>x</sub> Annual Trading budget is 76,230 tons per control period for the years 2009 through 2014, subject to a reduction for two set-asides, the New Unit Set-Aside (NUSA) and the Clean Air Set-Aside (CASA). Five percent of the budget will be allocated to the NUSA and 25 percent will be allocated to the CASA, resulting in a CAIR NO<sub>x</sub> Annual Trading budget of 53,361 tons available for allocation per control period pursuant to Section 225.440. The requirements of the NUSA are set forth in Section 225.445, and the requirements of the CASA are set forth in Sections 225.455 through 225.470.
- b) The total base CAIR NO<sub>x</sub> Annual Trading budget is 63,525 tons per control period for the year 2015 and thereafter, subject to a reduction for two set-asides, the NUSA and the CASA. Five percent of the budget will be allocated to the NUSA and 25 percent will be allocated to the CASA, resulting in a CAIR NO<sub>x</sub> Annual Trading budget of 44,468 tons available for allocation per control period pursuant to Section 225.440.
- c) If USEPA adjusts the total base CAIR NO<sub>x</sub> Annual Trading budget for any reason, the Agency will adjust the base CAIR NO<sub>x</sub> Annual Trading budget and the CAIR NO<sub>x</sub> Annual Trading budget available for allocation, accordingly.

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

### **Section 225.430 Timing for Annual Allocations**

- a) On or before September 25, 2007, the Agency will submit to USEPA the CAIR NO<sub>x</sub> allowance allocations, in accordance with Sections 225.435 and 225.440, for the 2009, 2010, and 2011 control periods.
- b) By October 31, 2008, and October 31 of each year thereafter, the Agency will submit to USEPA the CAIR NO<sub>x</sub> allowance allocations in accordance with Sections 225.435 and 225.440, for the control period four years after the year of the applicable deadline for submission pursuant to this Section. For example, on October 31, 2008, the Agency will submit to USEPA the allocations for the 2012 control period.
- c) For CAIR NO<sub>x</sub> units that commence commercial operation on or after January 1, 2006, that have not been allocated allowances under Section 225.440 for the applicable or any preceding control period, the Agency will allocate allowances from the NUSA in accordance with Section 225.445. The Agency will report these allocations to USEPA by October 31 of the applicable control period. For example, on October 31, 2009, the Agency will submit to USEPA the allocations from the NUSA for the 2009 control period.
- d) The Agency will allocate allowances from the CASA to energy efficiency, renewable energy, and clean technology projects pursuant to the criteria in Sections 225.455 through 225.470. The Agency will report these allocations to USEPA by October 1 of each year. For example, on October 1, 2009, the Agency will submit to USEPA the allocations from the CASA for the 2009 control period, based on reductions made in the 2008 control period.

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

### **Section 225.435 Methodology for Calculating Annual Allocations**

The Agency will calculate converted gross electrical (CGO) output, in MWh, for each CAIR NO<sub>x</sub> unit that has operated during at least one calendar year prior to the calendar year in which the Agency reports the allocations to USEPA as follows:

- a) For control periods 2009, 2010, and 2011, the owner or operator of the unit must submit in writing to the Agency, by September 15, 2007, a statement that either gross electrical output data or heat input data is to be used to calculate the unit's converted gross electrical output. The data shall be used to calculate converted gross electrical output pursuant to either subsection (a)(1) or (a)(2) of this Section:
  - 1) Gross electrical output: If the unit has four or five control periods of data, then the gross electrical output (GO) will be the average of the unit's three highest gross electrical outputs from the 2001, 2002, 2003, 2004, or 2005 control periods. If the unit has three or fewer control periods of gross

electrical output data, the gross electrical output will be the average of those control periods for which data is available. If a generator is served by two or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of these units for the control period. The unit's converted gross electrical output will be calculated as follows:

- A) If the unit is coal-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 1.0;$
- B) If the unit is oil-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 0.6;$  or
- C) If the unit is neither coal-fired nor oil-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 0.4.$

2) Heat input (HI): If the unit has four or five control periods of data, the average of the unit's three highest heat inputs from the 2001, 2002, 2003, 2004 or 2005 control period, will be used. If the unit has three or fewer control periods of heat input data, the heat input will be the average of those control periods for which data is available. The unit's converted gross electrical output will be calculated as follows:

- A) If the unit is coal-fired:  
 $CGO \text{ (in MWh)} = HI \text{ (in mmBtu)} \times 0.0967;$
- B) If the unit is oil-fired:  
 $CGO \text{ (in MWh)} = HI \text{ (in mmBtu)} \times 0.0580;$  or
- C) If the unit is neither coal-fired nor oil-fired:  
 $CGO \text{ (in MWh)} = HI \text{ (in mmBtu)} \times 0.0387.$

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

1) Gross electrical output: The average of the unit's two most recent years of control period gross electrical output, if available. In the first year for which a unit is considered to be an existing unit rather than a new unit, the gross electrical output, if available. If a unit commences commercial operation in the 2007 control period and does not have gross electrical output for the 2006 control period, then the gross electrical output from

2007 will be used. If a generator is served by two or more units, the gross electrical output of the generator shall be attributed to each unit in proportion to the unit's share of the total control period heat input of such units for the control period. The unit's converted gross electrical output shall be calculated as follows:

- A) If the unit is coal-fired:  
CGO (in MWh) = GO × MWh × 1.0;
- B) If the unit is oil-fired:  
CGO (in MWh) = GO × MWh × 0.6;
- C) If the unit is neither coal-fired nor oil-fired:  
CGO (in MWh) = GO × MWh × 0.4.

2) Heat input: The average of the unit's two most recent years of control period heat inputs, e.g., for the 2012 control period, the average of the unit's heat input from the 2006 and 2007 control periods. The unit's converted gross electrical output shall be calculated as follows:

- A) If the unit is coal-fired:  
CGO (in MWh) = HI (in mmBtu) × 0.0967;
- B) If the unit is oil-fired:  
CGO (in MWh) = HI (in mmBtu) × 0.0580; or
- C) If the unit is neither coal-fired nor oil-fired:  
CGO (in MWh) = HI (in mmBtu) × 0.0387.

c) For control period 2014 and thereafter, the unit's gross electrical output will be the average of the unit's two most recent control period's gross electrical output, if available. If a unit commences commercial operation in the most recent control period and does not have gross electrical output for two control periods, the gross electrical output from the most recent control period, e.g., if the unit commences commercial operation in 2009 and does not have gross electrical output from 2008, gross electrical output from 2009 will be used. If a generator is served by two or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of these units for the control period. The unit's converted gross electrical output will be calculated as follows:

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

- 2) If the unit is oil-fired:  
CGO (in MWh) = GO(in MWh) × 0.6; or
  - 3) If the unit is neither coal-fired nor oil-fired:  
CGO (in MWh) = GO(in MWh) × 0.4.
- d) For a unit that is a combustion turbine or boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the Agency will add the converted gross electrical output calculated for electricity pursuant to subsection (a), (b), or (c) of this Section to the converted useful thermal energy (CUTE) to determine the total converted gross electrical output for the unit (TCGO). The Agency will determine the converted useful thermal energy by using the average of the unit's control period useful thermal energy for the prior two control periods, if available. In the first year for which a unit is considered to be an existing unit rather than a new unit, the unit's control period useful thermal output for the prior year will be used. The converted useful thermal energy will be determined using the following equations:
- 1) If the unit is coal-fired:  
CUTE (in MWh) = UTE (in mmBtu) × 0.2930;
  - 2) If the unit is oil-fired:  
CUTE (in MWh) = UTE (in mmBtu) × 0.1758; or
  - 3) If the unit is neither coal-fired nor oil-fired:  
CUTE (in MWh) = UTE (in mmBtu) × 0.1172.
- e) The CAIR NO<sub>x</sub> unit's converted gross electrical output and converted useful thermal energy in subsections (a)(1), (b)(1), (c), and (d) of this Section for each control period will be based on the best available data reported or available to the Agency for the CAIR NO<sub>x</sub> unit pursuant to the provisions of Section 225.450.
- f) The CAIR NO<sub>x</sub> unit's heat input in subsections (a)(2) and (b)(2) of this Section for each control period will be determined in accordance with 40 CFR 75, as incorporated by reference in Section 225.140.

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

#### **Section 225.440 Annual Allocations**

- a) For the 2009 control period, and each control period thereafter, the Agency will allocate, to all CAIR NO<sub>x</sub> units in Illinois for which the Agency has calculated the converted gross electrical output pursuant to Section 225.435(a), (b), or (c) or

total converted gross electrical output pursuant to Section 225.435(d), as applicable, a total amount of CAIR NO<sub>x</sub> allowances equal to tons of NO<sub>x</sub> emissions in the CAIR NO<sub>x</sub> Annual Trading budget available for allocation as determined in Section 225.425 and, as adjusted to add allowances not allocated pursuant to subsection (b) of this Section in the previous year's allocation.

- b) The Agency will allocate CAIR NO<sub>x</sub> allowances to each CAIR NO<sub>x</sub> unit on a pro-rata basis using the unit's converted gross electrical output pursuant to Section 225.435(a), (b), or (c) or total converted gross electrical output calculated pursuant to Section 225.435(d), as applicable, to the extent whole allowances may be allocated. The Agency will retain any additional allowances beyond this allocation of whole allowances for allocation pursuant to subsection (a) of this Section in the next control period.

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

#### **Section 225.445 New Unit Set-Aside (NUSA)**

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

- a) Beginning with the 2009 control period and each control period thereafter, the Agency will establish a separate NUSA for each control period. Each NUSA will be allocated CAIR NO<sub>x</sub> allowances equal to five 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.
- b) The CAIR designated representative of a new CAIR NO<sub>x</sub> 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 fifth control period after the control period in which the unit commenced commercial operation. The NUSA allowance allocation request may only be submitted after a new unit has operated during one control period, and no later than March 1 of the control period for which allowances from the NUSA are being requested.
- c) In a NUSA allowance allocation request pursuant to subsection (b) of this Section, the CAIR designated representative must provide in its request information for gross electrical output and useful thermal energy, if any, for the new CAIR NO<sub>x</sub> unit for that control period.
- d) The Agency will allocate allowances from the NUSA to a new CAIR NO<sub>x</sub> unit

using the following procedures:

- 1) For each new CAIR NO<sub>x</sub> unit, the unit's gross electrical output for the most recent control period will be used to calculate the unit's gross electrical output. If a generator is served by two or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of these units for the control period. The new unit's converted gross electrical output will be calculated as follows:
  - A) If the unit is coal-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 1.0;$
  - B) If the unit is oil-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 0.6;$  or
  - C) If the unit is neither coal-fired nor oil-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 0.4.$
  
- 2) If the unit is a combustion turbine or boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the Agency will add the converted gross electrical output calculated for electricity pursuant to subsection (d)(1) of this Section to the converted useful thermal energy to determine the total converted gross electrical output for the unit. The Agency will determine the converted useful thermal energy using the unit's useful thermal energy for the most recent control period. The converted useful thermal energy will be determined using the following equations:
  - A) If the unit is coal-fired:  
 $CUTE \text{ (in MWh)} = UTE \text{ (in mmBtu)} \times 0.2930;$
  - B) If the unit is oil-fired:  
 $CUTE \text{ (in MWh)} = UTE \text{ (in mmBtu)} \times 0.1758;$  or
  - C) If the unit is neither coal-fired nor oil-fired:  
 $CUTE \text{ (in MWh)} = UTE \text{ (in mmBtu)} \times 0.1172.$
  
- 3) The gross electrical output and useful thermal energy in subsections (d)(1) and (d)(2) of this Section for each control period will be based on the best available data reported or available to the Agency for the CAIR NO<sub>x</sub> unit pursuant to the provisions of Section 225.450.

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

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

Where:

- $UA_y$  = unprorated allocation to a new CAIR  $NO_x$  unit.  
 $NCGO_y$  = Converted gross electrical output or total converted gross electrical output, as applicable, for a new CAIR  $NO_x$  unit.

- 5) The Agency will allocate CAIR  $NO_x$  allowances from the NUSA to new CAIR  $NO_x$  units as follows:
- A) If the NUSA for the control period for which CAIR  $NO_x$  allowances are requested has a number of allowances greater than or equal to the total unprorated allocations for all new units requesting allowances, the Agency will allocate the number of allowances using the unprorated allocation determined for that unit pursuant to subsection (d)(4) of this Section, to the extent that whole allowances may be allocated. For any additional allowances beyond this allocation of whole allowances, the Agency will retain the additional allowances in the NUSA for allocation pursuant to Section 225.445 in later control periods.
- B) If the NUSA for the control period for which the allowances are requested has a number of CAIR  $NO_x$  allowances less than the total unprorated allocation to all new CAIR  $NO_x$  units requesting allocations, the Agency will allocate the available allowances for new CAIR  $NO_x$  units on a pro-rata basis, using the unprorated allocation determined for that unit pursuant to subsection (d)(4) of this Section, to the extent that whole allowances may be allocated. For any additional allowances beyond this allocation of whole allowances, the Agency will retain the additional allowances in the NUSA for allocation pursuant to Section 225.445 in later control periods.
- e) The Agency will review each NUSA allowance allocation request pursuant to subsection (b) of this Section. The Agency will accept a NUSA allowance

allocation request only if the request meets, or is adjusted by the Agency as necessary to meet, the requirements of this Section.

- f) By June 1 of the applicable control period, the Agency will notify each CAIR designated representative that submitted a NUSA allowance request of the amount of CAIR NO<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 will allocate CAIR NO<sub>x</sub> allowances to new units from the NUSA no later than October 31 of the applicable control period.
- h) After a new CAIR NO<sub>x</sub> unit has operated in one control period, it becomes an existing unit for the purposes of calculating future allocations in Section 225.440 only, and the Agency will allocate CAIR NO<sub>x</sub> allowances for that unit, for the control period commencing five control periods after the control period in which the unit commences commercial operation, pursuant to Section 225.440. For example, if a unit commences commercial operation in 2009, in 2010, the Agency will allocate to that unit allowances pursuant to Section 225.440 for the 2014 control period. The new CAIR NO<sub>x</sub> unit will 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.
- i) 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 will, at a minimum, accrue those CAIR NO<sub>x</sub> allowances for future control period allocations to new CAIR NO<sub>x</sub> 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.

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

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

- a) By January 1, 2008, or by the date of commencing commercial operation, whichever is later, the owner or operator of the CAIR NO<sub>x</sub> unit must operate a system for accurately measuring gross electrical output that is consistent with the requirements of either 40 CFR 60 or 75; must measure gross electrical output in MWh using such a system; and must record the output of the measurement system at all times. If a generator is served by two or more units, the information to determine each unit's heat input for that control period must also be recorded, so as to allow each unit's share of the gross electrical output to be determined. If

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

- b) For a CAIR NO<sub>x</sub> unit that is a cogeneration unit, by January 1, 2008, or by the date the CAIR NO<sub>x</sub> unit commences to produce useful thermal energy, whichever is later, the owner or operator of the unit must install, calibrate, maintain, and operate meters for steam flow in lbs/hr, temperature in degrees Fahrenheit, and pressure in PSI, to measure and record the useful thermal energy that is produced, in mmBtu/hr, on a continuous basis. Owners and operators of a CAIR NO<sub>x</sub> unit that produces useful thermal energy but uses an energy transfer medium other than steam, e.g., hot water or glycol, must install, calibrate, maintain, and operate the necessary meters to measure and record the necessary data to express the useful thermal energy produced, in mmBtu/hr, on a continuous basis. If the CAIR NO<sub>x</sub> unit ceases to produce useful thermal energy, the owner or operator may cease operation of the meters, provided that operation of these meters must be resumed if the CAIR NO<sub>x</sub> unit resumes production of useful thermal energy.
- c) The owner or operator of a CAIR NO<sub>x</sub> unit must either report gross electrical output data to the Agency or comply with the applicable provisions for providing heat input data to USEPA as follows:
  - 1) By September 15, 2007, the gross electrical output for control periods 2001, 2002, 2003, 2004 and 2005, if available, and the unit's useful thermal energy data, if applicable. If a generator is served by two or more units, the documentation needed to determine each unit's share of the heat input of such units for that control period must also be submitted. If heat input data is used, the owner or operator must comply with the applicable provisions of 40 CFR 75, as incorporated by reference in Section 225.140.
  - 2) By June 1, 2008, the gross electrical output for control periods 2006 and 2007, if available, and the unit's useful thermal energy data, if applicable. If a generator is served by two or more units, the documentation needed to determine each unit's share of the heat input of such units for that control period must also be submitted. If heat input data is used, the owner or operator must comply with the applicable provisions of 40 CFR 75, as incorporated by reference in Section 225.140.
- d) Beginning with 2008, the CAIR designated representative of the CAIR NO<sub>x</sub> unit must submit to the Agency quarterly, by no later than April 30, July 31, October 31, and January 31 of each year, information for the CAIR NO<sub>x</sub> unit's gross electrical output, on a monthly basis for the prior quarter, and, if applicable, the unit's useful thermal energy for each month.

- e) The owner or operator of a CAIR NO<sub>x</sub> unit must maintain on-site the monitoring plan detailing the monitoring system, maintenance of the monitoring system, including quality assurance activities pursuant to the requirements of 40 CFR 60 or 75, as applicable, including the appropriate 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 venturi, orifice plates, flow nozzles, vortex meters, turbine meters, pressure transmitters, differential pressure transmitters, temperature transmitters, thermocouples, resistance temperature detectors, and any equipment or methods used to accurately measure gross electrical output.
  - 2) A certification statement by the CAIR designated representative that all components of the gross electrical output system have been tested to be accurate within three percent and that the gross electrical output system is accurate to within ten percent.
- f) The owner or operator of a CAIR NO<sub>x</sub> unit must retain records for at least five years from the date the record is created or the data is collected under subsections (a) and (b) of this Section, and the reports are submitted to the Agency and USEPA in accordance with subsections (c) and (d) of this Section. The owner or operator of a CAIR NO<sub>x</sub> unit must retain the monitoring plan required in subsection (e) of this Section for at least five years from the date that it is replaced by a new or revised monitoring plan.

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

#### **Section 225.455 Clean Air Set-Aside (CASA)**

- a) A project sponsor may apply for allowances from the CASA for sponsoring an energy efficiency and conservation, renewable energy, or clean technology project as set forth in Section 225.460 by submitting the application required by Section 225.470.
- b) Notwithstanding subsection (a) of this Section, a project sponsor with a CAIR NO<sub>x</sub> 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 the CASA and then is subsequently found to have been out of compliance with this Subpart for the applicable control period or

periods, the project sponsor must restore the CAIR NO<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 after receipt of an Agency notice that NO<sub>x</sub> allowances must be restored. These allowances will be assigned to the fund from which they were distributed.

- c) CAIR NO<sub>x</sub> allowances from the CASA will be allocated in accordance with the procedures in Section 225.475.
- d) The project sponsor may submit an application that aggregates two or more projects under a CASA project category that would individually result in less than one allowance, but that equal at a minimum one whole allowance when aggregated.

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

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

- a) Energy efficiency and conservation project means any of the following projects implemented and located in Illinois:
  - 1) Demand side management projects that reduce overall power demand by using less energy include:
    - A) Smart building management software that more efficiently regulates power flows.
    - B) The use of or replacement to high efficiency motors, pumps, compressors, or steam systems.
    - C) Lighting retrofits.
  - 2) Energy efficient new building construction projects include:
    - A) ENERGY STAR-qualified new home projects.
    - B) Measures to reduce or conserve energy consumption beyond the requirements of the Illinois Energy Conservation Code for Commercial Buildings [20 ILCS 687/6-3].
    - C) New residential construction projects that qualify for Energy Efficient Tax Incentives pursuant to the Energy Policy Act of 2005 (42 USC 15801 (2005)).

- 3) Supply-side energy efficiency projects include projects implemented to improve the efficiency in electricity generation by coal-fired power plants and the efficiency of electrical transmission and distribution systems.
  - 4) Highly efficient power generation projects, such as, but not limited to, combined cycle projects, combined heat and power, and microturbines. To be considered a highly efficient power generation project pursuant to this subsection (a)(4), a project must meet the following applicable thresholds and criteria:
    - A) For combined heat and power projects generating both electricity and useful thermal energy for space, water, or industrial process heat, a rated-energy efficiency of at least 60 percent; the project shall not be a CAIR NO<sub>x</sub> unit.
    - B) For combined cycle projects rated at greater than 0.50 MW, a rated-energy efficiency of at least 50 percent.
    - C) For microturbine projects rated at or below 0.50 MW and all other projects, a rated-energy efficiency of at least 40 percent.
- b) Renewable energy project means any of the following projects implemented and located in Illinois:
- 1) Zero-emission electric generating projects, including wind, solar (thermal or photovoltaic), and hydropower projects. Eligible hydropower plants are restricted to new generators that are not replacements of existing generators, that commenced operation on or after January 1, 2006, and that do not involve the significant expansion of an existing dam or the construction of a new dam.
  - 2) Renewable energy units are those units that generate electricity using more than 50 percent of the heat input, on an annual basis, from dedicated crops grown for energy production or the capture systems for methane gas from landfills, water treatment plants or sewage treatment plants, and organic waste biomass, and other similar sources of non-fossil fuel energy. Renewable energy projects do not include energy from incineration by burning or heating of waste wood, tires, garbage, general household waste, institutional lunchroom waste, office waste, landscape waste, or construction or demolition debris.

- c) Clean technology project for reducing emissions from producing electricity and useful thermal energy means any of the following projects implemented and located in Illinois:
- 1) Air pollution control equipment upgrades at existing coal-fired EGUs, as follows: installation of flue gas desulfurization (FGD) for control of SO<sub>2</sub> emissions; installation of a baghouse for control of particulate matter emissions; and installation of selective catalytic reduction (SCR), selective non-catalytic reduction (SNCR), or other add-on control devices for control of NO<sub>x</sub> emissions. For this purpose, a unit will be considered "existing" after it has been in commercial operation for at least eight years. Air pollution control upgrade projects do not include the addition of low NO<sub>x</sub> burners, overfired air techniques or gas reburning techniques for control of NO<sub>x</sub> emissions; projects involving flue gas conditioning techniques or upgrades, or replacement of electrostatic precipitators; or addition of an activated carbon injection or other sorbent injection system for control of mercury.
  - 2) Clean coal technologies projects include:
    - A) Integrated gasification combined cycle (IGCC) plants.
    - B) Fluidized bed coal combustion that commenced operation prior to December 31, 2006.
- d) In addition to those projects excluded in subsections (a) through (c) of this Section, the following projects are also not energy efficiency and conservation, renewable energy, or clean technology projects:
- 1) Nuclear power projects.
  - 2) Projects required to meet emission standards or technology requirements under State or federal law or regulation, except that allowances may be allocated for:
    - A) The installation of a baghouse.
    - B) Projects undertaken pursuant to Section 225.233 or Subpart F.
  - 3) Projects used to meet the requirements of a court order or consent decree, except that allowances may be allocated for:
    - A) Emission rates or limits achieved that are lower than what is required to meet the emission rates or limits for SO<sub>2</sub> or NO<sub>x</sub>, or for

installing a baghouse as provided for in a court order or consent decree entered into before May 30, 2006.

- B) Projects used to meet the requirements of a court order or consent decree entered into on or after May 30, 2006, if the court order or consent decree does not specifically preclude such allocations.
- 4) A Supplemental Environmental Project (SEP).
- e) Applications for projects implemented and located in Illinois that are not specifically listed in subsections (a) through (c) of this Section, and that are not specifically excluded by definition in subsections (a) through (c) of this Section or by specific exclusion in subsection (d) of this Section, may be submitted to the Agency. The application must designate which category or categories from those listed in subsections (a)(1) through (c)(2)(B) of this Section best fit the proposed project and the applicable formula pursuant to Section 225.465(b) to calculate the number of allowances that it is requesting. The Agency will determine whether the application is approvable based on a sufficient demonstration by the project sponsor that the project is a new type of energy efficiency, renewable energy, or clean technology project, similar in its effects as the projects specifically listed in subsections (a) through (c)(2)(B) of this Section.
- f) Early adopter projects include projects that meet the criteria for any energy efficiency and conservation, renewable energy, or clean technology projects listed in subsections (a), (b), (c), and (e) of this Section and commence construction between July 1, 2006 and December 31, 2012.

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

**Section 225.465 Clean Air Set-Aside (CASA) Allowances**

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

	Phase I (2009-2014)	Phase II (2015 and thereafter)
1) Energy Efficiency and Conservation/Renewable Energy	9149	7625
2) Air Pollution Control Equipment Upgrades	3811	3175
3) Clean Coal Technology	4573	3810
4) Early Adopters	1525	1271

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

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

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

Where:

A = The number of allowances for a particular project.

MWh<sub>c</sub> = The number of megawatt hours of electricity conserved or generated during a control period by a project.

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

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

Where:

A = The number of allowances for a particular project

MWh<sub>g</sub> = The number of megawatt hours of electricity generated during a control period by a project.

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

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

Where:

A = The number of allowances for a particular project.

MWh<sub>g</sub> = The number of MW hours of electricity generated during a control period by a project.

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

- A) For NO<sub>x</sub> or SO<sub>2</sub> control projects, by determining the difference in emitted NO<sub>x</sub> or SO<sub>2</sub> per control period using the emission rate before and after replacement or improvement, and the following formula:

$$A = (\text{MWh}_g) \times K \times (\text{ER}_B \text{ lb/MWh} - \text{ER}_A \text{ lb/MWh}) / 2000 \text{ lb}$$

Where:

- A = The number of allowances for a particular project.
- MWh<sub>g</sub> = The number of megawatt hours of electricity generated during a control period by a project.
- K = The pollutant factor: for NO<sub>x</sub>, K= 0.1; and for SO<sub>2</sub>, K = 0.05.
- ER<sub>B</sub> = Average NO<sub>x</sub> or SO<sub>2</sub> emission rate based on CEMS data from the most recent two control periods prior to the replacement or improvement of the control equipment in lb/MWh, unless subject to a court order or consent decree. For units subject to a court order or consent decree entered into before May 30, 2006, ER<sub>B</sub> is limited to emission rates that are lower than the emission rate required in the consent decree or court order. For a court order or consent decree entered into after May 30, 2006, ER<sub>B</sub> is limited to the lesser of the emission rate specified in the court order or consent decree or the actual average emission rate during the control period. If such limit is not expressed in lb/MWh, the limit must be converted into lb/MWh using a heat rate of 10 mmBtu/1 MW.
- ER<sub>A</sub> = Annual NO<sub>x</sub> or SO<sub>2</sub> average emission rate for the applicable control period data based on CEMS data in lb/MWh.

- B) For a baghouse project:

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

Where:

- A = The number of allowances for a particular project.

MWh<sub>g</sub> = The number of MWh of electricity generated during a control period or the portion of a control period that the units were controlled by the baghouse.

Q =

- If a baghouse was not installed pursuant to a consent decree or court order, 0.2.
- If a baghouse was installed pursuant to a consent decree or court order that assigns a Q factor, the factor established in the consent decree or court order but must not exceed a factor of 0.2.
- If a baghouse was installed pursuant to a consent decree or court order that does not assign a Q factor, then Q shall equal:  
 $Q = 0.25 - (P \times ER_q)$

Where:

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

ER<sub>q</sub> = The magnitude of the most recent control period's average PM emission rate in lb/MWh exiting the baghouse, subject to the following limits:

If P = 1.0, then  $1/10 \leq ER_q \leq 2/10$

If P = 1.1, then  $1/11 \leq ER_q \leq 2/11$

- If the ER<sub>q</sub> is less than the lower limit, the lower limit shall be used.
- If ER<sub>q</sub> is greater than the upper limit, the upper limit shall be used.
- If ER<sub>q</sub> is not expressed in lb/MWh, the number must be converted to lb/MWh using a heat rate of 10 mmBtu/1 MW.

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

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

electricity the project generates during a control period and the following formula:

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

Where:

- A = The number of allowances for a particular project.
- MWh<sub>g</sub> = The number of megawatt hours of electricity generated during a control period by a project.
- ER = Annual average NO<sub>x</sub> emission rate based on CEMS data in lb/MWh.

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

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

Where:

- A = The number of allowances for a particular project.
- MWh<sub>g</sub> = The number of gross MWh of electricity generated during a control period by a project.
- ER = Average NO<sub>x</sub> emission rate for the control period based on CEMS data in lb/MWh.

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

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

Where:

- A = The number of allowances for a particular project as determined in subsections (b)(1) through (b)(5) of this Section.
- A<sub>i</sub> = The number of allowances as determined in subsection (b)(1), (b)(2), (b)(3), (b)(4) or (b)(5) of this Section for a given project.

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

### **Section 225.470 Clean Air Set-Aside (CASA) Applications**

- a) A project sponsor may request allowances if the project commenced construction on or after the dates listed in this subsection. The project sponsor may request and be allocated allowances from more than one CASA category for a project, if applicable.
  - 1) Demand side management, energy efficient new construction, and supply side energy efficiency and conservation projects that commenced construction on or after January 1, 2003;
  - 2) Fluidized bed coal combustion projects, highly efficient power generation operations projects, or renewable energy emission units that commenced construction on or after January 1, 2001; and
  - 3) All other projects on or after July 1, 2006.
- b) Beginning with the 2009 control period and each control period thereafter, a project sponsor may request allowances from the CASA. The application must be submitted to the Agency by May 1 of the control period for which the allowances are being requested.
- c) The allocation will be based on the electricity conserved or generated in the control period preceding the calendar year in which the application is submitted. To apply for a CAIR NO<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 names of the principals or corporate officials.
  - 2) The number of the CAIR NO<sub>x</sub> general or compliance account for the project and the name of the associated CAIR account representative.
  - 3) A description of the project or projects, location, the role of the project sponsor in the projects, and a general explanation of how the amount of energy conserved or generated was measured, verified, and calculated, and the number of allowances requested with the supporting calculations. The number of allowances requested will be calculated using the applicable formula from Section 225.470(b).

- 4) Detailed information to support the request for allowances, including the following types of documentation for the measurement and verification of the NO<sub>x</sub> emissions reductions, electricity generated, or electricity conserved using established measurement verification procedures, as applicable. The measurement and verification required will depend on the type of project proposed.
  - A) As applicable, documentation of the project's base and control period conditions and resultant base and control period energy data, using the procedures and methods included in M&V Guidelines: Measurement and Verification for Federal Energy Projects, incorporated by reference in Section 225.140, or other method approved by the Agency. Examples include:
    - i) Energy consumption and demand profiles;
    - ii) Occupancy type;
    - iii) Density and periods;
    - iv) Space conditions or plant throughput for each operating period and season (for example, in a building this would include the light level and color, space temperature, humidity and ventilation);
    - v) Equipment inventory, nameplate data, location, and condition; and
    - vi) Equipment operating practices (schedules and set points, actual temperatures/pressures);
  - B) Emissions data, including, if applicable, CEMS data;
  - C) Information for rated-energy efficiency, including supporting documentation and calculations; and
  - D) Electricity, in MWh generated or conserved for the applicable control period.
- 5) Notwithstanding the requirements of subsection (c)(4) of this Section, applications for fewer than five allowances may propose other reliable and applicable methods of quantification acceptable to the Agency.

- 6) Any additional information requested by the Agency to determine the correctness of the requested number of allowances, including site information, project specifications, supporting calculations, operating procedures, and maintenance procedures.
- 7) The following certification by the responsible official for the project sponsor and the applicable CAIR account representative for the project:

"I am authorized to make this submission on behalf of the project sponsor and the holder of the CAIR NO<sub>x</sub> general account or compliance account for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this application and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information."
- d) A project sponsor may request allowances from the CASA for each project for a total number of control periods not to exceed the number of control periods listed in this subsection. After a project has been allocated allowances from the CASA, subsequent requests for the project from the project sponsor must include the information required by subsections (c)(1), (c)(2), (c)(3) and (c)(7) of this Section, a description of any changes or further improvements made to the project, and information specified in subsections (c)(5) and (c)(6) as specifically requested by the Agency.
  - 1) For energy efficiency and conservation projects (except for efficient operation and renewable energy projects), for a total of eight control periods.
  - 2) For early adopter projects, for a total of ten control periods.
  - 3) For air pollution control equipment upgrades, for a total of 15 control periods.
  - 4) For renewable energy projects, clean coal technology, and highly efficient power generation projects, for each year that the project is in operation.
- e) A project sponsor must keep copies of all CASA applications and the documentation used to support the application for at least five years.

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

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

- a) By September 1, 2009 and each September 1 thereafter, the Agency will determine the total number of allowances that are approvable for allocation to project sponsors based upon the applications submitted pursuant to Section 225.470.
  - 1) The Agency will determine the number of CAIR NO<sub>x</sub> allowances that are approvable based on the formulas and the criteria for these projects. The Agency will notify a project sponsor within 90 days after receipt of an application if the project is not approvable, the number of allowances requested is not approvable, or additional information is needed by the Agency to complete its review of the application.
  - 2) If the total number of CAIR NO<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 will 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 will be allocated on a pro-rata basis based on the number of allowances available, subject to further adjustment as provided for by subsection (b) of this Section. CAIR NO<sub>x</sub> allowances will be allocated, transferred, or used as whole allowances. The number of whole allowances will be determined by rounding down for decimals less than 0.5 and rounding up for decimals of 0.5 or greater.
- b) For control periods 2011 and thereafter:
  - 1) If there are, after the completion of the procedures in subsection (a) of this Section for a control period, any CAIR NO<sub>x</sub> allowances not allocated to a CASA project for the control period, the remaining allowances will accrue in each CASA project category up to twice the number of allowances that are assigned to the project category for each control period as set forth in Section 225.465.
  - 2) If any allowances remain after allocations pursuant to subsection (b)(1) of this Section, the Agency will allocate these allowances pro rata to projects that received fewer allowances than requested, based on the number of allowances not allocated but approved by the Agency for the project under CASA. No project may be allocated more allowances than approved by the Agency for the applicable control period.

- 3) If any allowances remain after the allocation of allowances pursuant to subsection (b)(2) of this Section, the Agency will then distribute pro-rata the remaining allowances to project categories that have fewer than twice the number of allowances assigned to that project category. The pro-rata distribution will be based on the difference between two times the project category and the number of allowances that remain in the project category.
- 4) If allowances still remain undistributed after the allocations and distributions in subsections (b)(1) through (b)(3) are completed, the Agency may elect to retire the CAIR NO<sub>x</sub> allowances that have not been distributed to any CASA category to continue progress toward attainment or maintenance of the National Ambient Air Quality Standards pursuant to the CAA.

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

### **Section 225.480 Compliance Supplement Pool**

In addition to the CAIR NO<sub>x</sub> allowances allocated pursuant to Section 225.425, the USEPA has allowed allocation of an additional 11,299 CAIR NO<sub>x</sub> allowances in Illinois as a compliance supplement pool to Illinois for the control period in 2009. However, for the purposes of public health and air quality improvements, none of these allowances will be allocated.

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

## **SUBPART E: CAIR NO<sub>x</sub> OZONE SEASON TRADING PROGRAM**

### **Section 225.500 Purpose**

The purpose of this Subpart E is to control the seasonal emissions of nitrogen oxides (NO<sub>x</sub>) from EGUs by determining allocations and implementing the CAIR NO<sub>x</sub> Ozone Season Trading Program.

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

### **Section 225.505 Applicability**

- a) Except as provided in subsections (b)(1), (b)(3), and (b)(4) of this Section:
  - 1) The following units are CAIR NO<sub>x</sub> Ozone Season units, and any source that includes one or more such units is a CAIR NO<sub>x</sub> source subject to the requirements of this Subpart E: any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time since

the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.

- 2) If a stationary boiler or stationary combustion turbine that, pursuant to subsection (a)(1) of this Section, is not a CAIR NO<sub>x</sub> Ozone Season unit begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25 MWe producing electricity for sale, the unit will become a CAIR NO<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 serves such generator.
- b) The units that meet the requirements set forth in subsections (b)(1), (b)(3), and (b)(4) of this Section will not be CAIR NO<sub>x</sub> Ozone Season units and units that meet the requirements of subsections (b)(2) and (b)(5) of this Section are CAIR NO<sub>x</sub> Ozone Season units:
- 1) Any unit that would otherwise be classified as a CAIR NO<sub>x</sub> Ozone Season unit pursuant to subsection (a)(1) or (a)(2) of this Section and:
    - A) Qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit; and
    - B) Does not serve at any time, since the later of November 15, 1990 or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe supplying any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution for sale.
  - 2) If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and meets the requirements of subsection (b)(1) of this Section for at least one calendar year, but subsequently no longer meets all such requirements, the unit shall become a CAIR NO<sub>x</sub> Ozone Season unit starting on the earlier of January 1 after the first calendar year during which the unit no longer qualifies as a cogeneration unit or January 1 after the first calendar year during which the unit no longer meets the requirements of subsection (b)(1)(B) of this Section.
  - 3) Any unit that would otherwise be classified as a CAIR NO<sub>x</sub> Ozone Season unit pursuant to subsection (a)(1) or (a)(2) of this Section commencing operation before January 1, 1985 and:

- A) Qualifies as a solid waste incineration unit; and
  - B) Has an average annual fuel consumption of non-fossil fuel for 1985-1987 exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).
- 4) Any unit that would otherwise be classified as a CAIR NO<sub>x</sub> Ozone Season unit under subsection (a)(1) or (a)(2) of this Section commencing operation on or after January 1, 1985 and:
- A) Qualifies as a solid waste incineration unit; and
  - B) Has an average annual fuel consumption of non-fossil fuel the first three years of operation exceeding 80 percent (on a Btu basis) and an average annual fuel consumption of non-fossil fuel for any three consecutive calendar years after 1990 exceeding 80 percent (on a Btu basis).
- 5) If a unit qualifies as a solid waste incineration unit and meets the requirements of subsection (b)(3) or (b)(4) of this Section for at least three consecutive years, but subsequently no longer meets all such requirements, the unit shall become a CAIR NO<sub>x</sub> Ozone Season unit starting on the earlier of January 1 after the first three consecutive calendar years after 1990 for which the unit has an average annual fuel consumption of 20 percent or more.

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

### **Section 225.510 Compliance Requirements**

- a) The designated representative of a CAIR NO<sub>x</sub> Ozone Season unit must comply with the requirements of the CAIR NO<sub>x</sub> Ozone Season Trading Program for Illinois as set forth in this Subpart E and 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); as incorporated by reference in Section 225.140.

- b) Permit requirements:
- 1) The designated representative of each source with one or more CAIR NO<sub>x</sub> Ozone Season units at the source must apply for a permit issued by the Agency with federally enforceable conditions covering the CAIR NO<sub>x</sub> Ozone Season Trading Program ("CAIR permit") that complies with the requirements of Section 225.520 (Permit Requirements).
  - 2) The owner or operator of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source must operate the CAIR NO<sub>x</sub> Ozone Season unit in compliance with its CAIR permit.
- c) Monitoring requirements:
- 1) The owner or operator of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source must comply with the monitoring, reporting and recordkeeping requirements of 40 CFR 96, subpart HHHH; 40 CFR 75; and Section 225.550. The CAIR designated representative of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source must comply with those sections of the monitoring, reporting and recordkeeping requirements of 40 CFR 96, subpart HHHH, applicable to a CAIR designated representative.
  - 2) The compliance of each CAIR NO<sub>x</sub> Ozone Season source with the CAIR NO<sub>x</sub> Ozone Season emissions limitation pursuant to subsection (d) of this Section will be determined by the emissions measurements recorded and reported in accordance with 40 CFR 96, subpart HHHH.
- d) Emission requirements:
- 1) By the allowance transfer deadline, midnight of November 30, 2009, and by midnight of November 30 of each subsequent year if November 30 is a business day, the owner or operator of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source must hold allowances available for compliance deductions pursuant to 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 means by midnight of the first business day thereafter. The number of allowances held on the allowance transfer deadline may not be less than the tons of NO<sub>x</sub> emissions for the control period from all CAIR NO<sub>x</sub> Ozone Season units at the CAIR NO<sub>x</sub> Ozone Season source, as determined in accordance with 40 CFR 96, subpart HHHH.
  - 2) Each ton of excess emissions of a CAIR NO<sub>x</sub> Ozone Season source for

each day in a control period, starting in 2009 will constitute a separate violation of this Subpart E, the Act, and the CAA.

- 3) Each CAIR NO<sub>x</sub> Ozone Season unit will be subject to the requirements of subsection (d)(1) of this Section for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitoring certification requirements pursuant to 40 CFR 96.370(b)(1), (b)(2) or (b)(3) and for each control period thereafter.
  - 4) CAIR NO<sub>x</sub> Ozone Season allowances must be held in, deducted from, or transferred into or among allowance accounts in accordance with this Subpart and 40 CFR 96, subparts FFFF and GGGG.
  - 5) In order to comply with the requirements of subsection (d)(1) of this Section, a CAIR NO<sub>x</sub> Ozone Season allowance may not be deducted for compliance according to subsection (d)(1) of this Section for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> Ozone Season allowance is allocated.
  - 6) A CAIR NO<sub>x</sub> Ozone Season allowance is a limited authorization to emit one ton of NO<sub>x</sub> in accordance with the CAIR NO<sub>x</sub> Ozone Season Trading Program. No provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.305, and no provision of law, will be construed to limit the authority of the United States or the State to terminate or limit this authorization.
  - 7) A CAIR NO<sub>x</sub> Ozone Season allowance does not constitute a property right.
  - 8) Upon recordation by USEPA pursuant to 40 CFR 96, subpart FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season allowance to or from a CAIR NO<sub>x</sub> Ozone Season source compliance account is deemed to amend automatically, and become a part of, any CAIR permit of the CAIR NO<sub>x</sub> Ozone Season source. This automatic amendment of the CAIR permit will be deemed an operation of law and will not require any further review.
- e) Recordkeeping and reporting requirements:
- 1) Unless otherwise provided, the owner or operator of the CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source must keep on site at the source each of the documents listed in subsections (e)(1)(A) through (e)(1)(E) of this Section for a period of five years from

the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Agency or USEPA.

- A) The certificate of representation for the CAIR designated representative for the source and each CAIR NO<sub>x</sub> Ozone Season unit at the source, all documents that demonstrate the truth of the statements in the certificate of representation, provided that the certificate and documents must be retained on site at the source beyond such five-year period until the documents are superseded because of the submission of a new certificate of representation, pursuant to 40 CFR 96.313, changing the CAIR designated representative.
  - B) All emissions monitoring information, in accordance with 40 CFR 96, subpart HHHH.
  - C) Copies of all reports, compliance certifications, and other submissions and all records made or required pursuant to the CAIR NO<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 E.
  - D) Copies of all documents used to complete a CAIR permit application and any other submission or documents used to demonstrate compliance pursuant to the CAIR 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.
- 2) The CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source must submit to the Agency and USEPA the reports and compliance certifications required pursuant to the CAIR NO<sub>x</sub> Ozone Season Trading Program, including those pursuant to 40 CFR 96, subpart HHHH and Section 225.550.
- f) Liability:
- 1) No revision of a permit for a CAIR NO<sub>x</sub> Ozone Season unit may excuse any violation of the requirements of this Subpart E or the requirements of the CAIR NO<sub>x</sub> Ozone Season Trading Program.

- 2) Each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit must meet the requirements of the CAIR NO<sub>x</sub> Ozone Season Trading Program.
  - 3) Any provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program that applies to a CAIR NO<sub>x</sub> Ozone Season source (including any provision applicable to the CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season source) will also apply to the owner and operator of the CAIR NO<sub>x</sub> Ozone Season source and to the owner and operator of each CAIR NO<sub>x</sub> Ozone Season unit at the source.
  - 4) Any provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program that applies to a CAIR NO<sub>x</sub> Ozone Season unit (including any provision applicable to the CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season unit) will also apply to the owner and operator of the CAIR NO<sub>x</sub> Ozone Season unit.
  - 5) The CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season unit that has excess emissions in any control period must surrender the allowances as required for deduction pursuant to 40 CFR 96.354(d)(1).
  - 6) The owner or operator of a CAIR NO<sub>x</sub> Ozone Season unit that has excess NO<sub>x</sub> emissions in any control period must pay any fine, penalty, or assessment or comply with any other remedy imposed pursuant to the Act and 40 CFR 96.354(d)(2).
- g) Effect on other authorities: No provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program, a CAIR permit application, a CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.305 will be construed as exempting or excluding the owner and operator and, to the extent applicable, the CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season source or a CAIR NO<sub>x</sub> Ozone Season unit from compliance with any other regulation promulgated pursuant to the CAA, the Act, any State regulation or permit, or a federally enforceable permit.

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

### **Section 225.515 Appeal Procedures**

The appeal procedures for decisions of USEPA pursuant to the CAIR NO<sub>x</sub> Ozone Season Trading Program are set forth in 40 CFR 78, as incorporated by reference in Section 225.140.

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

## Section 225.520 Permit Requirements

- a) Permit requirements:
  - 1) The owner or operator of each source with a CAIR NO<sub>x</sub> Ozone Season unit is required to submit:
    - A) A complete permit application addressing all applicable CAIR NO<sub>x</sub> Ozone Season Trading Program requirements for a permit meeting the requirements of this Section, applicable to each CAIR NO<sub>x</sub> Ozone Season unit at the source. Each CAIR permit must contain elements required for a complete CAIR permit application pursuant to subsection (b)(2) of this Section.
    - B) Any supplemental information that the Agency determines necessary in order to review a CAIR permit application and issue any CAIR permit.
  - 2) Each CAIR permit will be issued pursuant to Section 39 and 39.5 of the Act and will contain federally enforceable conditions addressing all applicable CAIR NO<sub>x</sub> Ozone Season Trading Program requirements and will be a complete and segregable portion of the source's entire permit pursuant to subsection (a)(1) of this Section.
  - 3) No CAIR permit may be issued until the Agency and USEPA have received a complete certificate of representation for a CAIR designated representative pursuant to 40 CFR 96, subpart BBBB, for the CAIR NO<sub>x</sub> Ozone Season source and the CAIR NO<sub>x</sub> Ozone Season unit at the source.
  - 4) For all CAIR NO<sub>x</sub> Ozone Season units that commenced operation before December 31, 2007, the owner or operator of the unit must submit a CAIR permit application meeting the requirements of this Section on or before December 31, 2007.
  - 5) For all units that commence operation on or after December 31, 2007, the owner or operator of these units must submit applications for construction and operating permits pursuant to the requirements of Sections 39 and 39.5 of the Act, as applicable, and 35 Ill. Adm. Code 201, and the applications must specify that they are applying for CAIR permits and must address the CAIR permit application requirements of this Section.
- b) Permit applications:
  - 1) Duty to apply: The owner or operator of any source with one or more

CAIR NO<sub>x</sub> Ozone Season units must submit to the Agency a CAIR permit application for the source covering each CAIR NO<sub>x</sub> Ozone Season unit pursuant to subsection (b)(2) of this Section by the applicable deadline in subsection (a)(4) or (a)(5) of this Section. The owner or operator of any source with one or more CAIR NO<sub>x</sub> Ozone Season units must reapply for a CAIR permit for the source as required by this Subpart, 35 Ill. Adm. Code 201, and, as applicable, Sections 39 and 39.5 of the Act.

- 2) Information requirements for CAIR permit applications: A complete CAIR permit application must include the following elements concerning the source for which the application is submitted:
    - A) Identification of the source, including plant name. The ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the Energy Information Administration must also be included, if applicable;
    - B) Identification of each CAIR NO<sub>x</sub> Ozone Season unit at the source; and
    - C) The compliance requirements applicable to each CAIR NO<sub>x</sub> Ozone Season unit as set forth in Section 225.510.
  - 3) An application for a CAIR permit will be treated as a modification of the CAIR NO<sub>x</sub> Ozone Season source's existing federally enforceable permit, if such a permit has been issued for that source, and will be subject to the same procedural requirements. When the Agency issues a CAIR permit pursuant to the requirements of this Section, it will be incorporated into and become part of that source's existing federally enforceable permit.
- c) Permit content: Each CAIR permit is deemed to incorporate automatically the definitions and terms specified in Section 225.130 and 40 CFR 96.302, as incorporated by reference in Section 225.140, and, upon recordation of USEPA under 40 CFR 96, subparts FFFF and GGGG, as incorporated by reference in Section 225.140, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season allowance to or from the compliance account of the CAIR NO<sub>x</sub> Ozone Season source covered by the permit.

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

### **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 will 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 set-asides, the NUSA and the CASA. Five percent of the budget will be allocated to the NUSA and 25 percent will be allocated to the CASA, resulting in a CAIR NO<sub>x</sub> Ozone Season Trading budget available for allocation of 21,491 tons per control period pursuant to Section 225.540. The requirements of the NUSA are set forth in Section 225.545, and the requirements of the CASA are set forth in Sections 225.555 through 225.570.
- b) The total base CAIR NO<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 set-asides, the NUSA and the CASA. Five percent of the budget will be allocated to the NUSA and 25 percent will be allocated to the CASA, resulting in a CAIR NO<sub>x</sub> Ozone Season Trading budget available for allocation of 20,287 tons per control period pursuant to Section 225.540.
- c) If USEPA adjusts the total base CAIR NO<sub>x</sub> Ozone Season Trading budget for any reason, the Agency will adjust the base CAIR NO<sub>x</sub> Ozone Season Trading budget and the CAIR NO<sub>x</sub> Ozone Season Trading budget available for allocation, accordingly.

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

### **Section 225.530 Timing for Ozone Season Allocations**

- a) On or before September 25, 2007, the Agency will submit to USEPA the CAIR NO<sub>x</sub> Ozone Season allowance allocations, in accordance with Sections 225.535 and 225.540, for the 2009, 2010, and 2011 control periods.
- b) By July 31, 2008 and July 31 of each year thereafter, the Agency will submit to USEPA the CAIR NO<sub>x</sub> Ozone Season allowance allocations in accordance with Sections 225.535 and 225.540, for the control period four years after the year of the applicable deadline for submission pursuant to this Section. For example, on July 31, 2008, the Agency will submit to USEPA the allocation for the 2012 control period.
- c) For CAIR NO<sub>x</sub> Ozone Season units that commence commercial operation on or after May 1, 2006, that have not been allocated allowances under Section 225.440 for the applicable or any preceding control period, the Agency will allocate allowances from the NUSA in accordance with Section 225.545. The Agency will report these allocations to USEPA by July 31 of the applicable control period. For example, on July 31, 2009, the Agency will submit to USEPA the allocations from the NUSA for the 2009 control period.

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

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

### **Section 225.535 Methodology for Calculating Ozone Season Allocations**

The Agency will calculate converted gross electrical output (CGO), in MWh, for each CAIR NO<sub>x</sub> Ozone Season unit that has operated during at least one control period prior to the calendar year in which the Agency reports the allocations to USEPA as follows:

- a) For control periods 2009, 2010, and 2011, the owner or operator of the unit must submit in writing to the Agency, by September 15, 2007, a statement that either gross electrical output data or heat input data is to be used to calculate converted gross electrical output. The data shall be used to calculate converted gross electrical output pursuant to either subsection (a)(1) or (a)(2) of this Section:
- 1) Gross electrical output: If the unit has four or five control periods of data, then the gross electrical output (GO) will be the average of the unit's three highest gross electrical outputs from the 2001, 2002, 2003, 2004, or 2005 control periods. If the unit has three or fewer control periods of gross electrical outputs, the gross electrical output will be the average of those control periods for which data is available. If a generator is served by two or more units, then the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of these units for the control period. The unit's converted gross electrical output will be calculated as follows:
    - A) If the unit is coal-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 1.0;$
    - B) If the unit is oil-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 0.6;$  or
    - C) If the unit is neither coal-fired nor oil-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 0.4.$
  - 2) Heat input (HI): If the unit has four or five control periods of data, the average of the unit's three highest control period heat inputs from 2001,

2002, 2003, 2004, or 2005 will be used. If the unit has three or fewer control periods of heat input data, the heat input will be the average of those control periods for which data is available. The unit's converted gross electrical output will be calculated as follows:

- A) If the unit is coal-fired:  
CGO (in MWh) = HI (in mmBtu)  $\times$  0.0967;
- B) If the unit is oil-fired:  
CGO (in MWh) = HI (in mmBtu)  $\times$  0.0580; or
- C) If the unit is neither coal-fired nor oil-fired:  
CGO (in MWh) = HI (in mmBtu)  $\times$  0.0387.

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

1) Gross electrical output: The average of the unit's two most recent years of control period gross electrical output, if available. If a unit commences commercial operation in the 2007 control period and does not have gross electrical output for the 2006 control period, the gross electrical output from the 2007 control period will be used. If a generator is served by two or more units, the gross electrical output of the generator shall be attributed to each unit in proportion to the unit's share of the total control period heat input of such units for the control period. The unit's converted gross electrical output shall be calculated as follows:

- A) If the unit is coal-fired:  
CGO (in MWh) = GO(in MWh)  $\times$  1.0;
- B) If the unit is oil-fired:  
CGO (in MWh) = GO(in MWh)  $\times$  0.6;
- C) If the unit is neither coal-fired nor oil-fired:  
CGO (in MWh) = GO(in MWh)  $\times$  0.4.

2) Heat input: The average of the unit's two most recent years of control period heat inputs, e.g., for the 2012 control period, the average of the unit's heat input from the 2006 and 2007 control periods. The unit's converted gross electrical output shall be calculated as follows:

- A) If the unit is coal-fired:  
 $CGO \text{ (in MWh)} = HI \text{ (in mmBtu)} \times 0.0967$ ;
- B) If the unit is oil-fired:  
 $CGO \text{ (in MWh)} = HI \text{ (in mmBtu)} \times 0.0580$ ; or
- C) If the unit is neither coal-fired nor oil-fired:  
 $CGO \text{ (in MWh)} = HI \text{ (in mmBtu)} \times 0.0387$ .
- c) For control period 2014 and thereafter, the unit's gross electrical output will be the average of the unit's two most recent control period's gross electrical output, if available. If a unit commences commercial operation in the most recent control period and does not have gross electrical output from the most recent control period, e.g. if the unit commences commercial operation in the 2009 control period and does not have gross electrical output from the 2008 control period, gross electrical output from the 2009 control period will be used. If a generator is served by two or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of these units for the control period. The unit's converted gross electrical output will be calculated as follows:
- 1) If the unit is coal-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 1.0$ ;
- 2) If the unit is oil-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 0.6$ ; or
- 3) If the unit is neither coal-fired nor oil-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 0.4$ .
- d) For a unit that is a combustion turbine or boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the Agency will add the converted gross electrical output calculated for electricity pursuant to subsection (a), (b), or (c) of this Section to the converted useful thermal energy (CUTE) to determine the total converted gross electrical output for the unit (TCGO). The Agency will determine the converted useful thermal energy by using the average of the unit's control period useful thermal energy for the prior two control periods, if available. In the first control period for which the unit is considered to be an existing unit rather than a new unit, the unit's control period useful thermal output for the prior year will be used. The converted useful thermal energy will be determined using the following equations:
- 1) If the unit is coal-fired:

CUTE (in MWh) = UTE (in mmBtu) × 0.2930;

- 2) If the unit is oil-fired:  
CUTE (in MWh) = UTE (in mmBtu) × 0.1758; or
  - 3) If the unit is neither coal-fired nor oil-fired:  
CUTE (in MWh) = UTE (in mmBtu) × 0.1172.
- e) The CAIR NO<sub>x</sub> Ozone Season unit's converted gross electrical output and converted useful thermal energy in subsections (a)(1), (b)(1), (c), and (d) of this Section for each control period will be based on the best available data reported or available to the Agency for the CAIR NO<sub>x</sub> Ozone Season unit pursuant to the provisions of Section 225.550.
  - f) The CAIR NO<sub>x</sub> Ozone Season unit's heat input in subsections (a)(2) and (b)(2) of this Section for each control period will be determined in accordance with 40 CFR 75, as incorporated by reference in Section 225.140.

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

#### **Section 225.540 Ozone Season Allocations**

- a) For the 2009 control period, and each control period thereafter, the Agency will allocate, to all CAIR NO<sub>x</sub> Ozone Season units in Illinois for which the Agency has calculated the converted gross electrical output pursuant to Section 225.535(a), (b), or (c), or total converted gross electrical output pursuant to Section 225.535(d), as applicable, a total amount of CAIR NO<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 and, as adjusted to add allowances not allocated pursuant to subsection (b) of this Section in the previous year's allocation.
- b) The Agency will allocate CAIR NO<sub>x</sub> Ozone Season allowances to each CAIR NO<sub>x</sub> Ozone Season unit on a pro-rata basis using the unit's converted gross electrical output pursuant to Section 225.535(a), (b), or (c), or total converted gross electrical output calculated pursuant to Section 225.535(d), as applicable, to the extent whole allowances may be allocated. The Agency will retain any additional allowances beyond this allocation of whole allowances for allocation pursuant to subsection (a) of this Section in the next control period.

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

#### **Section 225.545 New Unit Set-Aside (NUSA)**

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

- a) Beginning with the 2009 control period and each control period thereafter, the Agency will establish a separate NUSA for each control period. Each NUSA will be allocated CAIR NO<sub>x</sub> Ozone Season allowances equal to five 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.
- b) The CAIR designated representative of a new CAIR NO<sub>x</sub> Ozone Season 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 fifth control period after the control period in which the unit commenced commercial operation. The NUSA allowance allocation request may only be submitted after a new unit has operated during one control period, and no later than March 1 of the control period for which allowances from the NUSA are being requested.
- c) In a NUSA allowance allocation request pursuant to subsection (b) of this Section, the CAIR designated representative must provide in its request information for gross electrical output and useful thermal energy, if any, for the new CAIR NO<sub>x</sub> Ozone Season unit for that control period.
- d) The Agency will allocate allowances from the NUSA to a new CAIR NO<sub>x</sub> Ozone Season unit using the following procedures:
  - 1) For each new CAIR NO<sub>x</sub> Ozone Season unit, the unit's gross electrical output for the most recent control period will be used to calculate the unit's gross electrical output. If a generator is served by two or more units, the gross electrical output of the generator will be attributed to each unit in proportion to the unit's share of the total control period heat input of these units for the control period. The new unit's converted gross electrical output will be calculated as follows:
    - A) If the unit is coal-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 1.0;$
    - B) If the unit is oil-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 0.6;$  or

C) If the unit is neither coal-fired nor oil-fired:  
 $CGO \text{ (in MWh)} = GO \text{ (in MWh)} \times 0.4.$

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

A) If the unit is coal-fired:  
 $CUTE \text{ (in MWh)} = UTE \text{ (in mmBtu)} \times 0.2930;$

B) If the unit is oil-fired:  
 $CUTE \text{ (in MWh)} = UTE \text{ (in mmBtu)} \times 0.1758; \text{ or}$

C) If the unit is neither coal-fired nor oil-fired:  
 $CUTE \text{ (in MWh)} = UTE \text{ (in mmBtu)} \times 0.1172.$

3) The gross electrical output and useful thermal energy in subsections (d)(1) and (d)(2) of this Section for each control period will be based on the best available data reported or available to the Agency for the CAIR NO<sub>x</sub> Ozone Season unit pursuant to the provisions of Section 225.550 .

4) The Agency will determine a unit's unprorated allocation ( $UA_y$ ) using the unit's converted gross electrical output plus the unit's converted useful thermal energy, if any, calculated in subsections (d)(1) and (d)(2) of this Section, converted to approximate NO<sub>x</sub> tons (the unit's unprorated allocation), as follows:

$$UA_y = \frac{NCGO_y \times (1.01 \text{ lbs/MWh})}{2000 \text{ lbs/ton}}$$

Where:

$UA_y$  = unprorated allocation to a new CAIR NO<sub>x</sub> Ozone Season unit.

$NCGO_y$  = Converted gross electrical output or total converted gross electrical output, as applicable, for a new CAIR NO<sub>x</sub> Ozone Season unit.

- 5) The Agency will allocate CAIR NO<sub>x</sub> Ozone Season allowances from the NUSA to new CAIR NO<sub>x</sub> Ozone Season units as follows:
- A) If the NUSA for the control period for which CAIR NO<sub>x</sub> Ozone Season allowances are requested has a number of allowances greater than or equal to the total unprorated allocations for all new units requesting allowances, the Agency will allocate the number of allowances using the unprorated allocation determined for that unit pursuant to subsection (d)(4) of this Section, to the extent that whole allowances may be allocated. For any additional allowances beyond this allocation of whole allowances, the Agency will retain the additional allowances in the NUSA for allocation pursuant to Section 225.545 in later control periods.
  - B) If the NUSA for the control period for which the allowances are requested has a number of CAIR NO<sub>x</sub> Ozone Season allowances less than the total unprorated allocation to all new CAIR NO<sub>x</sub> Ozone Season units requesting allocations, the Agency will allocate the available allowances for new CAIR NO<sub>x</sub> Ozone Season units on a pro-rata basis, using the unprorated allocation determined for that unit pursuant to subsection (d)(4) of this Section, to the extent that whole allowances may be allocated. For any additional allowances beyond this allocation of whole allowances, the Agency will retain the additional allowances in the NUSA for allocation pursuant to Section 225.545 in later control periods.
- e) The Agency will review each NUSA allowance allocation request pursuant to subsection (b) of this Section. The Agency will accept a NUSA allowance allocation request only if the request meets, or is adjusted by the Agency as necessary to meet, the requirements of this Section.
- f) By June 1 of the applicable control period, the Agency will notify each CAIR designated representative that submitted a NUSA allowance request of the amount of CAIR NO<sub>x</sub> Ozone Season allowances from the NUSA, if any, allocated for the control period to the new unit covered by the request.
- g) The Agency will allocate CAIR NO<sub>x</sub> Ozone Season allowances to new units from the NUSA no later than July 31 of the applicable control period.
- h) After a new CAIR NO<sub>x</sub> Ozone Season unit has operated in one control period, it becomes an existing unit for the purposes of calculating future allocations in Section 225.540 only, and the Agency will allocate CAIR NO<sub>x</sub> Ozone Season

allowances for that unit, for the control period commencing five control periods after the control period in which the unit commenced commercial operation, pursuant to Section 225.540. The new CAIR NO<sub>x</sub> Ozone Season unit will continue to receive CAIR NO<sub>x</sub> Ozone Season allowances from the NUSA according to this Section until the unit is eligible to use the CAIR NO<sub>x</sub> Ozone Season allowances allocated to the unit pursuant to Section 225.540.

- i) If, after the completion of the procedures in subsection (c) of this Section for a control period, any unallocated CAIR NO<sub>x</sub> Ozone Season allowances remain in the NUSA for the control period, the Agency will, at a minimum, accrue those CAIR NO<sub>x</sub> Ozone Season allowances for future control period allocations to new CAIR NO<sub>x</sub> Ozone Season 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 excess of 7,245 for the purposes of continued progress toward attainment and maintenance of National Ambient Air Quality Standards pursuant to the CAA.

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

#### **Section 225.550 Monitoring, Recordkeeping and Reporting Requirements for Gross Electrical Output and Useful Thermal Energy**

- a) By January 1, 2008, or by the date of commencing commercial operation, whichever is later, the owner or operator of the CAIR NO<sub>x</sub> Ozone Season unit must operate a system for accurately measuring gross electrical output that is consistent with the requirements of either 40 CFR 60 or 75; must measure gross electrical output in MWh using such a system; and must record the output of the measurement system at all times. If a generator is served by two or more units, the information to determine each unit's heat input for that control period must also be recorded, so as to allow each unit's share of the gross electrical output to be determined. If heat input data is used, the owner or operator must comply with the applicable provisions of 40 CFR 75, as incorporated by reference in Section 225.140.
- b) For a CAIR NO<sub>x</sub> Ozone Season unit that is a cogeneration unit, by January 1, 2008, or by the date the CAIR NO<sub>x</sub> Ozone Season unit commences to produce useful thermal energy, whichever is later, the owner or operator of the unit with cogeneration capabilities must install, calibrate, maintain, and operate meters for steam flow in lbs/hr, temperature in degrees Fahrenheit, and pressure in PSI, to measure and record the useful thermal energy that is produced, in mmBtu/hr, on a continuous basis. Owners and operators of a CAIR NO<sub>x</sub> Ozone Season unit that produces useful thermal energy but uses an energy transfer medium other than steam, e.g., hot water or glycol, must install, calibrate, maintain, and operate the necessary meters to measure and record the necessary data to express the useful thermal energy produced, in mmBtu/hr, on a continuous basis. If the CAIR NO<sub>x</sub>

Ozone Season unit ceases to produce useful thermal energy, the owner or operator may cease operation of the meters, provided that operation of such meters must be resumed if the CAIR NO<sub>x</sub> Ozone Season unit resumes production of useful thermal energy.

- c) The owner or operator of a CAIR NO<sub>x</sub> Ozone Season unit must either report gross electrical output data to the Agency or comply with the applicable provisions for providing heat input data to USEPA as follows:
  - 1) By September 15, 2007, the gross electrical output for control periods 2001, 2002, 2003, 2004 and 2005, if available, and the unit's useful thermal energy data, if applicable. If a generator is served by two or more units, the documentation needed to determine each unit's share of the heat input of such units for that control period must also be submitted. If heat input data is used, the owner or operator must comply with the applicable provisions of 40 CFR 75, as incorporated by reference in Section 225.140.
  - 2) By June 1, 2008, the gross electrical output for control periods 2006 and 2007, if available, and the unit's useful thermal energy data, if applicable. If a generator is served by two or more units, the documentation needed to determine each unit's share of the heat input of such units for that control period must also be submitted. If heat input data is used, the owner or operator must comply with the applicable provisions of 40 CFR 75, as incorporated by reference in Section 225.140.
- d) Beginning with 2008, the CAIR designated representative of the CAIR NO<sub>x</sub> Ozone Season unit must submit to the Agency quarterly, by no later than April 30, July 31, October 31, and January 31 of each year, information for the CAIR NO<sub>x</sub> Ozone Season unit's gross electrical output, on a monthly basis for the prior quarter, and, if applicable, the unit's useful thermal energy for each month.
- e) The owner or operator of a CAIR NO<sub>x</sub> Ozone Season unit must maintain on-site the monitoring plan detailing the monitoring system, maintenance of the monitoring system, including quality assurance activities pursuant to the requirements of 40 CFR 60 or 75, as applicable, including the appropriate provisions for the measurement of gross electrical output for the CAIR NO<sub>x</sub> Ozone Season Trading Program and, if applicable, for new units. The monitoring plan must include, but is not limited to:
  - 1) A description of the system to be used for the measurement of gross electrical output pursuant to Section 225.550(a), including a list of any data logging devices, solid-state kW meters, rotating kW meters, electromechanical kW meters, current transformers, transducers, potential transformers, pressure taps, flow venturi, orifice plates, flow nozzles,

vortex meters, turbine meters, pressure transmitters, differential pressure transmitters, temperature transmitters, thermocouples, resistance temperature detectors, and any equipment or methods used to accurately measure gross electrical output.

- 2) A certification statement by the CAIR designated representative that all components of the gross electrical output system have been tested to be accurate within three percent and that the gross electrical output system is accurate to within ten percent.
- f) The owner or operator of a CAIR NO<sub>x</sub> Ozone Season unit must retain records for at least five years from the date the record is created or the data is collected under subsections (a) and (b) of this Section, and the reports are submitted to the Agency and USEPA in accordance with subsections (c) and (d) of this Section. The owner or operator of a CAIR NO<sub>x</sub> Ozone Season unit must retain the monitoring plan required in subsection (e) of this Section for at least five years from the date that it is replaced by a new or revised monitoring plan.

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

#### **Section 225.555 Clean Air Set-Aside (CASA)**

- a) A project sponsor may apply for allowances from the CASA for sponsoring an energy efficiency and conservation, renewable energy, or clean technology project as set forth in Section 225.560 by submitting the application required by Section 225.570.
- b) Notwithstanding subsection (a) of this Section, a project sponsor with a CAIR NO<sub>x</sub> Ozone Season source that is out of compliance with this Subpart for a given control period may not apply for allowances from the CASA for that control period. If a source receives CAIR NO<sub>x</sub> Ozone Season allowances from the CASA and then is subsequently found to have been out of compliance with this Subpart for the applicable control period or periods, the project sponsor must restore the CAIR NO<sub>x</sub> Ozone Season allowances that it received pursuant to its CASA request or an equivalent number of CAIR NO<sub>x</sub> Ozone Season allowances to the CASA within six months after receipt of an Agency notice that NO<sub>x</sub> Ozone Season allowances must be restored. These allowances will be assigned to the fund from which they were distributed.
- c) CAIR NO<sub>x</sub> Ozone Season allowances from the CASA will be allocated in accordance with the procedures in Section 225.575.
- d) The project sponsor may submit an application that aggregates two or more projects under a CASA project category that would individually result in less than

one allowance, but that equal at a minimum one whole allowance when aggregated.

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

### **Section 225.560 Energy Efficiency and Conservation, Renewable Energy, and Clean Technology Projects**

- a) Energy efficiency and conservation projects means any of the following projects implemented and located in Illinois:
  - 1) Demand side management projects that reduce the overall power demand by using less energy include:
    - A) Smart building management software that more efficiently regulates power flows.
    - B) The use of or replacement to high efficiency motors, pumps, compressors, or steam systems.
    - C) Lighting retrofits.
  - 2) Energy efficient new building construction projects include:
    - A) ENERGY STAR-qualified new home projects.
    - B) Measures to reduce or conserve energy consumption beyond the requirements of the Illinois Energy Conservation Code for Commercial Buildings [20 ILCS 687/6-3].
    - C) New residential construction projects that qualify for Energy Efficient Tax Incentives pursuant to the Energy Policy Act of 2005 (42 USC 15801 (2005)).
  - 3) Supply-side energy efficiency projects include projects implemented to improve the efficiency in electricity generation by coal-fired power plants and the efficiency of electrical transmission and distribution systems.
  - 4) Highly efficient power generation projects, such as, but not limited to, combined cycle projects, combined heat and power, and microturbines. To be considered a highly efficient power generation project pursuant to this subsection (a)(4), a project must meet the following applicable thresholds and criteria:

- A) For combined heat and power projects generating both electricity and useful thermal energy for space, water, or industrial process heat, a rated-energy efficiency of at least 60 percent; the project shall not be a CAIR NO<sub>x</sub> Ozone Season unit.
  - B) For combined cycle projects rated at greater than 0.50 MW, a rated-energy efficiency of at least 50 percent.
  - C) For microturbine projects rated at or below 0.50 MW and all other projects a rated-energy efficiency of at least 40 percent.
- b) Renewable energy projects means any of the following projects implemented and located in Illinois:
- 1) Zero-emission electric generating projects, including wind, solar (thermal or photovoltaic), and hydropower projects. Eligible hydropower plants are restricted to new generators that are not replacements of existing generators, that commenced operation on or after January 1, 2006, and that do not involve the significant expansion of an existing dam or the construction of a new dam.
  - 2) Renewable energy units are those units that generate electricity using more than 50 percent of the heat input, on an annual basis, from dedicated crops grown for energy production or the capture systems for methane gas from landfills, water treatment plants or sewage treatment plants, and organic waste biomass, and other similar sources of non-fossil fuel energy. Renewable energy projects do not include energy from incineration by burning or heating of waste wood, tires, garbage, general household waste, institutional lunchroom waste, office waste, landscape waste, or construction or demolition debris.
- c) Clean technology projects for reducing emissions from producing electricity and useful thermal energy means any of the following projects implemented and located in Illinois:
- 1) Air pollution control equipment upgrades for control of NO<sub>x</sub> emissions at existing coal-fired EGUs, as follows: installation of a selective catalytic reduction (SCR) or selective non-catalytic reduction (SNCR) system, or other emission control technologies. For this purpose, a unit will be considered "existing" after it has been in commercial operation for at least eight years. Air pollution control upgrades do not include the addition of low NO<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 an activated carbon injection, or other sorbent injection for control of mercury.

- 2) Clean coal technologies projects include:
  - A) Integrated gasification combined cycle (IGCC) plants.
  - B) Fluidized bed coal combustion that commenced operation prior to December 31, 2006.
- d) In addition to those projects excluded in subsections (a) through (c) of this Section, the following projects are also not energy efficiency and conservation, renewable energy, or clean technology projects:
  - 1) Nuclear power projects.
  - 2) Projects required to meet emission standards or technology requirements under State or federal law or regulation, except that allowances may be allocated for projects undertaken pursuant to Section 225.233 or Subpart F.
  - 3) Projects used to meet the requirements of a court order or consent decree, except that allowances may be allocated for:
    - A) Emission rates or limits achieved that are lower than what is required to meet the emission rates or limits for SO<sub>2</sub> or NO<sub>x</sub>, or for installing a baghouse as provided for in a court order or consent decree entered into before May 30, 2006.
    - B) Projects used to meet the requirements of a court order or consent decree entered into on or after May 30, 2006, if the court order or consent decree does not specifically preclude such allocations.
  - 4) A Supplemental Environmental Project (SEP).
- e) Applications for projects implemented and located in Illinois that are not specifically listed in subsections (a) through (c) of this Section, and that are not specifically excluded by definition in subsections (a) through (c) of this Section or by specific exclusion in subsection (d) of this Section, may be submitted to the Agency. The application must designate which category or categories from those listed in subsections (a)(1) through (c)(2)(B) of this Section best fit the proposed project and the applicable formula pursuant to Section 225.565(b) to calculate the number of allowances that it is requesting. The Agency will determine whether the application is approvable based on a sufficient demonstration by the project

sponsor that the project is a new type of energy efficiency, renewable energy, or clean technology project, similar in its effects as the projects specifically listed in subsections (a) through (c) of this Section.

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

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

**Section 225.565 Clean Air Set-Aside (CASA) Allowances**

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

	Phase I (2009-2014)	Phase II (2015 and thereafter)
1) Energy Efficiency and Conservation/Renewable Energy	3684	3479
2) Air Pollution Control Equipment Upgrades	1535	1448
3) Clean Coal Technology Projects	1842	1738
4) Early Adopters	614	580

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

- 1) For an energy efficiency and conservation project pursuant to Section 225.560(a)(1) through (a)(4)(A), the number of allowances must be calculated using the number of megawatt hours of electricity that was not consumed during a control period and the following formula:

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

Where:

- A = The number of allowances for a particular project.
- MWh<sub>c</sub> = The number of megawatt hours of electricity conserved or generated during a control period by a project.

- 2) For a zero emission electric generating project pursuant to Section 225.560(b)(1), the number of allowances must be calculated using the

number of megawatt hours of electricity generated during a control period and the following formula:

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

Where:

A = The number of allowances for a particular project

MWh<sub>g</sub> = The number of megawatt hours of electricity generated during a control period by a project.

- 3) For a renewable energy emission unit pursuant to Section 225.560(b)(2), the number of allowances must be calculated using the number of megawatt hours of electricity generated during a control period and the following formula:

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

Where:

A = The number of allowances for a particular project.

MWh<sub>g</sub> = The number of MW hours of electricity generated during a control period by a project.

- 4) For an air pollution control equipment upgrade project pursuant to Section 225.560(c)(1), the number of allowances must be calculated using the emission rate before and after replacement or improvement, and the following formula:

$$A = (\text{MWh}_g) \times 0.10 \times (\text{ER}_B \text{ lb/MWh} - \text{ER}_A \text{ lb/MWh}) / 2000 \text{ lb}$$

Where:

A = The number of allowances for a particular project.

MWh<sub>g</sub> = The number of MWhs of electricity generated during a control period by a project.

ER<sub>B</sub> = Average NO<sub>x</sub> emission rate based on CEMS data from the most recent two control periods prior to the replacement or improvement of the control equipment in lb/MWh, unless subject to a consent decree or court order. For units subject to a consent decree or court order entered into before May 30, 2006, ER<sub>B</sub> is limited to emission rates or limits that are lower than the emission rate or limit required in the consent decree or court order. On or after May 30, 2006, ER<sub>B</sub> is limited to emission rates or limits specified in the consent decree or court order. If such limit is not expressed in lb/MWh, the limit shall be converted into lb/MWh using a heat rate of 10 mmBtu/1 MW.

ER<sub>A</sub> = Average NO<sub>x</sub> emission rate for the applicable control period data based on CEMS data in lb/MWh.

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

A) For projects other than fluidized coal combustion pursuant to Section 225.560(a)(4)(B), (a)(4)(C) and (c)(2), the number of allowances must be calculated using the number of MWh of electricity the project generates during a control period and the following formula:

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

Where:

A = The number of allowances for a particular project.

MWh<sub>g</sub> = The number of megawatt hours of electricity generated during a control period by a project.

ER = Average NO<sub>x</sub> emission rate for the control period based on CEMS data in lb/MWh.

B) For fluidized bed coal combustion projects pursuant to Section 225.560(c)(2), the number of allowances shall be calculated using the number of gross MWh of electricity the project generates during a control period and the following formula:

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

Where:

A = The number of allowances for a particular project.

MWh<sub>g</sub> = The number of gross MWh of

electricity generated during a control period by a project.

ER = Average NO<sub>x</sub> emission rate for the control period based on CEMS data in 1b/MWh.

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

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

Where:

A = The number of allowances for a particular project as determined in subsections (b)(1) through (b)(5) of this Section.

A<sub>i</sub> = The number of allowances as determined in subsection (b)(1), (b)(2), (b)(3), (b)(4) or (b)(5) of this Section for a given project.

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

### **Section 225.570 Clean Air Set-Aside (CASA) Applications**

- a) A project sponsor may request allowances if the project commenced construction on or after the dates listed in this subsection. The project sponsor may request and be allocated allowances from more than one CASA category for a project, if applicable.
- 1) Demand side management, energy efficient new construction, and supply side energy efficiency and conservation projects that commenced construction on or after January 1, 2003;
  - 2) Fluidized bed coal combustion projects, highly efficient power generation operations projects, or renewable energy emission units that commenced construction on or after January 1, 2001; and
  - 3) All other projects on or after July 1, 2006.
- b) Beginning with the 2009 control period and each control period thereafter, a project sponsor may request allowances from the CASA. The application must be submitted to the Agency by May 1 of the control period for which the allowances are being requested.

- c) The allocation will be based on the electricity conserved or generated in the control period preceding the calendar year in which the application is submitted. To apply for a CAIR NO<sub>x</sub> Ozone Season allocation from the CASA, project sponsors must provide the Agency with the following information:
- 1) Identification of the project sponsor, including name, address, type of organization, certification that the project sponsor has met the definition of "project sponsor" as set forth in Section 225.130, and names of the principals or corporate officials.
  - 2) The number of the CAIR NO<sub>x</sub> Ozone Season general or compliance account for the project and the name of the associated CAIR account representative.
  - 3) A description of the project or projects, location, the role of the project sponsor in the projects, and a general explanation of how the amount of energy conserved or generated was measured, verified, and calculated, and the number of allowances requested with the supporting calculations. The number of allowances requested will be calculated using the applicable formula from Section 225.570(b).
  - 4) Detailed information to support the request for allowances, including the following types of documentation for the measurement and verification of the NO<sub>x</sub> emissions reductions, electricity generated, or electricity conserved using established measurement verification procedures, as applicable. The measurement and verification required will depend on the type of project proposed.
    - A) As applicable, documentation of the project's base and control period conditions and resultant base and control period energy data, using the procedures and methods included in M&V Guidelines: Measurement and Verification for Federal Energy Projects, incorporated by reference in Section 225.140, or other method approved by the Agency. Examples include:
      - i) Energy consumption and demand profiles;
      - ii) Occupancy type;
      - iii) Density and periods;
      - iv) Space conditions or plant throughput for each operating period and season (for example, in a building this would

include the light level and color, space temperature, humidity and ventilation);

- v) Equipment inventory, nameplate data, location, and condition; and
  - vi) Equipment operating practices (schedules and set points, actual temperatures/pressures);
  - B) Emissions data, including, if applicable, CEMS data;
  - C) Information for rated-energy efficiency, including supporting documentation and calculations; and
  - D) Electricity, in MWh, generated or conserved for the applicable control period.
- 5) Notwithstanding the requirements of subsection (c)(4) of this Section, applications for fewer than five allowances may propose other reliable and applicable methods of quantification acceptable to the Agency.
- 6) Any additional information requested by the Agency to determine the correctness of the requested number of allowances, including site information, project specifications, supporting calculations, operating procedures, and maintenance procedures.
- 7) The following certification by the responsible official for the project sponsor and the applicable CAIR account representative for the project:
- "I am authorized to make this submission on behalf of the project sponsor and the holder of the CAIR NO<sub>x</sub> Ozone Season general account or compliance account for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this application and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information."
- d) A project sponsor may request allowances from the CASA for each project for a total number of control periods not to exceed the number of control periods listed in this subsection. After a project has been allocated allowances from the CASA,

subsequent requests for the project from the project sponsor must include the information required by subsections (c)(1), (c)(2), (c)(3) and (c)(7) of this Section, a description of any changes or further improvements made to the project, and information specified in subsections (c)(5) and (c)(6) as specifically requested by the Agency.

- 1) For energy efficiency and conservation projects (except for efficient operation and renewable energy projects), for a total of eight control periods.
  - 2) For early adopter projects, for a total of ten control periods.
  - 3) For air pollution control equipment upgrades, for a total of 15 control periods.
  - 4) For renewable energy projects, clean coal technology, and highly efficient power generation projects, for each year that the project is in operation.
- e) A project sponsor must keep copies of all CASA applications and the documentation used to support the application for at least five years.

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

#### **Section 225.575 Agency Action on Clean Air Set-Aside (CASA) Applications**

- a) By September 1, 2009 and each September 1 thereafter, the Agency will determine the total number of allowances that are approvable for allocation to project sponsors based upon the applications submitted pursuant to Section 225.570.
  - 1) The Agency will determine the number of CAIR NO<sub>x</sub> Ozone Season allowances that are approvable based on the formulas and the criteria for such projects. The Agency will notify a project sponsor within 90 days after receipt of an application if the project is not approvable, the number of allowances requested is not approvable, or additional information is needed by the Agency to complete its review of the application.
  - 2) If the total number of CAIR NO<sub>x</sub> Ozone Season allowances requested for approved projects is less than or equal to the number of CAIR NO<sub>x</sub> Ozone Season allowances in the CASA project category, the number of allowances that are approved shall be allocated to each CAIR NO<sub>x</sub> Ozone Season compliance or general account.

- 3) If more CAIR NO<sub>x</sub> Ozone Season allowances are requested than the number of CAIR NO<sub>x</sub> Ozone Season allowances in a given CASA project category, allowances will be allocated on a pro-rata basis based on the number of allowances available, subject to further adjustment as provided for by subsection (b) of this Section. CAIR NO<sub>x</sub> Ozone Season allowances will be allocated, transferred, or used as whole allowances. The number of whole allowances will be determined by rounding down for decimals less than 0.5 and rounding up for decimals of 0.5 or greater.
- b) For control periods 2011 and thereafter:
- 1) If there are, after the completion of the procedures in subsection (a) of this Section for a control period, any CAIR NO<sub>x</sub> Ozone Season allowances not allocated to a CASA project for the control period, the remaining allowances will accrue in each CASA project category up to twice the number of allowances that are assigned to the project category for each control period as set forth in Section 225.565.
  - 2) If any allowances remain after allocations pursuant to subsection (b)(1) of this Section, the Agency will allocate these allowances pro-rata to projects that received fewer allowances than requested, based on the number of allowances not allocated but approved by the Agency for the project under CASA. No project may be allocated more allowances than approved by the Agency for the applicable control period.
  - 3) If any allowances remain after the allocation of allowances pursuant to subsection (b)(2) of this Section, the Agency will then distribute pro-rata the remaining allowances to project categories that have fewer than twice the number of allowances assigned to the project category. The pro-rata distribution will be based on the difference between two times the project category and the number of allowances that remain in the project category.
  - 4) If allowances still remain undistributed after the allocations and distributions in subsections (b)(1) through (b)(3) are completed, the Agency may elect to retire any CAIR NO<sub>x</sub> Ozone Season allowances that have not been distributed to any CASA category, to continue progress toward attainment or maintenance of the National Ambient Air Quality Standards pursuant to the CAA.

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

#### SUBPART F: COMBINED POLLUTANT STANDARDS

#### **Section 225.600 Purpose**

The purpose of this Subpart F is to allow an alternate means of compliance with the emissions standards for mercury in Section 225.230(a) for specified EGUs through permanent shut-down, installation of ACI, and the application of pollution control technology for NO<sub>x</sub>, PM, and SO<sub>2</sub> emissions that also reduce mercury emissions as a co-benefit and to establish permanent emissions standards for those specified EGUs. Unless otherwise provided for in this Subpart F, owners and operators of those specified EGUs are not excused from compliance with other applicable requirements of Subparts B, C, D, and E.

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

### **Section 225.605 Applicability**

- a) As an alternative to compliance with the emissions standards of Section 225.230(a), the owner or operator of specified EGUs in this Subpart F located at Fisk, Crawford, Joliet, Powerton, Waukegan, and Will County power plants may elect for all of those EGUs as a group to demonstrate compliance pursuant to this Subpart F, which establishes control requirements and emissions standards for NO<sub>x</sub>, PM, SO<sub>2</sub>, and mercury. For this purpose, ownership of a specified EGU is determined based on direct ownership, by holding a majority interest in a company that owns the EGU or EGUs, or by the common ownership of the company that owns the EGU, whether through a parent-subsidiary relationship, as a sister corporation, or as an affiliated corporation with the same parent corporation, provided that the owner or operator has the right or authority to submit a CAAPP application on behalf of the EGU.
- b) A specified EGU is a coal-fired EGU listed in Appendix A, irrespective of any subsequent changes in ownership of the EGU or power plant, the operator, unit designation, or name of unit.
- c) The owner or operator of each of the specified EGUs electing to demonstrate compliance with Section 225.230(a) pursuant to this Subpart must submit an application for a CAAPP permit modification to the Agency, as provided for in Section 225.220, that includes the information specified in Section 225.610 that clearly states the owner's or operator's election to demonstrate compliance with Section 225.230(a) pursuant to this Subpart F.
- d) If an owner or operator of one or more specified EGUs elects to demonstrate compliance with Section 225.230(a) pursuant to this Subpart F, then all specified EGUs owned or operated in Illinois by the owner or operator as of December 31, 2006, as defined in subsection (a) of this Section, are thereafter subject to the standards and control requirements of this Subpart F. Such EGUs are referred to as a Combined Pollutant Standard (CPS) group.

- e) If an EGU is subject to the requirements of this Section, then the requirements apply to all owners and operators of the EGU, and to the CAIR designated representative for the EGU.

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

### **Section 225.610 Notice of Intent**

The owner or operator of one or more specified EGUs that intends to comply with Section 225.230(a) by means of this Subpart F must notify the Agency of its intention on or before December 31, 2007. The following information must accompany the notification:

- a) The identification of each EGU that will be complying with Section 225.230(a) pursuant to this Subpart F, with evidence that the owner or operator has identified all specified EGUs that it owned or operated in Illinois as of December 31, 2006, and which commenced commercial operation on or before December 31, 2004;
- b) If an EGU identified in subsection (a) of this Section is also owned or operated by a person different than the owner or operator submitting the notice of intent, a demonstration that the submitter has the right to commit the EGU or authorization from the responsible official for the EGU submitting the application; and
- c) A summary of the current control devices installed and operating on each EGU and identification of the additional control devices that will likely be needed for each EGU to comply with emission control requirements of this Subpart F.

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

### **Section 225.615 Control Technology Requirements and Emissions Standards for Mercury**

- a) Control Technology Requirements for Mercury.
  - 1) For each EGU in a CPS group other than an EGU that is addressed by subsection (b) of this Section, the owner or operator of the EGU must install, if not already installed, and properly operate and maintain, by the dates set forth in subsection (a)(2) of this Section, ACI equipment complying with subsections (g), (h), (i), (j), and (k) of this Section, as applicable.
  - 2) By the following dates, for the EGUs listed in subsections (a)(2)(A) and (B), which include hot and cold side ESPs, the owner or operator must install, if not already installed, and begin operating ACI equipment or the Agency must be given written notice that the EGU will be shut down on or before the following dates:

- A) Fisk 19, Crawford 7, Crawford 8, Waukegan 7, and Waukegan 8 on or before July 1, 2008; and
  - B) Powerton 5, Powerton 6, Will County 3, Will County 4, Joliet 6, Joliet 7, and Joliet 8 on or before July 1, 2009.
- b) Notwithstanding subsection (a) of this Section, the following EGUs are not required to install ACI equipment because they will be permanently shut down, as addressed by Section 225.630, by the date specified:
  - 1) EGUs that are required to permanently shut down:
    - A) On or before December 31, 2007, Waukegan 6; and
    - B) On or before December 31, 2010, Will County 1 and Will County 2.
  - 2) Any other specified EGU that is permanently shut down by December 31, 2010.
- c) Beginning on January 1, 2015, and continuing thereafter, and measured on a rolling 12-month basis (the initial period is January 1, 2015 through December 31, 2015, and, then, for every 12-month period thereafter), each specified EGU, except Will County 3, shall achieve one of the following emissions standards:
  - 1) An emissions standard of 0.0080 lbs mercury/GWh gross electrical output; or
  - 2) A minimum 90 percent reduction of input mercury.
- d) Beginning on January 1, 2016, and continuing thereafter, Will County 3 shall achieve the mercury emissions standards of subsection (c) of this Section measured on a rolling 12-month basis (the initial period is January 1, 2016 through December 31, 2016, and, then, for every 12-month period thereafter).
- e) At any time prior to the dates required for compliance in subsections (c) and (d) of this Section, the owner or operator of a specified EGU, upon notice to the Agency, may elect to comply with the emissions standards of subsection (c) of this Section measured on a rolling 12-month basis for one or more EGUs. Once an EGU is subject to the mercury emissions standards of subsection (c) of this Section, it shall not be subject to the requirements of subsections (g), (h), (i), (j) and (k) of this Section.

- f) Compliance with the mercury emissions standards or reduction requirement of this Section must be calculated in accordance with Section 225.230(a) or (b).
- g) For each EGU for which injection of halogenated activated carbon is required by subsection (a)(1) of this Section, the owner or operator of the EGU must inject halogenated activated carbon in an optimum manner, which, except as provided in subsection (h) of this Section, is defined as all of the following:
  - 1) The use of an injection system for effective absorption of mercury, considering the configuration of the EGU and its ductwork;
  - 2) The injection of halogenated activated carbon manufactured by Alstom, Norit, or Sorbent Technologies, or the injection of any other halogenated activated carbon or sorbent that the owner or operator of the EGU has demonstrated to have similar or better effectiveness for control of mercury emissions; and
  - 3) The injection of sorbent at the following minimum rates, as applicable:
    - A) For an EGU firing subbituminous coal, 5.0 lbs per million actual cubic feet or, for any cyclone-fired EGU that will install a scrubber and baghouse by December 31, 2012, and which already meets an emission rate of 0.020 lb mercury/GWh gross electrical output or at least 75 percent reduction of input mercury, 2.5 lbs per million actual cubic feet;
    - B) For an EGU firing bituminous coal, 10.0 lbs per million actual cubic feet or, for any cyclone-fired EGU that will install a scrubber and baghouse by December 31, 2012, and which already meets an emission rate of 0.020 lb mercury/GWh gross electrical output or at least 75 percent reduction of input mercury, 5.0 lbs per million actual cubic feet;
    - C) For an EGU firing a blend of subbituminous and bituminous coal, a rate that is the weighted average of the rates specified in subsections (g)(3)(A) and (B), based on the blend of coal being fired; or
    - D) A rate or rates set lower by the Agency, in writing, than the rate specified in any of subsection (g)(3)(A), (B), or (C) of this Section on a unit-specific basis, provided that the owner or operator of the EGU has demonstrated that such rate or rates are needed so that carbon injection will not increase particulate matter emissions or

opacity so as to threaten noncompliance with applicable requirements for particulate matter or opacity.

- 4) For purposes of subsection (g)(3) of this Section, the flue gas flow rate must be determined for the point sorbent injection; provided that this flow rate may be assumed to be identical to the stack flow rate if the gas temperatures at the point of injection and the stack are normally within 100° F, or the flue gas flow rate may otherwise be calculated from the stack flow rate, corrected for the difference in gas temperatures.
- h) The owner or operator of an EGU that seeks to operate an EGU with an activated carbon injection rate or rates that are set on a unit-specific basis pursuant to subsection (g)(3)(D) of this Section must submit an application to the Agency proposing such rate or rates, and must meet the requirements of subsections (h)(1) and (h)(2) of this Section, subject to the limitations of subsections (h)(3) and (h)(4) of this Section:
- 1) The application must be submitted as an application for a new or revised federally enforceable operation permit for the EGU, and it must include a summary of relevant mercury emissions data for the EGU, the unit-specific injection rate or rates that are proposed, and detailed information to support the proposed injection rate or rates; and
  - 2) This application must be submitted no later than the date that activated carbon must first be injected. For example, the owner or operator of an EGU that must inject activated carbon pursuant to subsection (a)(1) of this Section must apply for unit-specific injection rate or rates by July 1, 2008. Thereafter, the owner or operator may supplement its application; and
  - 3) Any decision of the Agency denying a permit or granting a permit with conditions that set a lower injection rate or rates may be appealed to the Board pursuant to Section 39 of the Act; and
  - 4) The owner or operator of an EGU may operate at the injection rate or rates proposed in its application until a final decision is made on the application, including a final decision on any appeal to the Board.
- i) During any evaluation of the effectiveness of a listed sorbent, alternative sorbent, or other technique to control mercury emissions, the owner or operator of an EGU need not comply with the requirements of subsection (g) of this Section for any system needed to carry out the evaluation, as further provided as follows:

- 1) The owner or operator of the EGU must conduct the evaluation in accordance with a formal evaluation program submitted to the Agency at least 30 days prior to commencement of the evaluation; and
  - 2) The duration and scope of the evaluation may not exceed the duration and scope reasonably needed to complete the desired evaluation of the alternative control techniques, as initially addressed by the owner or operator in a support document submitted with the evaluation program; and
  - 3) The owner or operator of the EGU must submit a report to the Agency no later than 30 days after the conclusion of the evaluation that describes the evaluation conducted and which provides the results of the evaluation; and
  - 4) If the evaluation of alternative control techniques shows less effective control of mercury emissions from the EGU than was achieved with the principal control techniques, the owner or operator of the EGU must resume use of the principal control techniques. If the evaluation of the alternative control technique shows comparable effectiveness to the principal control technique, the owner or operator of the EGU may either continue to use the alternative control technique in a manner that is at least as effective as the principal control technique or it may resume use of the principal control technique. If the evaluation of the alternative control technique shows more effective control of mercury emissions than the control technique, the owner or operator of the EGU must continue to use the alternative control technique in a manner that is more effective than the principal control technique, so long as it continues to be subject to this Section.
- j) In addition to complying with the applicable recordkeeping and monitoring requirements in Sections 225.240 through 225.290, the owner or operator of an EGU that elects to comply with Section 225.230(a) by means of this Subpart F must also comply with the following additional requirements:
- 1) For the first 36 months that injection of sorbent is required, it must maintain records of the usage of sorbent, the exhaust gas flow rate from the EGU, and the sorbent feed rate, in pounds per million actual cubic feet of exhaust gas at the injection point, on a weekly average;
  - 2) After the first 36 months that injection of sorbent is required, it must monitor activated sorbent feed rate to the EGU, flue gas temperature at the point of sorbent injection, and exhaust gas flow rate from the EGU, automatically recording this data and the sorbent carbon feed rate, in

pounds per million actual cubic feet of exhaust gas at the injection point, on an hourly average; and

- 3) If a blend of bituminous and subbituminous coal is fired in the EGU, it must keep records of the amount of each type of coal burned and the required injection rate for injection of activated carbon on a weekly basis.
- k) In addition to complying with the applicable reporting requirements in Sections 225.240 through 225.290, the owner or operator of an EGU that elects to comply with Section 225.230(a) by means of this Subpart F must also submit quarterly reports for the recordkeeping and monitoring conducted pursuant to subsection (j) of this Section.

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

### **Section 225.620 Emissions Standards for NO<sub>x</sub> and SO<sub>2</sub>**

- a) Emissions Standards for NO<sub>x</sub> and Reporting Requirements.
  - 1) Beginning with calendar year 2012 and continuing in each calendar year thereafter, the CPS group, which includes all specified EGUs that have not been permanently shut down by December 31 before the applicable calendar year, must comply with a CPS group average annual NO<sub>x</sub> emissions rate of no more than 0.11 lbs/mmBtu.
  - 2) Beginning with ozone season control period 2012 and continuing in each ozone season control period (May 1 through September 30) thereafter, the CPS group, which includes all specified EGUs that have not been permanently shut down by December 31 before the applicable ozone season, must comply with a CPS group average ozone season NO<sub>x</sub> emissions rate of no more than 0.11 lbs/mmBtu.
  - 3) The owner or operator of the specified EGUs in the CPS group must file, not later than one year after startup of any selective SNCR on such EGU, a report with the Agency describing the NO<sub>x</sub> emissions reductions that the SNCR has been able to achieve.
- b) Emissions Standards for SO<sub>2</sub>. Beginning in calendar year 2013 and continuing in each calendar year thereafter, the CPS group must comply with the applicable CPS group average annual SO<sub>2</sub> emissions rate listed as follows:

year	lbs/mmBtu
2013	0.44
2014	0.41

2015	0.28
2016	0.195
2017	0.15
2018	0.13
2019	0.11

- c) Compliance with the NO<sub>x</sub> and SO<sub>2</sub> emissions standards must be demonstrated in accordance with Sections 225.310, 225.410, and 225.510. The owner or operator of the specified EGUs must complete the demonstration of compliance pursuant to Section 225.635(c) before March 1 of the following year for annual standards and before November 30 of the particular year for ozone season control periods (May 1 through September 30) standards, by which date a compliance report must be submitted to the Agency.
- d) The CPS group average annual SO<sub>2</sub> emission rate, annual NO<sub>x</sub> emission rate and ozone season NO<sub>x</sub> emission rates shall be determined as follows:

$$ER_{avg} = \sum_{i=1}^n (\text{SO}_{2i} \text{ or NO}_{xi} \text{ tons}) / \sum_{i=1}^n (HI_i)$$

Where:

- ER<sub>avg</sub> = average annual or ozone season emission rate in lbs/mmBtu of all EGUs in the CPS group.
- HI<sub>i</sub> = heat input for the annual or ozone control period of each EGU, in mmBtu.
- SO<sub>2i</sub> = actual annual SO<sub>2</sub> tons of each EGU in the CPS group.
- NO<sub>xi</sub> = actual annual or ozone season NO<sub>x</sub> tons of each EGU in the CPS group.
- n = number of EGUs that are in the CPS group.
- i = each EGU in the CPS group.

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

### **Section 225.625 Control Technology Requirements for NO<sub>x</sub>, SO<sub>2</sub>, and PM Emissions**

- a) Control Technology Requirements for NO<sub>x</sub> and SO<sub>2</sub>.
- 1) On or before December 31, 2013, the owner or operator must either permanently shut down or install and have operational FGD equipment on Waukegan 7;

- 2) On or before December 31, 2014, the owner or operator must either permanently shut down or install and have operational FGD equipment on Waukegan 8;
  - 3) On or before December 31, 2015, the owner or operator must either permanently shut down or install and have operational FGD equipment on Fisk 19;
  - 4) If Crawford 7 will be operated after December 31, 2018, and not permanently shut down by this date, the owner or operator must:
    - A) On or before December 31, 2015, install and have operational SNCR or equipment capable of delivering essentially equivalent NO<sub>x</sub> reductions on Crawford 7; and
    - B) On or before December 31, 2018, install and have operational FGD equipment on Crawford 7;
  - 5) If Crawford 8 will be operated after December 31, 2017 and not permanently shut down by this date, the owner or operator must:
    - A) On or before December 31, 2015, install and have operational SNCR or equipment capable of delivering essentially equivalent NO<sub>x</sub> emissions reductions on Crawford 8; and
    - B) On or before December 31, 2017, install and have operational FGD equipment on Crawford 8.
- b) Other Control Technology Requirements for SO<sub>2</sub>. Owners or operators of specified EGUs must either permanently shut down or install FGD equipment on each specified EGU (except Joliet 5), on or before December 31, 2018, unless an earlier date is specified in subsection (a) of this Section.
- c) Control Technology Requirements for PM. The owner or operator of the two specified EGUs listed in this subsection that are equipped with a hot-side ESP must replace the hot-side ESP with a cold-side ESP, install an appropriately designed fabric filter, or permanently shut down the EGU by the dates specified. Hot-side ESP means an ESP on a coal-fired boiler that is installed before the boiler's air-preheater where the operating temperature is typically at least 550° F, as distinguished from a cold-side ESP that is installed after the air pre-heater where the operating temperature is typically no more than 350° F.
- 1) Waukegan 7 on or before December 31, 2013; and

- 2) Will County 3 on or before December 31, 2015.
- d) Beginning on December 31, 2008, and annually thereafter up to and including December 31, 2015, the owner or operator of the Fisk power plant must submit in writing to the Agency a report on any technology or equipment designed to affect air quality that has been considered or explored for the Fisk power plant in the preceding 12 months. This report will not obligate the owner or operator to install any equipment described in the report.
- e) Notwithstanding 35 Ill. Adm. Code 201.146(hhh), until an EGU has complied with the applicable requirements of subsections (a), (b), and (c), the owner or operator of the EGU must obtain a construction permit for any new or modified air pollution control equipment that it proposes to construct for control of emissions of mercury, NO<sub>x</sub>, PM, or SO<sub>2</sub>.

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

#### **Section 225.630 Permanent Shut-Downs**

- a) The owner or operator of the following EGUs must permanently shut down the EGU by the dates specified:
  - 1) Waukegan 6 on or before December 31, 2007; and
  - 2) Will County 1 and Will County 2 on or before December 31, 2010.
- b) No later than 8 months before the date that a specified EGU will be permanently shut down, the owner or operator must submit a report to the Agency that includes a description of the actions that have already been taken to allow the shutdown of the EGU and a description of the future actions that must be accomplished to complete the shutdown of the EGU, with the anticipated schedule for those actions and the anticipated date of permanent shutdown of the unit.
- c) No later than six months before a specified EGU will be permanently shut down, the owner or operator shall apply for revisions to the operating permits for the EGU to include provisions that terminate the authorization to operate the unit on that date.
- d) If, after applying for or obtaining a construction permit to install required control equipment, the owner or operator decides to permanently shut down a specified EGU rather than install the required control technology, the owner or operator must immediately notify the Agency in writing and thereafter submit the information required by subsections (b) and (c) of this Section.

- e) Failure to permanently shut down a specified EGU by the required date shall be considered separate violations of the applicable emissions standards and control technology requirements of this Subpart F for NO<sub>x</sub>, PM, SO<sub>2</sub>, and mercury.

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

**Section 225.635 Requirements for CAIR SO<sub>2</sub>, CAIR NO<sub>x</sub>, and CAIR NO<sub>x</sub> Ozone Season Allowances**

- a) The following requirements apply to the owner, the operator and the designated representative with respect to CAIR SO<sub>2</sub>, CAIR NO<sub>x</sub>, and CAIR NO<sub>x</sub> Ozone Season allowances:
  - 1) The owner, operator, and CAIR designated representative of specified EGUs in a CPS group is permitted to sell, trade, or transfer SO<sub>2</sub> and NO<sub>x</sub> emissions allowances of any vintage owned, allocated to, or earned by the specified EGUs (the "CPS allowances") to its affiliated Homer City, Pennsylvania generating station for as long as the Homer City Station needs the CPS allowances for compliance.
  - 2) When and if the Homer City Station no longer requires all of the CPS allowances, the owner, operator, or CAIR designated representative of specified EGUs in a CPS group may sell any and all remaining CPS allowances, without restriction, to any person or entity located anywhere, except that the owner or operator may not directly sell, trade, or transfer CPS allowances to a CAIR NO<sub>x</sub> or CAIR SO<sub>2</sub> unit located in Ohio, Indiana, Illinois, Wisconsin, Michigan, Kentucky, Missouri, Iowa, Minnesota, or Texas.
  - 3) In no event shall this subsection (a) require or be interpreted to require any restriction whatsoever on the sale, trade, or exchange of the CPS allowances by persons or entities who have acquired the CPS allowances from the owner, operator, or CAIR designated representative of specified EGUs in a CPS group.
- b) The owner, operator, and CAIR designated representative of EGUs in a specified CPS group is prohibited from purchasing or using CAIR SO<sub>2</sub>, CAIR NO<sub>x</sub>, and CAIR NO<sub>x</sub> Ozone Season allowances for the purposes of meeting the SO<sub>2</sub> and NO<sub>x</sub> emissions standards set forth in Section 225.620.
- c) Before March 1, 2010, and continuing each year thereafter, the CAIR designated representative of the EGUs in a CPS group must submit a report to the Agency that demonstrates compliance with the requirements of this Section for the previous calendar year and ozone season control period (May 1 through

September 30), and includes identification of any CAIR allowances that have been used for compliance with the CAIR Trading Programs as set forth in Subparts C, D, and E, and any CAIR allowances that were sold, gifted, used, exchanged, or traded. A final report must be submitted to the Agency by August 31 of each year, providing either verification that the actions described in the initial report have taken place, or, if such actions have not taken place, an explanation of the changes that have occurred and the reasons for such changes.

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

### **Section 225.640 Clean Air Act Requirements**

The SO<sub>2</sub> emissions rates set forth in this Subpart F shall be deemed to be best available retrofit technology ("BART") under the Visibility Protection provisions of the CAA (42 USC 7491), reasonably available control technology ("RACT") and reasonably available control measures ("RACM") for achieving fine particulate matter ("PM<sub>2.5</sub>") requirements under NAAQS in effect on the effective date of this Subpart F, as required by the CAA (42 USC 7502). The Agency may use the SO<sub>2</sub> and NO<sub>x</sub> emissions reductions required under this Subpart F in developing attainment demonstrations and demonstrating reasonable further progress for PM<sub>2.5</sub> and 8 hour ozone standards, as required under the CAA. Furthermore, in developing rules, regulations, or State Implementation Plans designed to comply with PM<sub>2.5</sub> and 8 hour ozone NAAQS, the Agency, taking into account all emission reduction efforts and other appropriate factors, will use best efforts to seek SO<sub>2</sub> and NO<sub>x</sub> emissions rates from other EGUs that are equal to or less than the rates applicable to the CPS group and will seek SO<sub>2</sub> and NO<sub>x</sub> reductions from other sources before seeking additional emissions reductions from any EGU in the CPS group.

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

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

<b>Plant</b>	<b>Permit Number</b>	<b>Boiler</b>	<b>Permit Designation</b>	<b>Subpart F Designation</b>
Crawford	031600AIN	7	Unit 7 Boiler BLR1	Crawford 7
		8	Unit 8 Boiler BLR2	Crawford 8
Fisk	031600AMI	19	Unit 19 Boiler BLR19	Fisk 19
Joliet	197809AAO	71	Unit 7 Boiler BLR71	Joliet 7
		72	Unit 7 Boiler BLR72	Joliet 7
		81	Unit 8 Boiler BLR81	Joliet 8
		82	Unit 8 Boiler BLR82	Joliet 8
		5	Unit 6 Boiler BLR5	Joliet 6
Powerton	179801AAA	51	Unit 5 Boiler BLR51	Powerton 5
		52	Unit 5 Boiler BLR52	Powerton 5
		61	Unit 6 Boiler BLR61	Powerton 6
		62	Unit 6 Boiler BLR62	Powerton 6
Waukegan	097190AAC	17	Unit 6 Boiler BLR17	Waukegan 6
		7	Unit 7 Boiler BLR7	Waukegan 7
		8	Unit 8 Boiler BLR8	Waukegan 8
Will County	197810AAK	1	Unit 1 Boiler BLR1	Will County 1
		2	Unit 2 Boiler BLR2	Will County 2
		3	Unit 3 Boiler BLR3	Will County 3
		4	Unit 4 Boiler BLR4	Will County 4

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