

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

SUBPART B: CAIR SO₂ EGU ANNUAL TRADING PROGRAM

Section

- 225.200 Purpose
- 225.205 Applicability
- 225.210 Compliance Requirements
- 225.215 Appeal Procedures
- 225.220 CAIR SO₂ Permitting
- 225.225 CAIR SO₂ Trading Program

SUBPART C: CAIR NO_x EGU ANNUAL TRADING PROGRAM

Section

- 225.300 Purpose
- 225.305 Applicability
- 225.310 Compliance Requirements
- 225.315 Appeal Procedures
- 225.320 CAIR NO_x Permitting Requirements
- 225.325 CAIR NO_x Annual Trading Budgets
- 225.330 Timing for CAIR NO_x Annual Allocations
- 225.335 Methodology for Calculating CAIR NO_x Annual Allocations
- 225.340 CAIR NO_x Annual Allocations
- 225.345 New Unit Set-Aside
- 225.350 Energy Efficiency Set-Aside
- 225.355 Renewable Energy Set-Aside
- 225.360 Clean Coal Technology, Control Equipment Upgrade Set-Asides, Efficient Operators, and Early Adopters
- 225.365 (Reserved)
- 225.370 Monitoring, Record Keeping and Reporting for Gross Output

- 225.375 Compliance Supplement Pool
- 225.380 Opt-in Provisions (Reserved)

SUBPART D: CAIR NO_x EGU OZONE SEASON TRADING PROGRAM

Section

- 225.400 Purpose
- 225.405 Applicability
- 225.410 Compliance Requirements
- 225.415 CAIR NO_x Ozone Season Permitting Requirements
- 225.420 CAIR NO_x Ozone Season Trading Budgets
- 225.425 Methodology for Calculating CAIR NO_x Ozone Season Allocations
- 225.430 CAIR NO_x Ozone Season Allocations
- 225.435 New Unit Set-Asides
- 225.440 Energy Efficiency Set-Aside
- 225.445 Renewable Energy Set-Aside
- 225.460 Clean Coal Technology, Control Equipment Upgrade Set-Asides, Efficient Operators, and Early Adopters
- 225.465 (Reserved)
- 225.470 Monitoring, Record Keeping, and Reporting for Gross Output
- 225.480 Opt-in Provisions (Reserved)

SUBPART E: (Reserved)

SUBPART F: (Reserved)

AUTHORITY: Implementing and authorized by Sections 4, 9.1, 27, and 28.5 of the Illinois Environmental Protection Act [415 ILCS 5/4, 9.1, 27, and 28.5].

SOURCE: Adopted in Docket R06- at Ill. Reg. , effective , 2006.

SUBPART A: GENERAL PROVISIONS

Section 225.120 Severability

If any Section, subsection or clause of this Part is found invalid, such finding shall not affect the validity of this Part as a whole or any Section, sentence or clause not found invalid.

Section 225.103 Abbreviations

Unless otherwise specified within this Part, the abbreviations used in this Part shall 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 *et seq.*]

| | |
|------------------|--|
| Btu | British thermal unit |
| CAA | Clean Air Act [42 U.S.C. 7401] |
| CAAPP | Clean Air Act Permit Program [415 ILCS 5/39.5] |
| CO ₂ | carbon dioxide |
| EGU | electric generating unit |
| GWh | gigawatt hour |
| Hg | mercury |
| H ₂ O | water |
| hr | hour |
| kg | kilogram |
| kW | kilowatt electrical |
| kWh | kilowatt hour |
| lb | pound |
| Mg | megagram or metric tonne |
| mmBtu | million Btu |
| MWe | megawatt electrical |
| MWh | megawatt hour |
| NO _x | nitrogen oxides |
| ORIS | Office of Regulatory Information Systems |
| O ₂ | oxygen |
| peoc | potential electrical output capacity |
| ppm | parts per million |
| scfh | standard cubic feet per hour |
| SO ₂ | sulfur dioxide |
| USEPA | United State Environmental Protection Agency |
| yr | year |

b) The following conversion factors have been used in this Part:

| English | Metric |
|------------|----------------|
| 2.205 lb | 1 kg |
| 1 T | 0.907 Mg |
| 1 lb/T | 0.500 kg/Mg |
| 1 mmBtu/hr | 0.293 MW |
| 1 lb/mmBtu | 1.548 kg/MW-hr |

Section 225.130 Definitions

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

- a) "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.

- b) "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.
- c) "CAIR authorized account representative" means, with regard to a general account, a responsible natural person who is authorized, in accordance with 40 CFR 96 Subparts BB, FF, GG, HH, BBBB, FFFF, GGGG, HHHH, and BBB through HHH, to transfer and otherwise dispose of CAIR NO_x and SO₂ allowances, as applicable, held in the general account, and with regard to a compliance account, the CAIR designated representative of the source.
- d) "CAIR designated representative" means for a CAIR NO_x and a CAIR SO₂ source and each CAIR NO_x and SO₂ 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 40 CFR 96 Subparts BB, FF, GG, HH, BBBB, FFFF, GGGG, HHHH, and BBB through HHH, as applicable, to represent and legally bind each owner and operator in matters pertaining to the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, and the CAIR NO_x Ozone Season Trading Program, as applicable. If the CAIR NO_x source is also a CAIR SO₂ source, then this natural person shall be the same person as the CAIR designated representative under the CAIR SO₂ Trading Program. If the CAIR NO_x source is also a CAIR NO_x Ozone Season source, then this natural person shall be the same person as the CAIR designated representative under the CAIR NO_x Ozone Season Trading Program. If the CAIR NO_x source is also subject to the Acid Rain Program, then this natural person shall be the same person as the designated representative under the Acid Rain Program.
- e) "CAIR Trading Programs" means for the purposes of this Part, the CAIR Program shall mean the requirements of this Part, and those provisions of the federal CAIR NO_x or SO₂ Trading Programs, 40 CFR 96, incorporated by reference in Section 225.140 of this Subpart.
- f) "Coal-fired" means combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during a specified year.
- g) "Cogeneration unit" means a stationary, fossil fuel-fired boiler or stationary, fossil fuel-fired combustion turbine:
 - 1) Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and
 - 2) Producing during the 12-month period starting on the date the unit first produces electricity and during any calendar year after the calendar year in

which the unit first produces electricity.

- h) “Common stack” means a single flue through which emissions from two or more units are exhausted.
- i) “Commence commercial operation” means, 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 shall remain the unit’s date of commencement of operation even if the EGU is subsequently modified, reconstructed or repowered.
- j) “Combine 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.
- k) “Combustion turbine” means
 - 1) 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
 - 2) If the enclosed device under paragraph (1) of this definition is combined cycle, any associated heat recovery steam generator and steam turbine.
- l) “Commence Operation,” means for purposes of allocation of allowances as described in this Part, with regard to a stationary boiler, combustion turbine, or combined cycle system to have begun any mechanical, chemical, or electronic process, including, start-up of the unit’s combustion chamber. Such date shall remain the unit’s date of commencement of operation even if the unit is subsequently modified, reconstructed, or repowered.
- m) “Common stack” means a single flue through which emissions from two or more units are exhausted.
- n) “Control period” means:
 - 1) For the CAIR SO₂ and NO_x Annual programs in Subparts B and C of this Part, the period beginning January 1 of a calendar year, except as provided in Section 225.210(d)(3) and 225.310(d)(3) of this Subpart, and ending on December 31 of the same year, inclusive; or
 - 2) For the CAIR NO_x Ozone Season Program in Subpart D of this Part, the period beginning May 1 of a calendar year, except as provided in Section 225.410(d)(3) of this Subpart, and ending on September 30 of the same year, inclusive.

- o) “Energy efficiency unit” means an end-use energy efficiency project implemented after January 1, 20xx that reduces electricity consumption according to an energy efficiency verification protocol accepted by the Agency.
- p) “Exempt cogeneration” means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine:
 - 1) Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and
 - 2) Producing during the 12-month period starting on the date the unit first produces electricity and during any calendar year after which the unit first produces electricity:
 - A) For a topping-cycle cogeneration unit,
 - i) Useful thermal energy not less than 5 percent of total energy output; and
 - ii) 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.
 - B) For a bottoming-cycle cogeneration unit, useful power not less than 45 percent of total energy input.
- q) “Fossil fuel” means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.
- r) “Fossil fuel-fired” means the combusting any amount of fossil fuel, alone or in combination with any other fuel in any calendar year.
- s) “Generator” means a device that produces electricity.
- t) “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 through that EGU. For an EGU generating only electricity, the gross electrical output is the output from the turbine/generator set. For purposes of Subparts C and D of this Part, an EGU engaged in cogeneration or combined production of heat and power, the gross electrical output also includes some consideration for the useful work or useful heat sent to other sources.

- u) “Heat input” means the product of the gross heating value of the fuel and the amount of fuel combusted in a combustion device. Heat input does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.”
- v) “Integrated gasification combined cycle electric utility steam generating unit (IGCC)” means a coal-fired electric utility steam generation 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.
- w) "Nameplate Capacity" means, starting from the initial installation of a generator, the maximum electrical generating output (in MWe) that an Electric Generating Unit is capable of producing on a steady-state basis during continuous operation as specified by the manufacturer.
- x) “Oil-fired” means combusting fuel oil for more than 15 percent of the annual heat in a specified year.
- y) “Renewable energy units” means energy from wind, solar thermal energy, photovoltaic cells and panels, dedicated crops grown for energy production and organic waste biomass, hydropower that does not involve new construction or significant expansion of hydropower dams, and other such alternative sources of environmentally preferable energy. “renewable energy resources” does not include, however, energy from the incineration, burning or heating of waste wood, tires, garbage, general household, institutional lunchroom or office waste, landscape waste, or construction or demolition debris.
- z) “Repowering” means, with regard to a unit, replacement of a coal fired boiler with one of the following coal-fired technologies at the same source as the coal-fired boiler:
 - 1) Atmospheric or pressurized fluidized bed combustion;
 - 2) Integrated gasification combined cycle;
 - 3) Magnetohydrodynamics;
 - 4) Direct and indirect coal-fired turbines;
 - 5) Integrated gasification fuel cells; or
 - 6) As determined by the USEPA in consultation with the US Department of Energy, a derivative of one or more of the technologies listed under subsections (aa)(1) through (aa)(5) of this Section, and any other coal-fired technology capable of controlling multiple combustion emissions simultaneously with improved boiler generation efficiency and with

significantly greater waste reduction relative to the performance of technology in widespread commercial use as of January 1, 2005.

- aa) “Thermal output” means the thermal energy (in mmBtu_{out}/time) that is produced through a process and is used for industrial, commercial, heating, or cooling purposes after the subtraction of heat for boiler feed, feedwater preheating, or combustion air preheating.
- bb) “Unit” means a stationary boiler, fossil-fuel-fired boiler, or combustion turbine, combined cycle system or other stationary, fossil fuel-fired combustion device.

Section 225.140 Incorporations by Reference

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

- a) CAIR SO₂ Trading Program, 40 CFR 96, Subpart AAA through Subpart HHH (2005);
- b) CAIR NO_x Trading Program, 40 CFR 96, Subpart AA (excluding 40 CFR 96.104, 96.105(b)(2), 96.106, and 96.108), Subpart BB, Subpart FF, Subpart GG, and Subpart HH. (2005);
- c) CAIR NO_x Ozone Season Trading Program, 40 CFR 96, Subpart AAAA (excluding 40 CFR 96.104, 96.105(b)(2), 96.106, and 96.108), Subpart BBBB, Subpart FFFF, Subpart GGGG, and Subpart HHHH. (2005);
- d) 40 CFR 72, 75 & 76;
- e) 40 CFR part 78; and
- d) 40 CFR 60, Appendix A, Methods 7, 7A, 7C, 7D, and 7E.