

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

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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. 12864, effective August 31, 2007; amended in R09-10 at 33 Ill. Reg. 10427, effective June 26, 2009.

- 10) ~~ASTM D7036-04, Standard Practice for Competence of Air Emission Testing Bodies.~~
- i) ~~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 33 Ill. Reg. 10427, effective June 26, 2009~~)

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 SO₂ unit, CAIR NO_x unit, or a CAIR NO_x 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 SO₂ unit, CAIR NO_x unit, or a CAIR NO_x 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 SO₂ unit, CAIR NO_x unit, or a CAIR NO_x Ozone Season unit pursuant to Section 225.305, 225.405, or 225.505, respectively, on the later of November 15, 1990 or the date the unit commences commercial operation as defined in subsection (a) of this Section, the unit's date for commencement of commercial operation will be the date on which the unit becomes a CAIR SO₂ unit, CAIR NO_x unit, or CAIR NO_x Ozone Season unit pursuant to Section 225.305, 225.405, or 225.505, respectively.~~
- 1) ~~For a unit with a date for commencement of commercial operation as defined in subsection (b) of this Section and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date will remain the unit's date of commencement of commercial operation, which shall continue to be treated as the same unit.~~
- 2) ~~For a unit with a date for commencement of commercial operation as defined in subsection (b) of this Section and that is subsequently replaced by a unit at the same source (e.g., repowered), such date will remain the replaced unit's date of commencement of commercial operation, and the 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. 12864, effective August 31, 2007~~)

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

Section 225.200 — Purpose

The purpose of this Subpart B is to control the emissions of mercury from coal fired EGU operating in Illinois.

Section 225.202 — Measurement Methods

Measurement of mercury must be according to the following:

- a) ~~Continuous emission monitoring pursuant to Appendix B to this Part or an alternative emissions monitoring system, alternative reference method for measuring emissions, or other alternative to the emissions monitoring and measurement requirements of Sections 225.240 through 225.290, if such alternative is submitted to the Agency in writing and approved in writing by the Manager of the Bureau of Air's Compliance Section~~
- b) ~~ASTM D3173-03, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke (Approved April 10, 2003), incorporated by reference in Section 225.140.~~

- e) ~~ASTM D3684-01, Standard Test Method for Total Mercury in Coal by the Oxygen Bomb Combustion/Atomic Absorption Method (Approved October 10, 2001), incorporated by reference in Section 225.140.~~
- d) ~~ASTM D5865-04, Standard Test Method for Gross Calorific Value of Coal and Coke (Approved April 1, 2004), incorporated by reference in Section 225.140.~~
- e) ~~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), incorporated by reference in Section 225.140.~~
- f) ~~ASTM D6722-01, Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by Direct Combustion Analysis (2001), incorporated by reference in Section 225.140.~~
- g) ~~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), incorporated by reference in Section 225.140.~~
- h) ~~Emissions testing pursuant to Methods 29, 30A, and 30B in Appendix A-8 to 40 CFR 60. (Source: Amended at 33 Ill. Reg. 10427, effective June 26, 2009)~~

Section 225.205 Applicability

The following stationary coal fired boilers and stationary coal fired combustion turbines are EGUs and are subject to this Subpart B:

- a) ~~Except as provided in subsection (b) of this Section, a unit serving, at any time since the start up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.~~
- b) ~~For a unit that 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, a cogeneration unit serving at any time a generator with nameplate capacity of more than 25 MWe and supplying in 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 system for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit must be subject to subsection (a) of this Section starting on the day on which the unit first no longer qualifies as a cogeneration unit.~~

Section 225.210 Compliance Requirements

a) ~~Permit Requirements.~~

~~The owner or operator of each source with one or more EGUs subject to this Subpart B at the source must apply for a CAAPP permit that addresses the applicable requirements of this Subpart B.~~

b) ~~Monitoring and Testing Requirements.~~

- 1) ~~The owner or operator of each source and each EGU at the source must comply with either the monitoring requirements of Sections 225.240 through 225.290 of this Subpart B, the periodic emissions testing requirements of Section 225.239 of this Subpart B, or an alternative emissions monitoring system, alternative reference method for measuring emissions, or other alternative to the emissions monitoring and measurement requirements of Sections 225.240 through 225.290, if such alternative is submitted to the Agency in writing and approved in writing by the Manager of the Bureau of Air's Compliance Section.~~
- 2) ~~The compliance of each EGU with the mercury requirements of Sections 225.230 and 225.237 of this Subpart B must be determined by the emissions measurements recorded and reported in accordance with either Sections 225.240 through 225.290 of this Subpart B, Section 225.239 of this Subpart B, or an alternative emissions monitoring system, alternative reference method for measuring emissions, or other alternative to the emissions monitoring and measurement requirements of Sections 225.240 through 225.290, if such alternative is submitted to the Agency in writing and approved in writing by the Manager of the Bureau of Air's Compliance Section.~~

c) ~~Mercury Emission Reduction Requirements~~

~~The owner or operator of any EGU subject to this Subpart B must comply with applicable requirements for control of mercury emissions of Section 225.230 or Section 225.237 of this Subpart B.~~

d) ~~Recordkeeping and Reporting Requirements~~

~~Unless otherwise provided, the owner or operator of a source with one or more EGUs at the source must keep on-site at the source each of the documents listed in subsections (d)(1) through (d)(3) of this Section for a period of five years from the date the document is created. This period may be extended, in writing by the Agency, for cause, at any time prior to the end of five years.~~

- 1) ~~All emissions monitoring information gathered in accordance with Sections 225.240 through 225.290 and all periodic emissions testing information gathered in accordance with Section 225.239.~~
 - 2) ~~Copies of all reports, compliance certifications, and other submissions and all records made or required or documents necessary to demonstrate compliance with the requirements of this Subpart B.~~
 - 3) ~~Copies of all documents used to complete a permit application and any other submission under this Subpart B.~~
 - e) ~~Liability.~~
 - 1) ~~The owner or operator of each source with one or more EGUs must meet the requirements of this Subpart B.~~
 - 2) ~~Any provision of this Subpart B that applies to a source must also apply to the owner and operator of such source and to the owner or operator of each EGU at the source.~~
 - 3) ~~Any provision of this Subpart B that applies to an EGU must also apply to the owner or operator of such EGU.~~
 - f) ~~Effect on Other Authorities. No provision of this Subpart B may be construed as exempting or excluding the owner or operator of a source or EGU from compliance with any other provision of an approved State Implementation Plan, a permit, the Act, or the CAA.~~
- (Source: Amended at 33 Ill. Reg. 10427, effective June 26, 2009)

Section 225.220 Clean Air Act Permit Program (CAAPP) Permit Requirements

- a) ~~Application Requirements.~~
 - 1) ~~Each source with one or more EGUs subject to the requirements of this Subpart B is required to submit a CAAPP permit application that addresses all applicable requirements of this Subpart B, applicable to each EGU at the source.~~
 - 2) ~~For any EGU that commenced commercial operation:~~
 - A) ~~on or before December 31, 2008, the owner or operator of such EGUs must submit an initial permit application or application for CAAPP permit modification that meets the requirements of this Section on or before December 31, 2008.~~
 - B) ~~after December 31, 2008, the owner or operator of any such EGU must submit an initial CAAPP permit application or application for CAAPP modification that meets the requirements of this Section not later than 180 days before initial startup of the EGU, unless the construction permit issued for the EGU addresses the requirements of this Subpart B.~~
- b) ~~Contents of Permit Applications.~~

~~In addition to other information required for a complete application for CAAPP permit or CAAPP permit modification, the application must include the following information:~~

 - 1) ~~The ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the U.S. Department of Energy, Energy Information Administration, if applicable.~~
 - 2) ~~Identification of each EGU at the source.~~
 - 3) ~~The intended approach to the monitoring requirements of Sections 225.240 through 225.290 of this Subpart B, or, in the alternative, the applicant may include its intended approach to the testing requirement of Section 225.239 of this Subpart B.~~
 - 4) ~~The intended approach to the mercury emission reduction requirements of Section 225.230 or 225.237 of this Subpart B, as applicable.~~
- e) ~~Permit Contents.~~
 - 1) ~~Each CAAPP permit issued by the Agency for a source with one or more EGUs subject to the requirements of this Subpart B must contain federally enforceable conditions addressing all applicable requirements of this Subpart B, which conditions must be a complete and segregable portion of the source's entire CAAPP permit.~~
 - 2) ~~In addition to conditions related to the applicable requirements of this Subpart B, each such CAAPP permit must also contain the information specified under subsection (b) of this Section.~~

(Source: Amended at 33 Ill. Reg. 10427, effective June 26, 2009)

Section 225.230 Emission Standards for EGUs at Existing Sources

- a) ~~Emission Standards.~~
 - 1) ~~Except as provided in Sections 225.230(b) and (d), 225.232 through 225.235, 225.239, and 225.291 through 225.299 of this Subpart B, beginning July 1, 2009, the owner or operator of a source with one or more EGUs subject to this Subpart B that commenced commercial operation on or before December 31, 2008, must comply with one of the following standards for each EGU on a rolling 12-month basis:~~

- A) ~~An emission standard of 0.0080 lb mercury/GWh gross electrical output; or~~
 B) ~~A minimum 90 percent reduction of input mercury.~~

- 2) ~~For an EGU complying with subsection (a)(1)(A) of this Section, the mercury emission rate during quality-assured monitor operating (QAMO) hours of the EGU for each 12-month rolling period, as monitored in accordance with this Subpart B and calculated as follows, must not exceed the applicable emission standard:~~

$$ER = \frac{\sum_{i=1}^{12} E_i}{\sum_{i=1}^{12} O_i}$$

Where:

ER = ~~Mercury emissions rate of the EGU during QAMO hours for the particular 12-month rolling period, expressed in lb/GWh.~~

E_i = ~~Mercury emissions of the EGU during QAMO hours, in lbs, in an individual month in the 12-month rolling period, as determined in accordance with the emissions monitoring provisions of this Subpart B.~~

O_i = ~~Gross electrical output of the EGU during QAMO hours, in GWh, in an individual month in the 12-month rolling period, as determined in accordance with Section 225.263 of this Subpart B.~~

- 3) ~~For an EGU complying with subsection (a)(1)(B) of this Section, the actual control efficiency for mercury emissions achieved by the EGU for each 12-month rolling period, as monitored in accordance with this Subpart B and calculated as follows, must meet or exceed the applicable efficiency requirement:~~

$$CE = 100 \times \left(1 - \frac{\sum_{i=1}^{12} E_i}{\sum_{i=1}^{12} I_i} \right)$$

Where:

CE = ~~Control efficiency for mercury emissions of the EGU during QAMO hours for the particular 12-month rolling period, expressed as a percent.~~

E_i = ~~Mercury emissions of the EGU, in lbs during QAMO hours, in an individual month in the 12-month rolling period, as determined in accordance with the emissions monitoring provisions of this Subpart B.~~

I_i = ~~Amount of mercury in the fuel fired in the EGU during QAMO hours, in lbs, in an individual month in the 12-month rolling period, as determined in accordance with Section 225.265 of this Subpart B. I_i is determined by multiplying the amount of mercury in the fuel fired in the EGU in month *i* by the number of QAMO hours in that month, and dividing that product by the number of EGU operating hours in that month.~~

b) ~~Alternative Emission Standards for Single EGUs.~~

- 1) ~~As an alternative to compliance with the emission standards in subsection (a) of this Section, the owner or operator of the EGU may comply with the emission standards of this Subpart B by demonstrating that the emissions of mercury from the EGU are less than the allowable emissions of mercury from the EGU on a rolling 12-month basis.~~
- 2) ~~For the purpose of demonstrating compliance with the alternative emission standards of this subsection (b), for each rolling 12-month period, the emissions of mercury from the EGU, as monitored in accordance with this Subpart B, must not exceed the allowable emissions of mercury from the EGU, as further provided by the following formulas:~~

$$E_{12} \leq A_{12}$$

$$E_{12} = \sum_{i=1}^{12} E_i$$

$$A_{12} = \sum_{i=1}^{12} A_i$$

Where:

E₁₂ = ~~Mercury emissions of the EGU during QAMO hours for the particular 12-month rolling period.~~

A₁₂ = ~~Allowable mercury emissions of the EGU during QAMO hours for the particular 12-month rolling period.~~

E_i = ~~Mercury emissions of the EGU during QAMO hours in an individual month in the 12-month rolling period.~~

A_i = Allowable mercury emissions of the EGU during QAMO hours in an individual month in the 12-month rolling period, based on either the input mercury to the unit ($A_{Input-i}$) or the electrical output from the EGU ($A_{Output-i}$), as selected by the owner or operator of the EGU for that given month. A_i is determined by multiplying the allowable mercury emissions based on either input mercury or electrical output in month i by the number of QAMO hours in that month, and dividing that product by the number of EGU operating hours in that month.

$A_{Input-i}$ = Allowable mercury emissions of the EGU in an individual month based on the input mercury to the EGU, calculated as 10.0 percent (or 0.100) of the input mercury to the EGU.

$A_{Output-i}$ = Allowable mercury emissions of the EGU in a particular month based on the electrical output from the EGU, calculated as the product of the output based mercury limit, i.e., 0.0080 lb/GWh, and the electrical output from the EGU, in GWh.

- 3) If the owner or operator of an EGU does not conduct the necessary sampling, analysis, and recordkeeping, in accordance with Section 225.265 of this Subpart B, to determine the mercury input to the EGU, the allowable emissions of the EGU must be calculated based on the electrical output of the EGU.
- e) If two or more EGUs are served by common stacks and the owner or operator conducts monitoring for mercury emissions in the common stacks, as provided for by Sections 1.14 through 1.18 of Appendix B to this Part, such that the mercury emissions of each EGU are not determined separately, compliance of the EGUs with the applicable emission standards of this Subpart B must be determined as if the EGUs were a single EGU.
- d) **Alternative Emission Standards for Multiple EGUs.**
- 1) As an alternative to compliance with the emission standards of subsection (a) of this Section, the owner or operator of a source with multiple EGUs may comply with the emission standards of this Subpart B by demonstrating that the emissions of mercury from all EGUs at the source during QAMO hours are less than the allowable emissions of mercury from all EGUs at the source on a rolling 12-month basis.
- 2) For the purposes of the alternative emission standard of subsection (d)(1) of this Section, for each rolling 12-month period, the emissions of mercury from all the EGUs at the source during QAMO hours, as monitored in accordance with this Subpart B, must not exceed the sum of the allowable emissions of mercury from all the EGUs at the source, as further provided by the following formulas:

$$E_s \leq A_s$$

$$E_s = \sum_{i=1}^n E_i$$

$$A_s = \sum_{i=1}^n A_i$$

Where:

E_s = Sum of the mercury emissions of the EGUs at the source during QAMO hours.

A_s = Sum of the allowable mercury emissions of the EGUs at the source during QAMO hours.

E_i = Mercury emissions of an individual EGU at the source during QAMO hours, as determined in accordance with subsection (b)(2) of this Section.

A_i = Allowable mercury emissions of an individual EGU at the source during QAMO hours, as determined in accordance with subsection (b)(2) of this Section.

n = Number of EGUs covered by the demonstration.

- 3) If an owner or operator of a source with two or more EGUs that is relying on this subsection (d) to demonstrate compliance fails to meet the requirements of this subsection (d) in a given 12-month rolling period, all EGUs at such source covered by the compliance demonstration are considered out of compliance with the applicable emission standards of this Subpart B for the entire last month of that period.
- (Source: Amended at 33 Ill. Reg. 10427, effective June 26, 2009)

Section 225.232 Averaging Demonstrations for Existing Sources

- a) Through December 31, 2013, as an alternative to compliance with the emission standards of Section 225.230(a) of this Subpart B, the owner or operator of an EGU may comply with the emission standards of this Subpart B by means of an Averaging Demonstration (Demonstration) that demonstrates that the emissions of mercury from the EGU and

~~other EGUs at the source and other EGUs at other sources covered by the Demonstration are less than the allowable emissions of mercury from all EGUs covered by the Demonstration on a rolling 12-month basis.~~

- ~~b) The EGUs at each source covered by a Demonstration must also comply with one of the following emission standards on a source-wide basis for the period covered by the Demonstration:~~
- ~~1) An emission standard of 0.020 lb mercury/GWh gross electrical output; or~~
 - ~~2) A minimum 75 percent reduction of input mercury.~~
- ~~c) For the purpose of this Section, compliance must be demonstrated using the equations in Section 225.230(a)(2), (a)(3), or (d)(2), as applicable, addressing all EGUs at the sources covered by the Demonstration, rather than by using only the EGUs at one source.~~
- ~~d) Limitations on Demonstrations:~~
- ~~1) The owners or operators of more than one existing source with EGUs can only participate in Demonstrations that include other existing sources that they own or operate.~~
 - ~~2) Single Existing Source Demonstrations~~
 - ~~A) The owner or operator of only a single existing source with EGUs (i.e., City, Water, Light & Power, City of Springfield, ID 167120AAO; Kincaid Generating Station, ID 021814AAB; and Southern Illinois Power Cooperative/Marion Generating Station, ID 199856AAC) can only participate in Demonstrations with other such owners or operators of a single existing source of EGUs.~~
 - ~~B) Participation in Demonstrations under this Section by the owner or operator of only a single existing source with EGUs must be authorized through federally enforceable permit conditions for each such source participating in the Demonstration.~~
- ~~e) A source may be included in only one Demonstration during each rolling 12-month period.~~
- ~~f) The owner or operator of EGUs using Demonstrations to show compliance with this Subpart B must complete the determination of compliance for each 12-month rolling period no later than 60 days following the end of the period.~~
- ~~g) If averaging is used to demonstrate compliance with this Subpart B, the effect of a failure to demonstrate compliance will be that the compliance status of each source must be determined under Section 225.230 of this Subpart B as if the sources were not covered by a Demonstration.~~
- ~~h) For purposes of this Section, if the owner or operator of any source that participates in a Demonstration with an owner or operator of a source that does not maintain the required records, data, and reports for the EGUs at the source, or that does not submit copies of such records, data, or reports to the Agency upon request, then the effect of this failure will be deemed to be a failure to demonstrate compliance and the compliance status of each source must be determined under Section 225.230 of this Subpart B as if the sources were not covered by a Demonstration.~~
- ~~(Source: Amended at 33 Ill. Reg. 10427, effective June 26, 2009)~~

Section 225.233 Multi-Pollutant Standards (MPS)

a) General.

- 1) As an alternative to compliance with the emissions standards of Section 225.230(a), the owner of eligible EGUs may elect for those EGUs to demonstrate compliance pursuant to this Section, which establishes control requirements and standards for emissions of NO_x and SO₂, as well as for emissions of mercury.
- 2) For the purpose of this Section, the following requirements apply:
 - A) An eligible EGU is an EGU that is located in Illinois and which commenced commercial operation on or before December 31, 2004; and
 - B) Ownership of an eligible EGU is determined based on direct ownership, by the holding of 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 has the right or authority to submit a CAAPP application on behalf of the EGU.
- 3) The owner of one or more EGUs electing to demonstrate compliance with this Subpart B pursuant to this Section must submit an application for a CAAPP permit modification to the Agency, as provided in Section 225.220, that includes the information specified in subsection (b) of this Section and which clearly states the owner's election to demonstrate compliance pursuant to this Section 225.233.
 - A) If the owner of one or more EGUs elects to demonstrate compliance with this Subpart pursuant to this Section, then all EGUs it owns in Illinois as of July 1, 2006, as defined in subsection (a)(2)(B) of this Section,

must be thereafter subject to the standards and control requirements of this Section, except as provided in subsection (a)(3)(B). Such EGUs must be referred to as a Multi-Pollutant Standard (MPS) Group.

- B) Notwithstanding the foregoing, the owner may exclude from an MPS Group any EGU scheduled for permanent shutdown that the owner so designates in its CAAPP application required to be submitted pursuant to subsection (a)(3) of this Section, with compliance for such units to be achieved by means of Section 225.235.
- 4) When an EGU is subject to the requirements of this Section, the requirements apply to all owners or operators of the EGU.
- b) Notice of Intent.
The owner of one or more EGUs that intends to comply with this Subpart B by means of this Section must notify the Agency of its intention by December 31, 2007. The following information must accompany the notification:
- 1) The identification of each EGU that will be complying with this Subpart B by means of the multi-pollutant standards contained in this Section, with evidence that the owner has identified all EGUs that it owned in Illinois as of July 1, 2006 and which commenced commercial operation on or before December 31, 2004;
 - 2) If an EGU identified in subsection (b)(1) of this Section is also owned or operated by a person different than the owner 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 accepting the application;
 - 3) The Base Emission Rates for the EGUs, with copies of supporting data and calculations;
 - 4) 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 the each EGU to comply with emission control requirements of this Section, including identification of each EGU in the MPS group that will be addressed by subsection (c)(1)(B) of this Section, with information showing that the eligibility criteria for this subsection (b) are satisfied; and
 - 5) Identification of each EGU that is scheduled for permanent shut down, as provided by Section 225.235, which will not be part of the MPS Group and which will not be demonstrating compliance with this Subpart B pursuant to this Section.

~~e) Control Technology Requirements for Emissions of Mercury.~~

~~1) Requirements for EGUs in an MPS Group.~~

- ~~A) For each EGU in an MPS Group other than an EGU that is addressed by subsection (c)(1)(B) of this Section for the period beginning July 1, 2009 (or December 31, 2009 for an EGU for which an SO₂ scrubber or fabric filter is being installed to be in operation by December 31, 2009), and ending on December 31, 2014 (or such earlier date that the EGU is subject to the mercury emission standard in subsection (d)(1) of this Section), the owner or operator of the EGU must install, to the extent not already installed, and properly operate and maintain one of the following emission control devices:~~
- ~~i) A Halogenated Activated Carbon Injection System, complying with the sorbent injection requirements of subsection (c)(2) of this Section, except as may be otherwise provided by subsection (c)(4) of this Section, and followed by a Cold Side Electrostatic Precipitator or Fabric Filter; or~~
 - ~~ii) If the boiler fires bituminous coal, a Selective Catalytic Reduction (SCR) System and an SO₂ Scrubber.~~
- ~~B) An owner of an EGU in an MPS Group has two options under this subsection (e). For an MPS Group that contains EGUs smaller than 90 gross MW in capacity, the owner may designate any such EGUs to be not subject to subsection (c)(1)(A) of this Section. Or, for an MPS Group that contains EGUs with gross MW capacity of less than 115 MW, the owner may designate any such EGUs to be not subject to subsection (c)(1)(A) of this Section, provided that the aggregate gross MW capacity of the designated EGUs does not exceed 4% of the total gross MW capacity of the MPS Group. For any EGU subject to one of these two options, unless the EGU is subject to the emission standards in subsection (d)(2) of this Section, beginning on January 1, 2013, and continuing until such date that the owner or operator of the EGU commits to comply with the mercury emission standard in subsection (d)(2) of this Section, the owner or operator of the EGU must install and properly operate and maintain a Halogenated Activated Carbon Injection System that complies with the sorbent injection requirements of subsection (c)(2) of this Section, except as may be otherwise provided by subsection (c)(4) of this Section, and followed by either a Cold Side Electrostatic Precipitator or Fabric Filter. The use of a properly installed, operated, and maintained Halogenated Activated Carbon Injection System that meets the sorbent injection requirements of subsection (c)(2) of this Section is defined as the "principal control technique."~~

- 2) ~~For each EGU for which injection of halogenated activated carbon is required by subsection (c)(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 (c)(4) of this Section, is defined as all of the following:~~
- ~~A) The use of an injection system designed for effective absorption of mercury, considering the configuration of the EGU and its ductwork;~~
 - ~~B) The injection of halogenated activated carbon manufactured by Alstom, Norit, or Sorbent Technologies, Calgon Carbon's FLUEPAC CF Plus, or Calgon Carbon's FLUEPAC MC Plus, 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~~
 - ~~C) The injection of sorbent at the following minimum rates, as applicable:
 - ~~i) 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 lbs mercury/GWh gross electrical output or at least 75 percent reduction of input mercury, 2.5 lbs per million actual cubic feet;~~
 - ~~ii) For an EGU firing bituminous coal, 10.0 lbs per million actual cubic feet 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;~~
 - ~~iii) For an EGU firing a blend of subbituminous and bituminous coal, a rate that is the weighted average of the above rates, based on the blend of coal being fired; or~~
 - ~~iv) A rate or rates set lower by the Agency, in writing, than the rate specified in any of subsections (c)(2)(C)(i), (c)(2)(C)(ii), or (c)(2)(C)(iii) 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.~~~~
 - ~~D) For the purposes of subsection (c)(2)(C) of this Section, the flue gas flow shall be the gas flow rate in the stack for all units except for those equipped with activated carbon injection prior to a hot side electrostatic precipitator; for units equipped with activated carbon injection prior to a hot side electrostatic precipitator, the flue gas flow rate shall be the gas flow rate at the inlet to the hot side electrostatic precipitator, which shall be determined as the stack flow rate adjusted through the use of Charles' Law for the differences in gas temperatures in the stack and at the inlet to the electrostatic precipitator ($V_{esp} = V_{stack} \times T_{esp} / T_{stack}$, where $V =$ gas flow rate in acf and $T =$ gas temperature in Kelvin or Rankine~~
- 3) ~~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 (c)(2)(C)(iv) of this Section must submit an application to the Agency proposing such rate or rates, and must meet the requirements of subsections (c)(3)(A) and (c)(3)(B) of this Section, subject to the limitations of subsections (c)(3)(C) and (c)(3)(D) of this Section:~~
- ~~A) The application must be submitted as an application for a new or revised federally enforceable operating permit for the EGU, and it must include a summary of relevant mercury emission 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~~
 - ~~B) 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 (c)(1)(A) of this subsection must apply for unit specific injection rate or rates by July 1, 2009. Thereafter, the owner or operator of the EGU may supplement its application; and~~
 - ~~C) 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~~
 - ~~D) 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.~~
- 4) ~~During any evaluation of the effectiveness of a listed sorbent, an alternative sorbent, or other technique to control mercury emissions, the owner or operator of an EGU need not comply with the requirements of subsection (c)(2) of this Section for any system needed to carry out the evaluation, as further provided as follows:~~

- ~~A) 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;~~
 - ~~B) 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 technique, as initially addressed by the owner or operator in a support document submitted with the evaluation program;~~
 - ~~C) 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~~
 - ~~D) If the evaluation of the alternative control technique shows less effective control of mercury emissions from the EGU than was achieved with the principal control technique, the owner or operator of the EGU must resume use of the principal control technique. 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 subsection (c).~~
- 5) 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 this Subpart B by means of this Section must also comply with the following additional requirements:
- ~~A) For the first 36 months that injection of sorbent is required, it must maintain records of the usage of sorbent, the flue gas flow rate from the EGU (and, if the unit is equipped with activated carbon injection prior to a hot side electrostatic precipitator, flue gas temperature at the inlet of the hot side electrostatic precipitator and in the stack), and the sorbent feed rate, in pounds per million actual cubic feet of flue, on a weekly average;~~
 - ~~B) After the first 36 months that injection of sorbent is required, it must monitor activated sorbent feed rate to the EGU, gas flow rate in the stack, and, if the unit is equipped with activated carbon injection prior to a hot side electrostatic precipitator, flue gas temperature at the inlet of the hot side electrostatic precipitator and in the stack. It must automatically record this data and the sorbent carbon feed rate, in pounds per million actual cubic feet of flue gas, on an hourly average; and~~
 - ~~C) 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.~~
- 6) Until June 30, 2012, as an alternative to the CEMS or excepted monitoring system (sorbent trap system) monitoring, recordkeeping, and reporting requirements in Sections 225.240 through 225.290, the owner or operator of an EGU may elect to comply with the emissions testing, monitoring, recordkeeping, and reporting requirements in Section 225.239(e), (d), (e), (f)(1) and (2), (h)(2), (i)(3) and (4), and (j)(1).
- 7) 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 this Subpart B by means of this Section must also submit quarterly reports for the recordkeeping and monitoring conducted pursuant to subsection (c)(5) of this Section.
- d) ~~Emission Standards for Mercury.~~
- 1) For each EGU in an MPS Group that is not addressed by subsection (c)(1)(B) of this Section, beginning January 1, 2015 (or such earlier date when the owner or operator of the EGU notifies the Agency that it will comply with these standards) and continuing thereafter, the owner or operator of the EGU must comply with one of the following standards on a rolling 12-month basis:
 - ~~A) An emission standard of 0.0080 lb mercury/GWh gross electrical output; or~~
 - ~~B) A minimum 90-percent reduction of input mercury.~~
 - 2) For each EGU in an MPS Group that has been addressed under subsection (c)(1)(B) of this Section, beginning on the date when the owner or operator of the EGU notifies the Agency that it will comply with these standards and continuing thereafter, the owner or operator of the EGU must comply with one of the following standards on a rolling 12-month basis:

- ~~A) An emission standard of 0.0080 lb mercury/GWh gross electrical output; or~~
~~B) A minimum 90 percent reduction of input mercury.~~
- ~~3) Compliance with the mercury emission standard or reduction requirement of this subsection (d) must be calculated in accordance with Section 225.230(a) or (d), or Section 225.232 until December 31, 2013.~~
- ~~4) Until June 30, 2012, as an alternative to demonstrating compliance with the emissions standards in this subsection (d), the owner or operator of an EGU may elect to comply with the emissions testing requirements in Section 225.239(a)(4), (b), (c), (d), (e), (f), (g), (h), (i), and (j) of this Subpart.~~
- e) Emission Standards for NO_x and SO₂.
- 1) NO_x Emission Standards.
- A) Beginning in calendar year 2012 and continuing in each calendar thereafter, for the EGUs in each MPS Group, the owner and operator of the EGUs must comply with an overall NO_x annual emission rate of no more than 0.11 lb/million Btu or an emission rate equivalent to 52 percent of the Base Annual Rate of NO_x emissions, whichever is more stringent.
- B) Beginning in the 2012 ozone season and continuing in each ozone season thereafter, for the EGUs in each MPS Group, the owner and operator of the EGUs must comply with an overall NO_x seasonal emission rate of no more than 0.11 lb/million Btu or an emission rate equivalent to 80 percent of the Base Seasonal Rate of NO_x emissions, whichever is more stringent.
- 2) SO₂ Emission Standards.
- A) Beginning in calendar year 2013 and continuing in calendar year 2014, for the EGUs in each MPS Group, the owner and operator of the EGUs must comply with an overall SO₂ annual emission rate of 0.33 lb/million Btu or a rate equivalent to 44 percent of the Base Rate of SO₂ emissions, whichever is more stringent.
- B) Beginning in calendar year 2015 and continuing in each calendar year thereafter, for the EGUs in each MPS Grouping, the owner and operator of the EGUs must comply with an overall annual emission rate for SO₂ of 0.25 lbs/million Btu or a rate equivalent to 35 percent of the Base Rate of SO₂ emissions, whichever is more stringent.
- 3) Ameren MPS Group Multi-Pollutant Standard
- A) Notwithstanding the provisions of subsections (e)(1) and (2) of this Section, this subsection (e)(3) applies to the Ameren MPS Group as described in the notice of intent submitted by Ameren Energy Resources in accordance with subsection (b) of this Section.
- B) NO_x Emission Standards-
- i) Beginning in the 2010 ozone season and continuing in each ozone season thereafter, for the EGUs in the Ameren MPS Group, the owner and operator of the EGUs must comply with an overall NO_x seasonal emission rate of no more than 0.11 lb/million Btu.
- ii) Beginning in calendar year 2010 and continuing in calendar year 2011, for the EGUs in the Ameren MPS Group, the owner and operator of the EGUs must comply with an overall NO_x annual emission rate of no more than 0.14 lb/million Btu.
- iii) Beginning in calendar year 2012 and continuing in each calendar year thereafter, for the EGUs in the Ameren MPS Group, the owner and operator of the EGUs must comply with an overall NO_x annual emission rate of no more than 0.11 lb/million Btu.
- C) SO₂ Emission Standards
- i) Beginning in calendar year 2010 and continuing in each calendar year through 2013, for the EGUs in the Ameren MPS Group, the owner and operator of the EGUs must comply with an overall SO₂ annual emission rate of 0.50 lb/million Btu.
- ii) In calendar year 2014, for the EGUs in the Ameren MPS Group, the owner and operator of the EGUs must comply with an overall SO₂ annual emission rate of 0.43 lb/million Btu.
- iii) Beginning in calendar year 2015 and continuing in calendar year 2016, for the EGUs in the Ameren MPS Group, the owner and operator of the EGUs must comply with an overall SO₂ annual emission rate of 0.25 lb/million Btu.
- iv) Beginning in calendar year 2017 and continuing in each calendar year thereafter, for the EGUs in the Ameren MPS Group, the owner and operator of the EGUs must comply with an overall SO₂ annual emission rate of 0.23 lb /million Btu.
- 4) Compliance with the NO_x and SO₂ emission standards must be demonstrated in accordance with Sections 225.310, 225.410, and 225.510. The owner or operator of EGUs must complete the demonstration of compliance

before March 1 of the following year for annual standards and before November 1 for seasonal standards, by which date a compliance report must be submitted to the Agency.

~~f) Requirements for NO_x and SO₂ Allowances.~~

- ~~1) The owner or operator of EGUs in an MPS Group must not sell or trade to any person or otherwise exchange with or give to any person NO_x allowances allocated to the EGUs in the MPS Group for vintage years 2012 and beyond that would otherwise be available for sale, trade, or exchange as a result of actions taken to comply with the standards in subsection (e) of this Section. Such allowances that are not retired for compliance must be surrendered to the Agency on an annual basis, beginning in calendar year 2013. This provision does not apply to the use, sale, exchange, gift, or trade of allowances among the EGUs in an MPS Group.~~
 - ~~2) The owners or operators of EGUs in an MPS Group must not sell or trade to any person or otherwise exchange with or give to any person SO₂ allowances allocated to the EGUs in the MPS Group for vintage years 2013 and beyond that would otherwise be available for sale or trade as a result of actions taken to comply with the standards in subsection (e) of this Section. Such allowances that are not retired for compliance, or otherwise surrendered pursuant to a consent decree to which the State of Illinois is a party, must be surrendered to the Agency on an annual basis, beginning in calendar year 2014. This provision does not apply to the use, sale, exchange, gift, or trade of allowances among the EGUs in an MPS Group.~~
 - ~~3) The provisions of this subsection (f) do not restrict or inhibit the sale or trading of allowances that become available from one or more EGUs in a MPS Group as a result of holding allowances that represent over-compliance with the NO_x or SO₂ standard in subsection (e) of this Section, once such a standard becomes effective, whether such over-compliance results from control equipment, fuel changes, changes in the method of operation, unit shut downs, or other reasons.~~
 - ~~4) For purposes of this subsection (f), NO_x and SO₂ allowances mean allowances necessary for compliance with Sections 225.310, 225.410, or 225.510, 40 CFR 72, or Subparts AA and AAAA of 40 CFR 96, or any future federal NO_x or SO₂ emissions trading programs that modify or replace these programs. This Section does not prohibit the owner or operator of EGUs in an MPS Group from purchasing or otherwise obtaining allowances from other sources as allowed by law for purposes of complying with federal or state requirements, except as specifically set forth in this Section.~~
 - ~~5) By March 1, 2010, and continuing each year thereafter, the owner or operator of EGUs in an MPS Group must submit a report to the Agency that demonstrates compliance with the requirements of this subsection (f) for the previous calendar year, and which includes identification of any allowances that have been surrendered to the USEPA or to the Agency and any allowances that were sold, gifted, used, exchanged, or traded because they became available due to over-compliance. All allowances that are required to be surrendered must be surrendered by August 31, unless USEPA has not yet deducted the allowances from the previous year. A final report must be submitted to the Agency by August 31 of each year, verifying that the actions described in the initial report have taken place or, if such actions have not taken place, an explanation of all changes that have occurred and the reasons for such changes. If USEPA has not deducted the allowances from the previous year by August 31, the final report will be due, and all allowances required to be surrendered must be surrendered, within 30 days after such deduction occurs.~~
- ~~g) Notwithstanding 35 Ill. Adm. Code 201.146(hhh), until an EGU has complied with the applicable emission standards of subsections (d) and (e) of this Section for 12 months, the owner or operator of the EGU must obtain a construction permit for any new or modified air pollution control equipment that it proposes to construct for control of emissions of mercury, NO_x, or SO₂.~~
- (Source: Amended at 33 Ill. Reg. 10427, effective June 26, 2009)

~~**Section 225.234 Temporary Technology Based Standard for EGUs at Existing Sources**~~

~~a) General.~~

- ~~1) At a source with EGUs that commenced commercial operation on or before December 31, 2008, for an EGU that meets the eligibility criteria in subsection (b) of this Section, the owner or operator of the EGU may temporarily comply with the requirements of this Section through June 30, 2015, as an alternative to compliance with the mercury emission standards in Section 225.230, as provided in subsections (c), (d), and (e) of this Section.~~
- ~~2) An EGU that is complying with the emission control requirements of this Subpart B by operating pursuant to this Section may not be included in a compliance demonstration involving other EGUs during the period that is operating pursuant to this Section.~~

~~within 30 days after discovery of the deviations, and a discussion of the possible cause of such deviations, any corrective actions, and any preventative measures taken.~~

- ~~f) Quality Assurance RATA Reports. The owner or operator of an EGU must submit to the Agency, Air Compliance and Enforcement Section, the quality assurance RATA report for each EGU or group of EGUs monitored at a common stack and each non-EGU pursuant to Section 1.16(b)(2)(B) of Appendix B to this Part, within 45 days after completing a quality assurance RATA.~~

~~(Source: Amended at 33 Ill. Reg. 10427, effective June 26, 2009)~~

Section 225.291 Combined Pollutant Standard: Purpose

The purpose of Sections 225.291 through 225.299 (hereinafter referred to as the Combined Pollutant Standard (“CPS”)) is to allow an alternate means of compliance with the emissions standards for mercury in Section 225.230(a) for specified EGUs through permanent shut-down, installation of ACI, and the application of pollution control technology for NO_x, PM, and SO₂ 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 the CPS, 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 33 Ill. Reg. 10427, effective June 26, 2009)

Section 225.292 Applicability of the Combined Pollutant Standard

- a) As an alternative to compliance with the emissions standards of Section 225.230(a), the owner or operator of specified EGUs in the CPS 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 the CPS, which establishes control requirements and emissions standards for NO_x, PM, SO₂, 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 the CPS 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 225.293 that clearly states the owner’s or operator’s election to demonstrate compliance with Section 225.230(a) pursuant to the CPS.
- d) If an owner or operator of one or more specified EGUs elects to demonstrate compliance with Section 225.230(a) pursuant to the CPS, 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 the CPS. 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.

(Source: Added at 33 Ill. Reg. 10427, effective June 26, 2009)

Section 225.293 Combined Pollutant Standard: 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 the CPS 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 the CPS, 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 the CPS.

(Source: Added at 33 Ill. Reg. 10427, effective June 26, 2009)

Section 225.294 ~~Combined Pollutant Standard: 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 225.297, 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) ~~Compliance with Emission Standards~~**

- 1) ~~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 either:
A) ~~a rolling 12-month basis; or~~
B) ~~a quarterly calendar basis pursuant to the emissions testing requirements in Section 225.239(a)(4), (c), (d), (e), (f), (g), (h), (i), and (j) of this Subpart until June 30, 2012.~~~~
- 2) ~~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), or Section 225.232 until December 31, 2013.~~**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:~~**

- 1) ~~Except as provided in subsection (h) of this Section, optimum manner is defined as all of the following:
A) ~~The use of an injection system for effective absorption of mercury, considering the configuration of the EGU and its ductwork;~~
B) ~~The injection of halogenated activated carbon manufactured by Alstom, Norit, or Sorbent Technologies, Calgon Carbon's FLUEPAC CF Plus, or Calgon Carbon's FLUEPAC MC Plus, 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~~
C) ~~The injection of sorbent at the following minimum rates, as applicable:
i) ~~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;~~~~~~

- ~~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 this Subpart B by means of Sections 225.291 through 225.299 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 flue gas flow rate from the EGU (and, if the unit is equipped with activated carbon injection prior to a hot side electrostatic precipitator, flue gas temperature at the inlet of the hot side electrostatic precipitator and in the stack), and the sorbent feed rate, in pounds per million actual cubic feet of flue gas, 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, gas flow rate in the stack, and, if the unit is equipped with activated carbon injection prior to a hot side electrostatic precipitator, flue gas temperature at the inlet of the hot side electrostatic precipitator and in the stack. It must automatically record this data and the sorbent carbon feed rate, in pounds per million actual cubic feet of flue gas, 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 the CPS must also submit quarterly reports for the recordkeeping and monitoring conducted pursuant to subsection (j) of this Section.~~
- ~~l) Until June 30, 2012, as an alternative to the CEMS (or excepted monitoring system) monitoring, recordkeeping, and reporting requirements in Sections 225.240 through 225.290, the owner or operator of an EGU may elect to comply with the emissions testing, monitoring, recordkeeping, and reporting requirements in Section 225.239(c), (d), (e), (f)(1) and (2), (h)(2), (i)(3) and (4), and (j)(1).~~
- ~~(Source: Added at 33 Ill. Reg. 10427, effective June 26, 2009)~~

Section 225.295 Combined Pollutant Standard: Emissions Standards for NO_x and SO₂

- a) Emissions Standards for NO_x and Reporting Requirements.
- 1) Beginning with calendar year 2012 and continuing in each calendar year thereafter, the CPS group, which includes all specified EGUs that have not been permanently shut down by December 31 before the applicable calendar year, must comply with a CPS group average annual NO_x emissions rate of no more than 0.11 lbs/mmBtu.
 - 2) Beginning with ozone season control period 2012 and continuing in each ozone season control period (May 1 through September 30) thereafter, the CPS group, which includes all specified EGUs that have not been permanently shut down by December 31 before the applicable ozone season, must comply with a CPS group average ozone season NO_x emissions rate of no more than 0.11 lbs/mmBtu.
 - 3) The owner or operator of the specified EGUs in the CPS group must file, not later than one year after startup of any selective SNCR on such EGU, a report with the Agency describing the NO_x emissions reductions that the SNCR has been able to achieve.
- b) Emissions Standards for SO₂. Beginning in calendar year 2013 and continuing in each calendar year thereafter, the CPS group must comply with the applicable CPS group average annual SO₂ 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_x and SO₂ 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 225.298(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 SO₂ emission rate, annual NO_x emission rate and ozone season NO_x emission rates shall be determined as follows:

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

Where:

- ER_{avg} = average annual or ozone season emission rate in lbs/mmBbtu of all EGUs in the CPS group.
 HI_i = heat input for the annual or ozone control period of each EGU, in mmBtu.
 SO_{2i} = actual annual SO_2 tons of each EGU in the CPS group.
 NO_{xi} = actual annual or ozone season NO_x tons of each EGU in the CPS group.
 N = number of EGUs that are in the CPS group.
 I = each EGU in the CPS group.

(Source: Amended at 33 Ill. Reg. 10427, effective June 26, 2009)

Section 225.296 Combined Pollutant Standard: Control Technology Requirements for NO_x , SO_2 , and PM Emissions

- a) Control Technology Requirements for NO_x and SO_2 .
- 1) On or before December 31, 2013, the owner or operator must either permanently shut down or install and have operational FGD equipment on Waukegan 7;
 - 2) On or before December 31, 2014, the owner or operator must either permanently shut down or install and have operational FGD equipment on Waukegan 8;
 - 3) On or before December 31, 2015, the owner or operator must either permanently shut down or install and have operational FGD equipment on Fisk 19;
 - 4) If Crawford 7 will be operated after December 31, 2018, and not permanently shut down by this date, the owner or operator must:
 - A) On or before December 31, 2015, install and have operational SNCR or equipment capable of delivering essentially equivalent NO_x reductions on Crawford 7; and
 - B) On or before December 31, 2018, install and have operational FGD equipment on Crawford 7;
 - 5) If Crawford 8 will be operated after December 31, 2017 and not permanently shut down by this date, the owner or operator must:
 - A) On or before December 31, 2015, install and have operational SNCR or equipment capable of delivering essentially equivalent NO_x emissions reductions on Crawford 8; and
 - B) On or before December 31, 2017, install and have operational FGD equipment on Crawford 8.
- b) Other Control Technology Requirements for SO_2 . Owners or operators of specified EGUs must either permanently shut down or install FGD equipment on each specified EGU (except Joliet 5), on or before December 31, 2018, unless an earlier date is specified in subsection (a) of this Section.
- c) Control Technology Requirements for PM. The owner or operator of the two specified EGUs listed 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 225.296(a), (b), and (c), the owner or operator of the EGU must obtain a construction permit for any new or modified air pollution control equipment that it proposes to construct for control of emissions of mercury, NO_x , PM, or SO_2 .

(Source: Added at 33 Ill. Reg. 10427, effective June 26, 2009)

~~Section 225.297 Combined Pollutant Standard: Permanent Shut-Downs~~

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

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

(Source: Amended at 33 Ill. Reg. 10427, effective June 26, 2009)