



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R05-OAR-2016-0397; FRL-9967-19-Region 5]

**Air Plan Approval; Illinois; Rule Part 225, Control of Emissions
from Large Combustion Sources**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing to approve a revision to the Illinois state implementation plan (SIP) to amend requirements applicable to certain coal-fired electric generating units (EGUs). These amendments require the Will County 3 and Joliet 6, 7, and 8 EGUs to permanently cease combusting coal; allow other subject EGUs to cease combusting coal as an alternative means of compliance with mercury emission standards; exempt the Will County 4 EGU from sulfur dioxide (SO₂) control technology requirements; require all subject EGUs to comply with a group annual nitrogen oxide (NO_x) emission rate; and require only those subject EGUs that combust coal to comply with a group annual SO₂ emission rate.

DATES: Comments must be received on or before **[insert date 30 days after date of publication in the Federal Register]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R05-OAR-2016-0397 at <http://www.regulations.gov> or via email to blakley.pamela@epa.gov. For comments submitted at

Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the "For Further Information Contact" section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

FOR FURTHER INFORMATION CONTACT: Charles Hatten, Environmental Engineer, Control Strategy Section, Air Programs Branch (AR-18J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois, 60604, (312) 886-6031, hatten.charles@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document whenever

"we," "us," or "our" is used, we mean EPA. This supplementary information section is arranged as follows:

I. Background

II. Discussion of the state's submittal

A. Rule revisions that EPA is proposing to approve

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C. Analysis of the state's submittal

III. What action is EPA taking?

IV. Incorporation by reference

V. Statutory and Executive Order Reviews

I. Background

On June 24, 2011, Illinois EPA submitted to EPA state rules to address the visibility protection requirements of Section 169A of the Clean Air Act (CAA) and the regional haze rule, as codified in 40 CFR 51.308. This submission included the following provisions contained in Title 35 of the Illinois Administrative Code (IAC), Part 225 (Part 225): sections 225.291, 225.292, 225.293, 225.295 and 225.296 (except for 225.296(d)), and Appendix A to Part 225. On July 6, 2012, EPA approved these provisions (77 FR 39943).

On June 23, 2016, Illinois submitted revisions to these rules and on January 9, 2017, Illinois submitted additional

information explaining the revisions.¹ These rules are known as the "Combined Pollutant Standard," and are codified at 35 IAC Part 225, Subpart B, titled "Control of Emissions from Large Combustion Sources" (CPS or Part 225 rules). The CPS provides certain EGUs an alternative means of compliance with the mercury emission standards in 35 IAC 225.230(a).² The CPS applies to EGUs at six power plants, which are identified in Appendix A to the CPS. Illinois is revising the CPS to address the conversion of certain EGUs to fuel other than coal.

II. Discussion of the state's submittal

A. Rule revisions that EPA is proposing to approve

EPA is proposing to approve the following revisions as part of Illinois' SIP:

Section 225.291 Combined Pollutant Standard: Purpose

SIP Section 225.291 sets forth the purpose of the CPS, which is to allow an alternate means of compliance with the emissions standards for mercury in 35 IAC 225.230(a) for specified EGUs through permanent shutdown, the installation of an activated carbon injection system, or the application of pollution control

1 Illinois' final rule amended other state regulations, Parts 214 (Sulfur limitations), and Part 217 (Nitrogen oxide emissions), and other portions of Part 225, that are not part of the Illinois SIP, and were not submitted to EPA as part of this action. Illinois stated in its statement of reasons for the final rule that these revisions are proposed to control emissions of sulfur dioxide (SO₂) in and around areas designated as nonattainment with respect to the 2010 National Ambient Air Quality Standard (NAAQS), and are intended to aid Illinois' attainment planning efforts for the 2010 SO₂ NAAQS.

2 35 IAC 225.230 contains Illinois' mercury emission standards for EGUs, and

technology for NO_x, SO₂, and particulate matter (PM) emissions that also reduce mercury emissions as a co-benefit.

Illinois revised section 225.291 by stating as its purpose the conversion of an EGU to a fuel other than coal (such as natural gas or distillate fuel oil with sulfur content no greater than 15 parts per million (ppm)) as an additional alternative means of compliance with the mercury emission standards under the CPS.

Section 225.292 Applicability of the Combined Pollutant Standard

SIP Section 225.292 describes the applicability of the CPS to the owner or operator of EGUs located at the Fisk, Crawford, Joliet, Powerton, Waukegan, and Will County power plants, which are specified in Appendix A of section 225. This section establishes what constitutes ownership of an EGU under the CPS, which EGUs may elect to comply with the CPS, the process by which an owner or operator may elect to demonstrate compliance with the emission standards for mercury at 35 IAC 225.230 pursuant to the CPS, and compliance deadlines.

Illinois revised subsection (b) of section 225.292 to address EGUs that burn fuel other than coal. Illinois removed a reference that describes specified EGUs as "coal-fired," and added a statement that a "specified EGU" is an EGU listed in Appendix A of section 225, irrespective of, among other things,

is not part of the federally enforceable SIP.

“the type of fuel combusted (including natural gas or distillate fuel oil with sulfur content no greater than 15 ppm).” Illinois further amended subsection (a) of 225.292 by adding the word “the” before listing the specific power plants to which the CPS applies.

Section 225.293 Combined Pollutant Standard: Notice of Intent

SIP Section 225.293 contains the notification requirements for the owner or operator of one or more specified EGUs who elects to comply with the mercury emission standards in 35 IAC 225.230 by means of the CPS.

Illinois amended this section by adding subsection (d), which establishes a notification requirement for owners and operators of EGUs listed in Appendix A of section 225 who, on or after January 1, 2015, change the type of primary fuel combusted by the unit or the control device or devices installed and operating on the unit. Such owners and operators must notify Illinois EPA of such change by January 1, 2017, or within 30 days after the completion of such change, whichever is later.

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

SIP Section 225.295 contains the emission standards, reporting requirements, and compliance dates for NO_x and SO₂ applicable to the EGUs in the CPS group. Of relevance here, subsection (a) contains the NO_x emission standards and reporting

requirements, subsection (b) contains the emission standards for SO₂, and subsection (d) contains requirements for determining the CPS group average annual SO₂ emission rate, annual NO_x emission rate and ozone season NO_x emission rates.

Illinois amended this section to include specified EGUs that burn fuel other than coal. Section 225.295(a)(1) and (a)(2) was revised to specify that the NO_x emission rates apply to all EGUs in the CPS "regardless of the type of fuel combusted." The NO_x emission standard for both the CPS group average annual and ozone season emission rate remains unchanged at 0.11 pounds/million British thermal unit (lbs/mmBtu).

Illinois further amended Section 225.295 to specify that the SO₂ emission standards in subsections (b) only apply to those specified EGUs in the CPS group that combust coal.

Finally, Illinois revised Section 225.295(d) to specify that the calculations for determining the group annual average SO₂ emission rate only applies to those specified EGUs that combust coal identified in subsection (b); and to change the references from "tons" to "lbs" used in the equations to determine compliance with the CPS group average annual SO₂ emission rate, annual NO_x emission rate and the ozone season NO_x emission rate, on a lbs/mmBTU basis.

Section 225.296 Combined Pollutant Standard: Control Technology Requirements for NO_x, SO₂, and PM Emissions

SIP Section 225.296 sets forth control technology requirements and compliance dates for SO₂, NO_x, and PM emissions for specified EGUs under the CPS. It also contains certain exemptions from compliance.

Illinois amended section 225.296(b) - "Other Control Technology Requirements for SO₂," to require that Will County 3 stop combusting coal on and after April 16, 2016, and Joliet 6, 7, and 8 stop combusting coal on and after December 31, 2016. Additionally, Illinois added to the requirements for the owners or operators of the other specified EGUs in Appendix A of section 225 the option to permanently cease combusting coal in addition to permanent shutdown or installation of fluidized gas desulfurization (FGD) equipment on or before December 18, 2018, unless an earlier date applies. Illinois further exempts Will County 4 from compliance with this section instead of Joliet 6.³

Illinois further amended section 225.296(c) - "Control Technology Requirements for PM" to remove Will County 3 from the compliance requirements for PM in this section, which requires the owner or operator to make certain changes to the electrostatic precipitator or permanently shut down the EGU by the date specified in this section. Section 225.296(c) now only applies

³ According to Illinois, the Joliet 6 EGU was incorrectly identified in this section as "Joliet 5" because Joliet 6 is powered by "Boiler 5" at the facility. Technical Support Document at 11. All references to Joliet 6 in this action refer to the Joliet 5 EGU identified in 35 IAC 225.296(b).

to Waukegan 7, which was required to be in compliance with this section on or before December 31, 2013.

Section 225. Appendix A: Specified EGUs for Purposes of the Combined Pollutant Standard

Appendix A of SIP Section 225 identifies the EGUs that are subject to the CPS. Illinois revised this section by removing references to "Midwest Generation," and leaving the names of the city of the plants and the identification of the EGUs. This administrative change will eliminate the need for revisions to this section should there be future changes in ownership of the EGUs in Appendix A.

B. Rule revisions for which EPA is taking no action

Illinois' final rule also amended 35 IAC Part 214 (Sulfur Limitations), Part 217 (Nitrogen Oxides Emissions), and other portions of Part 225 that are not part of Illinois' SIP and for which EPA is taking no action.

Most relevant to this action, Illinois amended section 225.295, "Emission Standards for NO_x and SO₂" (discussed above) by adding subsection (a)(4). New subsection (a)(4) states, "the specified EGUs are not subject to the requirements set forth in 35 Ill. Adm. Code 217, Subpart M, including without limitation the NO_x emission standards set forth in 35 Ill. Adm. Code 217.344."

EPA is taking no action on this amendment because the requirements of 35 Ill. Adm. Code 217, Subpart M, are not approved as part of the Illinois SIP, and Illinois EPA has not submitted the requirements for approval. Therefore, EPA is taking no action with respect to 35 IAC 225.295(a)(4).

C. Analysis of the state's submittal

EPA is proposing to approve the revisions discussed above because the revisions meet all applicable requirements under the CAA, consistent with section 110(k)(3) of the CAA and the regional haze rule. Furthermore, the revisions do not interfere with any applicable requirement concerning attainment and reasonable further progress or any other applicable CAA requirement, consistent with section 110(l) of the CAA.

1. The revisions do not interfere with Illinois' regional haze SIP rules

The proposed SIP revisions do not interfere with Illinois' regional haze SIP rules. Illinois relied on emission reductions of NO_x and SO₂ achieved through implementation of the CPS in its SIP submittal to EPA for the regional haze SIP rules. Illinois has shown that the proposed SIP revisions will result in significant reductions of emissions of SO₂, and no change or potential reductions in emissions of NO_x. Additionally, although Illinois did not rely on emission reductions of PM in its

regional haze SIP submittal, Illinois has shown that the proposed SIP amendments should result in reductions of PM emissions.

First, Illinois has shown that the amendments to the CPS will result in significantly lower emissions of SO₂ from the converted EGUs. EGUs that combust natural gas emit trace amounts of SO₂. Using EPA's Air Markets Program Division Data, Illinois has estimated that the amendments will result in reductions of more than 6,000 tons of SO₂ annually in 2017, and more than 4,500 tons of SO₂ annually in 2019 and subsequent years, beyond what would occur under the original CPS emission standards. Illinois assumed that the EGUs will continue to operate with the same heat input after their conversion. Illinois believes that this is a conservative estimate of emissions because the converted EGUs will likely not be operating as frequently and the heat inputs should lower, which would also result in lower emissions. See Section 3.3 of Illinois EPA's Technical Support Document for Proposed Rule Revisions Necessary to Demonstrate Attainment of the One-Hour NAAQS for Oxides of Sulfur (TSD).

In addition, by applying the SO₂ group annual emission rates to only those EGUs that combust coal, the SO₂ emission rates will effectively become more stringent. This is because there will be fewer EGUs to average after the four EGUs under the CPS are required to cease combusting coal. The SO₂ group annual average emission limits in 35 IAC 225.295(b) have not changed and are

0.15 lbs/mmBtu in 2017, 0.13 lbs/mmBtu in 2018, and 0.11 lbs/mmBtu in 2019 and beyond.

Second, Illinois has shown that the amendments to the CPS will, at worst, result in no change in emissions of NO_x and will likely result in reductions of this pollutant. The NO_x emission standard for both the CPS group average annual and ozone season emission rates remain unchanged at 0.11 lbs/mmBtu. The most conservative analysis, under which heat inputs at converted EGUs remain the same, would result in no change in NO_x emissions because the same EGUs will continue to be subject to the group wide average NO_x emission rate. However, Illinois believes it is likely that there will be a considerable decline in utilization of and heat input at the converted EGUs, which would likely result in NO_x emission reductions because the group wide average limit is on a lbs/mmBtu basis. See Section 3.4 of the TSD.

Illinois has further illustrated that there should be no change in NO_x emissions by referring to the "Technical Support Document for Best Available Retrofit Technology" (BART TSD) that was included as Attachment 2 to Illinois' original Regional Haze SIP submittal. The BART TSD shows that only the group-wide average of 0.11 lbs/mmBTU was used to estimate future emissions for the Illinois regional haze SIP rules. While several EGUs have since been retired, and a number of them have converted to firing natural gas, the group-wide average continues to apply to

all EGUs, and shows that the NO_x emission reductions will remain the same.

Third, while Illinois did not rely on emission reductions of PM from the EGU sector in its initial regional haze SIP submittal, it has shown that amendments to the CPS should result in an overall reduction in PM emissions. The amendments require Joliet 6, 7, and 8 (approximately 66 million mmBtu) and Will County 3 (approximately 16 million mmBtu) to permanently cease combusting coal. All of these EGUs were permitted to emit PM at a rate of 0.10 lbs/mmBtu. These units will either be shutting down or converting to natural gas combustion. The AP-42 emission factor for PM emissions from natural gas combustion is approximately 0.0075 lbs/mmBtu. This would result in a 92.5% reduction in PM emissions from the Joliet EGUs from their previous allowable emission rates when they are operating, and does not include any reductions from reduced operating time that Illinois anticipates will occur after conversion.

Fourth, Illinois has shown that the "transfer" of the exemption from complying with SO₂ control technology requirements to Will County 4 unit from Joliet 6 do not affect the regional Haze rules. Previously, 35 IAC 225.296(b) required Will County 4 to either permanently shut down or install FGD equipment to

control SO₂ on or before December 31, 2018.⁴ Illinois exempts Will County 4 from this requirement. However, Will County 4 remains subject to the 0.10 lbs/mmBtu PM emission rate, and the group wide SO₂ and NO_x emission standards under the CPS. Additionally, this transfer does not alter the emission standards for SO₂ and NO_x that were relied upon in approving Illinois' regional haze rules. The intent of the regional haze program is mitigation of visibility impairment at specified national parks and wilderness areas, known as "Class I areas" under the CAA. Illinois does not have any Class I areas within the state, the nearest being either in southwestern Missouri or northern Michigan. See 77 FR 3966, 3967 (January 12, 2012). The redistribution of emission reductions from Joliet 6 to Will County 4, particularly as accompanied by substantial emission reductions at other converted EGUs, should result in equal if not more reasonable progress toward achieving natural visibility conditions in Class I areas under Illinois' regional haze rules, given the net overall reduction in emissions.

Therefore, these revisions do not alter the EGU group-wide emission standards for SO₂ and NO_x that were relied upon in approving Illinois' regional haze rules. The only exception to this is the removal of non-coal fired EGUs from SO₂ emissions

⁴ The SO₂ emissions reductions from the cessation of coal combustion from Will County 3 and Joliet 6, 7, and 8 will occur at least two years earlier

averaging, which should result in significant reductions of SO₂ emissions from the CPS group of EGUs.

2. The revisions do not interfere with any applicable CAA requirement under section 110(1) of the CAA

Under Section 110(1) of the CAA, EPA shall not approve a SIP revision if it would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 171 of the CAA) or any other applicable requirement of the CAA. The proposed SIP revisions would not interfere with any applicable CAA requirements based on technical analysis submitted by Illinois EPA.

Illinois made these revisions to aid in attainment planning efforts for the 2010 SO₂ NAAQS for the Lemont nonattainment area. See 78 FR 47191, 47192 (Aug. 5, 2013). As discussed above, Illinois has shown that the revisions will result in reduction of SO₂ and PM emissions, and no change or a reduction in NO_x emissions, which are the pollutants of concern. See TSD. Furthermore, the emission standards under the CPS, which are based on group averaging, remain unchanged, except that the averaging method for determining compliance with the SO₂ emission standard will become more stringent, because the averaging will exclude natural gas units.

Therefore, the proposed revisions to CPS in Part 225 are

than any SO₂ emission reductions from the installation of FGD equipment on or

approvable under Section 110(l) because: 1) there are no proposed changes to any SIP emission limits, except to make the SO₂ limit more stringent; 2) the conversion of the EGUs from coal to natural gas will result in a significant decrease in emissions of SO₂, no increase in emissions of NO_x, and reductions in emissions of PM; and 3) the changes are consistent with Illinois' long-term strategy for making reasonable progress toward meeting the visibility goals of Section 169A of the CAA contained in the state's regional haze rules.

III. What action is EPA taking?

EPA is proposing to approve the revisions to the Illinois air pollution control rules at 35 IAC Part 225, specifically, sections 225.291, 225.292, 225.293, 225.295 (except for 225.295(a)(4)), and 225.296 (except for 225.296(d)) and 225.Appendix A. Illinois EPA submitted the revisions to Part 225 on June 23, 2016, and submitted supplemental information on January 9, 2017.

Illinois' final rule also included revisions to Parts 214 (Sulfur limitations) and 217 (Nitrogen oxide emissions), and other sections of the Part 225 rules. EPA is not taking any action on those revisions, and, as noted above, Illinois' addition of 35 IAC 225.295(a)(4).

IV. Incorporation by reference

before December 31, 2018 under the CPS.

In this rule, EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is proposing to incorporate by reference revisions to Title 35 of Illinois Administrative Code Rule Part 225 - Control of Emissions from Large Combustion Sources, sections 225.291, 225.292, 225.293, 225.295 (except for 225.295(a)(4)), and 225.296 (except for 225.296(d)) and 225.Appendix A, effective December 7, 2015. EPA has made, and will continue to make, these documents generally available through www.regulations.gov and/or at the EPA Region 5 Office (please contact the person identified in the "For Further Information Contact" section of this preamble for more information).

V. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995

(15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and

- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: August 21, 2017.

Robert A. Kaplan,
Acting Regional Administrator, Region 5.

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