

ILLINOIS POLLUTION CONTROL BOARD

January 2, 2018

IN THE MATTER OF:)
)
AMENDMENTS TO 35 ILL. ADM. CODE) R18-20
225.233, MULTI-POLLUTANT) (Rulemaking - Air)
STANDARDS (MPS))

HEARING OFFICER ORDER

On October 2, 2017, the Illinois Environmental Protection Agency (IEPA) filed a rulemaking proposing amendments to the Multi-Pollutant Standard (MPS) in 35 Ill. Adm. Code 225, Control of Emissions from Large Combustion Sources. The MPS applies to coal-fired electrical generating units in central and southern Illinois, specifically, in the Counties of Fulton, Jasper, Mason, Massac, Montgomery, Peoria, Putnam, and Randolph. On October 19, 2017, the Board accepted the proposed rules for first notice without commenting on the merits. On November 8, 2017, the Hearing Officer order set deadlines for prefiling testimony and questions for a hearing scheduled for January 17, 2018, in Peoria, Peoria County. The deadline for the prefiled questions is January 2, 2018.

The Board and Staff have reviewed the proposed rules and submit with this Order their questions to the IEPA and Dynegy Midwest Generation, LLC, Illinois Power Generating Company, Illinois Power Resources Generating, LLC, and Electric Energy, Inc, included as Attachment A.

Anyone may file a comment and anyone may respond to the questions attached, as well as any other prefiled questions in the record. All filings in this proceeding will be available on the Board's web page at www.ipcb.state.il.us and participants may file electronically on the Board's web page.

IT IS SO ORDERED.

A handwritten signature in black ink that reads "Marie E. Tipsord". The signature is written in a cursive, flowing style.

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ATTACHMENT A
R18-20
AMENDMENTS TO 35 ILL. ADM. CODE 225.233, MULTI-POLLUTANT STANDARDS
(MPS)

IEPA Rory Davis

1. On pages 1-2, you state that the proposal to combine the two MPS Groups and change the rate-based emission limits to mass emission limits is intended to simplify compliance with fleet-wide emission limits of all units owned by the same company, and provide operational flexibility as well as regulatory certainty. Davis Test. at 1-2.
 - a. Please clarify whether the units under the two MPS Groups are currently in compliance with the applicable MPS.
 - b. Comment on whether the Agency considered a combined MPS Group with fleet-wide rate-based emission limits for SO₂ and NO_x to simplify compliance, and provide operational flexibility and regulatory certainty. If so, explain why this option was rejected. If not, comment on the drawbacks of this option.
 - c. Comment on whether the Agency considered the option of fleet-wide mass emission limits, as well as, mass emission limits/caps based on the allowable emissions under the MPS for individual power stations. If so, explain why this option was rejected. If not, comment on the drawbacks of this option.
 - d. The combined MPS Group does not include EGUs that are not in operation at Vermillion, Wood River, Hutsonville, Meredosia, or Edwards Unit 1. However unlikely, would the proposed rule allow for the units at these facilities to be restarted again without belonging an MPS Group anymore? If so, what regulations would apply to these EGUs?
2. On page 2, you state, “[t]he proposed amendments were reviewed by the U.S. Environmental Protection Agency (“USEPA”) prior to their filing with the Board, and USEPA has indicated that the amendments are indeed approvable as a SIP revision.”
 - a. Please comment on whether USEPA expressed any concerns regarding “hotspots” or local impacts with the elimination of rate-based emission limits for many of the affected EGUs.
 - b. Did USEPA suggest any changes to IEPA’s proposal?
 - c. Please submit into the record any correspondence between IEPA and USEPA regarding USEPA’s review of the IEPA’s proposal.

3. Also on page 2, you note, “[t]he proposed amendments do not relieve the owners of the affected EGUs from obligations to comply with other current requirements intended to limit the emissions of criteria pollutants. These rules include the Cross-State Air Pollution Rule ("CSAPR"), sulfur limitations set forth in 35 IAC Part 214, and other State and federal requirements for the affected EGUs.
 - a. Please clarify what other state and federal requirements pertaining to SO₂ and NO_x apply to the affected units. Do any of these provisions require the affected units to comply with any rate or mass limitations for SO₂ and NO_x?
 - b. Do the other state and federal regulations require any of the affected units to install emissions control equipment?
4. On page 3, you state that the all sources affected by the proposed amendments have either been modeled in accordance with the federal SO₂ Data Requirements Rule (DRR) or were previously addressed due to monitoring that showed nonattainment in an area near the source. Please comment on whether the Agency’s determination under DRR has been reviewed and approved by USEPA. In this regard, please provide any federal register citations to USEPA determination or submit relevant documents into the record.
5. On page 3, you note that the Agency determined that a separate source-specific limit was needed at the Joppa plant to ensure compliance with the SO₂ NAAQS. Please comment on why the Agency did not rely on a mass limit based on allowable emissions under the current MPS (13,902 tons) instead of the proposed higher limit (19,680 tons).
6. Also on page 3, you state that E.D. Edwards plant is subject to the hourly limits under Part 214 that were adopted by the Board in docket R15-21. Please clarify what is the combined SO₂ limit is for the Edward Units 2 and 3 under 35 Ill. Adm. Code 214.603. Please comment on whether this combined hourly limit places an annual SO₂ emissions cap on Units 2 and 3.
7. On page 4, you assert that the proposed rules require units with SCR to operate those controls always when those units are in operation, and require those units to meet an average NO_x emission rate standard of 0.10 lb/mmBtu during the ozone season. Since the rule requires the operation of SCR at all times when the units are in operation, explain why compliance with the proposed rate limit is not required year-round. In this regard, please comment on whether operation of SCR as required by Section 225.233(e)(1)(E)(i) would achieve the proposed average rate limit for SO₂.
8. Also on page 4, you note the Agency considered localized impact in drafting the proposed amendments. Please explain how the Agency evaluated the localized impact at each of the affected power stations. If modeling was employed, clarify whether the modeling was based on allowable emissions or the power station’s potential to emit. If

modeling was based on allowable emissions, please comment on how the proposed amendments protect the public from localized impact, given that the proposal, for the most part, has no emission rate limit or mass limit for individual power stations.

TSD & Proposed Rule

9. TSD at page 3 identifies the affected units are currently subject to fleet-wide emission rates for nitrogen oxides ("NO_x") and sulfur dioxide ("SO₂") in Section 225.233(e). Please provide a map showing the location of affected EGUs. Also, include the location of IEPA's air monitoring stations and the boundaries of any non-attainment areas.

10. TSD at page 4 states, "Since the MPS regulations were promulgated, pollution control equipment has been installed on several EGUs, while others have ceased operation, in the Dynegy and Ameren MPS groups. The current MPS rule does not specifically require installation of any additional pollution control equipment." Please clarify which of the eighteen MPS units that are currently operating have pollution control equipment installed to control SO₂ and NO_x. Provide a table listing each facility and unit along with the current pollution control equipment. (Similar tables were provided by petitioners in PCB 12-126 and PCB 14-10 that included a list of pollution control equipment for each facility and unit. PCB 12-126 Petition Exh. 2, PCB 14-10 Petition Exh. 6.)

11. TSD Table 4 lists "Historical Heat Input of the Affected Units" from 2010 through 2016. Please provide a trend graph for each of the units and for the total of all the units?

12. TSD Table 5 lists "Historical NO_x Emissions of the Affected Units" and Table 6 includes "Historical SO₂ Emissions of the Affected Units". Please provide updated tables adding the following additional details:
 - a. Emission units associated with each of the facilities.
 - b. Base Year Heat Input (1000 mmBTU).
 - c. Adjusted Heat Input (1000 mmBTU).
 - d. Presumptive BART (Best Available Retrofit Technology): (lbs/mmBTU) and (Tons/Year Reduction).
 - e. Actual annual and seasonal NO_x and SO₂ emissions for the period 2012 through 2016.
 - f. Based on these tables, please provide separate trend graphs for NO_x and SO₂ from 2012 through 2016 for each of the units and for the total of all the units. On each graph, please show the relationships to the respective facility's potential to emit.

17. TSD states that the proposed amendments limit the combined MPS Group to 55,000 tons per year (TPY) of SO₂, 25,000 TPY of NO_x, and 11,500 tons of NO_x during the Ozone Season to allow for emissions that could occur from greater utilization of the affected units. TSD at 11-12. Please clarify how the Agency projected future utilization considering the declining trend in the utilization of the affected units. In this regard, did Dynegy provide any projection forecasts for heat input for these units for 2017 and beyond? If so, please submit such information into the record.
18. Proposed 225.233(e)(1)(E)(i) would require existing SCRs to be operated “in accordance with good operating practices...” However, the proposed rule does not contain a similar provision for operation of a Flue Gas Desulfurization (FGD) system.
 - a. In PCB 14-10, the conditions of the variance contained requirements that the FGDs be run at a minimal 98 percent efficiency on a calendar year annual average basis. Illinois Power Holdings, LLC and AmerenEnergy Median Valley Cogen, LLC, Ameren Energy Resources, LLC v. IEPA, PCB 14-10, slip op. at 103 (November 21, 2013). Please comment on including a performance requirement in the proposed rule for both FGDs and SCRs that is similar to the one in the PCB 14-10 variance.
 - b. PCB 14-10 also contained a condition requiring IPH to burn low sulfur coal at the E.D. Edwards, Joppa, and Newton Energy Centers. *Id.* at 103. What means will Dynegy use to maintain compliance SO₂ limits? Please comment on including a requirement to burn low sulfur coal at certain EGUs in the proposed rule similar to the one in the PCB 14-10 variance.
19. Section 225.233(e)(1)(E)(i) requires the owner or operator to minimize emissions to the extent reasonably practicable during periods in which the SCR is not operational.
 - a. Please explain the circumstances under which an owner or operator may not operate the SCR control system. If the shut-down is related to routine maintenance, should the rule specify a time limit for the operation of the EGU without an operational SCR system.
 - b. Please describe the measures that an owner or operator may implement to minimize the emissions of NO_x when the SCR system is not operational.
20. In Section 225.233(e)(1)(E)(ii), please clarify whether averaging is limited only to the seven EGUs identified in Section 225.233(e)(1)(E) or all 18 EGUs in the same MPS Group to show compliance with the proposed NO_x Ozone Season average emission rate of 0.10 lb/mmBtu.

21. In Section 225.233(f)(2) provides the allocation amounts for EGUs in the event of transfer of EGUs.
- a. Please explain how the Agency determined the proposed allocation amounts for each power station. Also, explain why the total allocation amount for SO₂ and NO_x is less than the proposed annual mass emissions limits. For example, the total allocation amount for SO₂ (52,000 tons) is less than the proposed SO₂ mass emissions limitation (55,000 tons).
 - b. The allocation amounts are proposed on generating station basis rather than on EGUs. Please clarify whether transfer of ownership is assumed to include all EGUs at a power station. If not, explain how allocations are handled for transfer of individual EGUs at a power source. If necessary, revise Section 225.233(f)(2) to include allocation amounts for each EGU at the affected generation stations.
 - c. Please comment on using these allocations as caps on mass emission limits for each facility in the proposed rule in addition to the overall cap for mass emission limits. If these allocations would not be suitable for a cap, please comment on proposing other mass emission limits on each facility, such as a cap for each facility based on the allowable emission rates under the current rule in addition to the proposed overall annual and seasonal caps.
 - d. Also, comment on whether shutdown of individual EGUs at a power source or shutdown of the power source itself should also result in reduction of the Group's mass emission limits for SO₂ and NO_x.
22. In Section 225.233(g), please explain why an EGUs would no longer need to obtain a construction permit for any new or modified air pollution control equipment for mercury, NO_x, or SO₂?
23. In Section 225.233(i), even though compliance is proposed on a mass basis, could reporting of actual emissions also include emissions on a rate basis? Would there be any additional expense or monitoring equipment be required to do this beyond administrative costs?

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Pre-filed Hearing Questions for Dynegy Witness

Rick Dierix

1. On pages 9 and 10, you note that the “fleet” burns low sulfur coal. Please clarify whether all EGUs in the proposed MPS Group burn low sulfur coal. If so, does Dynegy plan to continue burning low sulfur coal at all MPS units. Please comment on including a requirement to burn low sulfur coal at all MPS units.
2. On page 11, you assert that reduction in mass emissions “is an appropriate metric for evaluating the benefit of the rule because it represents the potential impact and stringency of a rule before and after a proposed change.” Please comment on whether this fleet-wide metric is appropriate for evaluating any local impacts given that there are no mass emissions limits proposed for individual MPS power stations. In this regard, comment on whether the proposed regulations should include mass emissions limits for individual MPS power stations based on the allowable emissions under the current MPS or the proposed transfer allocations to assure protection of public from any localized impacts.
3. On page 15, you state, “even if emissions were to increase, each MPS unit is subject to multiple emission standards for both NO_x and SO₂ that are intended to maintain and attain the NAAQS. The proposal will not affect any of those requirements. Therefore, the total emissions, regardless of the proposal, will remain below levels protective of human health and the environment.”
 - a. Please list the emissions standards for SO₂ and NO_x applicable to each MPS unit/power station in the proposed combined MPS Group.
 - b. Please comment on whether these emission standards place any permit limits in terms of mass or rate on the MPS units.