

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

IN THE MATTER OF: )  
 )  
AMENDMENTS TO 35 ILL. ADM. CODE ) R15-21  
PART 214, SULFUR LIMITATIONS, PART ) (Rulemaking-Air)  
217, NITROGEN OXIDES EMISSIONS, )  
AND PART 225, CONTROL OF EMISSIONS )  
FROM LARGE COMBUSTION SOURCES )

**NOTICE**

To: John Therriault, Assistant Clerk  
Illinois Pollution Control Board  
James R. Thompson Center  
100 West Randolph, Suite 11-500  
Chicago, Illinois 60601-3218

PLEASE TAKE NOTICE that I have today filed with the Office of the Pollution Control Board the Illinois Environmental Protection Agency's Testimony of Rory Davis, a copy of which is herewith served upon you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY

By: /s/ Dana Vetterhoffer  
Assistant Counsel

DATED: June 8, 2015  
1021 N. Grand Ave. East  
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(217) 782-5544

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**TESTIMONY OF RORY DAVIS**

My name is Rory Davis. I am an Environmental Protection Engineer in the Air Quality Planning Section, Air Pollution Control Division of the Illinois Environmental Protection Agency's ("Illinois EPA" or "Agency") Bureau of Air. I have been employed by the Agency in the Air Quality Planning Section for nearly ten years. I have a Bachelor of Science degree in Computational Physics as well as a Bachelor of Science degree in Mathematics from Illinois State University. I also have a Master's degree in Engineering from the University of Illinois at Chicago. My graduate studies consisted of an interdisciplinary program involving coursework from the Chemical Engineering and Mechanical Engineering fields with a concentration on Environmental Engineering. I have been a licensed Professional Engineer in Illinois in the environmental discipline since 2010. In my current position with the Agency, my duties include providing technical support for regulatory proposals, and I was responsible for assembling the Technical Support Document ("TSD"), much of which I wrote, for this rulemaking. I will be providing testimony regarding the proposed regulation for limiting emissions of oxides of sulfur ("SO<sub>2</sub>") to address the 2010 SO<sub>2</sub> National Ambient Air Quality Standard ("NAAQS").

**Proposed Amendments for Limiting Emissions of SO<sub>2</sub> in Illinois**

Illinois EPA has proposed amendments to Parts 214, 217, and 225 of Title 35 of the Illinois Administrative Code to reduce SO<sub>2</sub> emissions in Illinois. The amendments have been proposed to address two areas designated as nonattainment of the 1-hour SO<sub>2</sub> NAAQS, and to possibly prevent additional areas of the State from being designated as nonattainment in the future. The proposed amendments affect a wide variety of source categories and sources throughout the State, and reflect the Agency's best efforts to address the two SO<sub>2</sub> nonattainment areas while balancing considerations of federal requirements, total environmental benefit, culpability of emission sources, cost considerations, and future protection of the NAAQS in other areas. These considerations, along with analysis of current emission inventories, information gathered from potentially affected sources, and iterative computer modeling, have resulted in a package of proposed amendments that achieve levels of SO<sub>2</sub> emission control appropriate to satisfy current federal requirements.

Detailed technical support for specific aspects of the proposed amendments and their anticipated effects can be found in the TSD that the Agency submitted as part of the rulemaking proposal. As the lead writer of the document, I am prepared to answer questions regarding the document and related issues at the public hearings, and follow up with written responses if necessary.

**Amendments to Part 214**

The Agency's proposed amendments to Part 214 require the use of lower sulfur content fuels on a statewide basis, and set source-specific SO<sub>2</sub> emission limits for emission units in and around the two nonattainment areas that were found to be significantly contributing to nonattainment of the 1-hour SO<sub>2</sub> NAAQS.

Requiring that stationary sources located in and around nonattainment areas use only lower sulfur content fuels is necessary in order to demonstrate attainment of the NAAQS in those areas. The Agency has proposed these sulfur content limits on a statewide basis because modeling of additional areas in the State will be required in the future to determine whether these areas should also be designated as nonattainment for the SO<sub>2</sub> NAAQS. The sulfur content limits will aid attainment planning efforts in these future nonattainment areas, and could potentially prevent a borderline area from being designated as nonattainment at all. Finally, the required lower sulfur content fuels are widely available and a cost-effective measure for the control of SO<sub>2</sub> emissions.

The source-specific limits proposed in the new Part 214 Subpart AA are also necessary to demonstrate attainment of the SO<sub>2</sub> NAAQS. The proposed limits were determined using an iterative modeling process, and in consultation with potentially affected sources. This process has resulted in limits for culpable sources that the Agency and representatives from affected industries agree can be achieved in a reasonable manner.

If adopted by the Board, the Agency intends to submit its revisions to Part 214 to the United States Environmental Protection Agency (“USEPA”) as part of Illinois’ State Implementation Plan (“SIP”) for the SO<sub>2</sub> NAAQS. The Agency has worked with USEPA in developing the proposed amendments to ensure they are approvable for SIP purposes.

#### **Amendments to Part 217 and 225**

The amendments to Parts 217 and 225 have been proposed in consideration of planned changes at a number of coal-fired power plants owned by Midwest Generation, LLC (“Midwest Generation”) that were brought to the attention of the Agency during the course of the Agency’s planning for this rulemaking. These planned changes involve the conversion of several coal-

fired units to burn natural gas or low sulfur fuel oil, and to permanently cease burning coal.

These planned conversions significantly aid the Agency's demonstration of modeled attainment in the Lemont nonattainment area, and will result in significant environmental benefit to Illinois in the form of SO<sub>2</sub> emission reductions and emission reductions of other pollutants.

Under the proposed amendments to Parts 217 and 225, converted units will not be considered part of the Midwest Generation coal-fired fleet for purposes of compliance with the fleet-wide average SO<sub>2</sub> limit in the combined pollutant standard ("CPS") portion of Part 225. Converted units will still be included in the CPS fleet-wide average limit for nitrogen oxides ("NO<sub>x</sub>") emissions, and as such, those units will remain exempted from the NO<sub>x</sub> limitations in Subpart M of Part 217. Finally, an exception in Part 225 from requirements for flue gas desulfurization that originally applied to Joliet 6 was changed to apply to the Will County 4 unit.

The Agency's analysis indicates that the proposed amendments concerning the conversion of Midwest Generation's electric generating units will result in significant reductions in emissions of SO<sub>2</sub>, NO<sub>x</sub>, carbon dioxide, particulate matter, and mercury in Illinois.

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**CERTIFICATE OF SERVICE**

I, the undersigned, an attorney, affirm that I have served the attached Testimony of Rory Davis upon the following person(s) by e-mailing it to the e-mail address(es) indicated below:

Daniel Robertson, Hearing Officer  
Illinois Pollution Control Board  
daniel.robertson@illinois.gov

I affirm that my e-mail address is dana.vetterhoffer@illinois.gov; the number of pages in the e-mail transmission is 7; and the e-mail transmission took place today before 5:00 p.m.

I also affirm that I am mailing the attached Testimony of Rory Davis by first-class mail from Springfield, Illinois, with sufficient postage affixed, to the following persons:

**SEE ATTACHED SERVICE LIST**

ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY

By: /s/ Dana Vetterhoffer  
Assistant Counsel

DATED: June 8, 2015

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