BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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

R18-20 (Rulemaking – Air)

NOTICE

TO: Don Brown Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph St., Suite 11-500 Chicago, IL 60601-3218

SEE ATTACHED SERVICE LIST

PLEASE TAKE NOTICE that I have today electronically filed with the Office of the

Clerk of the Illinois Pollution Control Board the TESTIMONY OF RORY DAVIS and the

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S RESPONSES TO QUESTIONS

OF THE JOINT COMMITTEE ON ADMINISTRATIVE RULES, a copy of which is herewith

served upon you.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: <u>/s/ Gina Roccaforte</u> Gina Roccaforte Assistant Counsel Division of Legal Counsel

DATED: December 11, 2017

1021 North Grand Avenue East P. O. Box 19276 Springfield, IL 62794-9276 217/782-5544

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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

R18-20 (Rulemaking – Air)

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 twelve 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. In my current position with the Agency, my duties include providing technical support for regulatory proposals. I will be providing testimony regarding the proposed amendments to the Multi-Pollutant Standards ("MPS") portions of Title 35 of the Illinois Administrative Code ("35 IAC") Part 225.

Proposed Amendments to Part 225 Multi-Pollutant Standards

The Agency has proposed amendments to 35 IAC Part 225, specifically Section 225.233, to combine the two currently separate MPS Groups into one new MPS Group, and to modify the limits in the MPS to be in terms of annual fleet-wide mass emission limits. The combination of the two MPS Groups is intended to simplify compliance with fleet-wide emission limits now that all units in both current MPS Groups are owned by the same company, Dynegy, Inc. ("Dynegy")

or one of its subsidiaries. The amendments to change fleet-wide rate-based emission standards to mass-based emission limits is intended to provide Dynegy operational flexibility and regulatory certainty moving forward while also reducing the overall allowable emissions from the MPS Group.

The Agency's proposal to the Board included a Technical Support Document ("TSD"), of which I was the primary author. The TSD explains the purpose and impacts of the proposed amendments and demonstrates that the proposed amendments are approvable as a revision to Illinois' Regional Haze State Implementation Plan ("SIP") in accordance with Section 110(1) of the Clean Air Act ("CAA"). First, in Section 5.1 of the TSD, the Agency demonstrates that allowable emissions from the EGUs in the proposed combined MPS Group will be lower than the allowable emissions from such EGUs under the current MPS limits. This demonstration shows that the proposed amendments do not constitute "backsliding" in terms of CAA 110(1) requirements. Second, in Section 6.1 of the TSD, the Agency provides evidence that the proposed amendments result in lower allowable emissions than were committed to by Illinois in its original Regional Haze SIP and the more recent Regional Haze Progress Report. The 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.

The 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.

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CSAPR is a regional trading program for annual SO₂ and NO_x, as well as for ozone season NO_x, that limits sources' emissions to the number of CSAPR allowances held by the source owner. The trading program provides an economic incentive to reduce emissions at affected units, results in controls being installed where most economically efficient, and generally ensures that controls are operated after capital investments are made.

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. The DRR required states to model or monitor emissions and localized air quality impacts around significant emitters of SO₂ to ultimately determine whether such areas were attaining the 2010 National Ambient Air Quality Standard ("NAAQS") for SO₂. The Agency determined during the drafting of these proposed amendments that a separate source-specific limit was needed at the Joppa plant to ensure that the area around the source will not become an SO₂ nonattainment area under the DRR, and to obviate any further DRR modeling.

In the specific case of the E.D. Edwards plant, which has already been raised as a concern by several commenters prior to and after the filing of this rule, the source was included in modeling performed in response to a nonattainment designation in the Pekin/Peoria area. The Agency determined that hourly limits for the source were needed to ensure that the NAAQS is protected in the area, and these limits were adopted into 35 IAC Part 214 in a previous Board rulemaking (R2015-021). These Illinois limits have also been submitted to USEPA as a SIP revision that is currently in the approval process. These limits will not be changed by the proposed amendments under consideration in this rulemaking. The limits on Edwards will remain in place to ensure the NAAQS is met in the area around the source.

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Additionally, the proposed amendments require the affected units that currently have selective catalytic reduction control devices to operate those controls at all times when those units are in operation, and also require those units to meet an average NOx emission rate standard of 0.10 lb/mmBtu during the ozone season. These requirements were included to ensure that these units would continue to operate existing controls and continue to operate with emission rates that are considered well controlled during the ozone season.

In conclusion, the amendments to Part 225 have been proposed to provide operational flexibility that Dynegy has stated is necessary due to changes in the electricity market and its EGU fleet since the original MPS rules were promulgated. The amendments will also reduce overall allowable emissions from the fleet. The amendments do not constitute backsliding with regard to Section 110(1) of the CAA, and USEPA has indicated that the amendments are approvable as a SIP revision. In drafting the amendments, the Agency considered interstate transport of pollutants, regional haze impacts, and localized impacts around the affected sources. The proposed amendments set mass emission limits to ensure that allowable emissions are lower from the EGUs in the MPS Groups than originally anticipated in Illinois' SIP submittals for the Regional Haze Rule. The CSAPR trading program further limits interstate transport of pollutants from Illinois sources. Already-promulgated Illinois regulations ensure that the SO2 NAAQS is protected around certain significant emission sources to protect the public from localized impacts around those sources. The federal SO2 DRR contains continuing obligations that require Illinois to track emissions in the specified areas and take additional steps if emissions increase to ensure that any potential NAAQS issues will be identified and addressed.

I am prepared to answer any questions from hearing participants regarding these and other issues relevant to the rulemaking, as is David Bloomberg, the Manager of the Air Quality Planning Section.

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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IN THE MATTER OF:

AMENDMENTS TO 35 ILL. ADM. CODE 225.233, MULTI-POLLUTANT STANDARDS (MPS) R18-20 (Rulemaking – Air)

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S RESPONSES TO QUESTIONS OF THE JOINT COMMITTEE ON ADMINISTRATIVE RULES

The Illinois Environmental Protection Agency ("Illinois EPA" or "Agency"), by one of

its attorneys, offers the following responses to the questions of the Joint Committee on

Administrative Rules ("JCAR"), submitted to the Illinois Pollution Control Board via electronic

mail by Jonathan Eastvold on November 2, 2017.

1. Would it be possible to get more data explaining how much of an increase in emissions each facility could have as a result of this rulemaking? (The emissions limits being replaced are expressed in lb/MMBtu, and the new ones are expressed in tons. An applesto-apples comparison for each facility would be extremely helpful.)

Response: This question appears to be about allowable emissions, as it asks how much change each facility *could* have. As is discussed in the Agency's Technical Support Document (TSD), the allowable emissions for the facilities overall will <u>decrease</u>, not increase as is pre-supposed by this question. Specifically, Section 5.1 on page 11 explains: "The proposed amendments would limit the combined MPS Group to 55,000 tons of SO₂ annually rather than the calculated 66,354 tons of allowable annual emissions under the current MPS. The proposed amendments would also limit the combined MPS Group to 25,000 tons of NO_x annually rather than the calculated 32,841 tons of allowable annual emissions under the current MPS. Finally, the proposed amendments would limit the combined MPS Group to 11,500 tons of NO_x during the Ozone Season rather than the calculated 13,766 tons of allowable annual emissions under the current MPS."

If JCAR is asking not about allowable emissions, but about actual emissions, the Agency has also discussed that in the TSD. Section 5.0 on page 8 states: "Determining precise estimates for the environmental impact of the proposed amendments, in terms of actual emissions from the affected sources, is problematic as a number of factors independent of the MPS can impact actual emissions, as discussed below. The proposed amendments replace fleet-wide rate-based standards in the MPS with fleet-wide mass emission limits. This change in the method of measurement of emissions for compliance will result in lower allowable emissions from the operating units that comprise the proposed combined MPS Group. It should also be noted that nothing in the proposed amendments relieves the affected sources from obligations to comply with the federal Cross State Air Pollution Rule or the unit- and source-specific SO₂ limits found in 35 IAC Part 214." It should also be noted that nothing in the current MPS regulations would prevent either of the MPS Groups from increasing their actual emissions above what they have been in recent years. Section 5.2, starting on page 11, then more fully discusses the factors that impact EGU emissions, including weather throughout the year, fuel prices for coal and natural gas, and the general strength of the economy over a given period.

Finally, it is important to point out that this question presupposes that the MPS contains unit-specific and/or facility-specific emission rates. It does not and never has; rather, the affected units are currently subject to <u>fleet-wide</u> average emission rates for NO_x and SO_2 under the MPS. The MPS units must comply with the emission rates on a fleet-wide average basis, meaning if one unit/facility over-controls, another unit/facility can control to a lesser degree, as long as the overall average is at or below the emission standard. Consequently, compliance with the emission standards under the MPS is demonstrated for the entire fleet of MPS units, not a specific unit/facility.

Also, would it be possible (using EPA's BenMAP or some other application) to estimate the economic impact of these additional emissions (contrasted, if at all possible, with hard estimates for the economic benefits to affected communities from the looser requirements)?

Response: This part of the question also pre-supposes an increase in emissions and "looser requirements." As the Agency has explained both above and in detail in its TSD, the allowable emissions will be reduced, not increased. As such, there is no economic impact of the type described to estimate.

2. Will relaxing the SO₂ and NO_x restrictions result in any change in CO₂ emissions?

Response: Once again, this question incorrectly suggests that there will be a relaxation in SO₂ and NO_x limits. CO₂ emissions correlate to some extent with SO₂ and NO_x emissions, in that an increase in plant utilization would also increase CO₂, while a decrease would similarly decrease CO₂. See above and the TSD for discussion of actual emissions and the difficulty of determining precise estimates thereof.

However, it should be noted that the MPS does not regulate CO₂ emissions. In fact, no Board rules regulate CO₂ emissions, although Agency regulations require the reporting of greenhouse gas emissions under 35 Ill. Adm. Code 254, Annual Emissions Report.

6. In (f)(1)(B)(ii) and (iii), there was a question raised about the construction "must not cause or allow to be discharged into the atmosphere combined...emissions". What is the difference between a scenario in which the emissions are caused vs. allowed to be discharged?

Response: This is standard regulatory language regarding control of air pollutant emissions. It clarifies that owners and operators of affected units must not *cause* and must not *allow/permit* emissions to be discharged into the atmosphere in violation of the regulatory provisions. The two concepts may overlap, but they also provide clarity regarding the prohibited actions.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,

<u>/s/ Gina Roccaforte</u> Gina Roccaforte Assistant Counsel Division of Legal Counsel

Dated: December 11, 2017

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Electronic Filing: Received, Clerk's Office 12/11/2017 <u>SERVICE LIST</u>

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STATE OF ILLINOIS)	
)	SS
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CERTIFICATE OF SERVICE

I, the undersigned, an attorney, state the following:

I have electronically served the attached TESTIMONY OF RORY DAVIS and the

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S RESPONSES TO QUESTIONS

OF THE JOINT COMMITTEE ON ADMINISTRATIVE RULES upon the persons on the

attached Service List.

My e-mail address is gina.roccaforte@illinois.gov.

The number of pages in the e-mail transmission is 11.

The e-mail transmission took place before 5:00 p.m. on December 11, 2017.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,

<u>/s/ Gina Roccaforte</u> Gina Roccaforte Assistant Counsel Division of Legal Counsel

Dated: December 11, 2017

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