ILLINOIS POLLUTION CONTROL BOARD July 25, 2012

JUL 2 5 2012

STATE OF ILLINOIS

Pollution Control Board

AMEREN ENERGY RESOURCES,)
Petitioner,	
٧.) PCB 12-126
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,) (Variance - Air) ORIGINAL
Respondent.	

HEARING OFFICER ORDER

A hearing in this matter remains set for August 1, 2012. In addition to the questions posed in the hearing officer order dated July 5, 2012, petitioner is directed to address the following questions at the hearing.

QUESTIONS FOR PETITIONER

1. <u>104.204(d)</u>

PC 249 from the Illinois Attorney General's Office asks,

Could scrubbers at Ameren's plants be further optimized to reduce emissions or are there less expensive pollution control technologies that could assist? Could Ameren run certain units less or temporarily power down a unit at each facility? What are these other operational management measures and could more of them be pursued to reduce emissions? PC 249 at 7.

Please comment on the compliance alternatives of further optimizing scrubbers to reduce emissions, less expensive pollution control technologies that could assist in reducing emissions, and operational management measures that could be pursued to reduce emissions.

2. <u>104.204(g)</u>

Table 1 on page 26 of the petition and Attachment 1 to Exhibit 7 compares "MPS Baseline SO2 Tons" to "Variance SO_2 Tons" and calculates a "Cumulative SO_2 Variance Reduced Tons" for the years 2010 to 2021.

In Attachment 1 to Exhibit 7, Ameren used the "Baseline Heat Input" of 340,446,252, explaining, "In order to equalize the comparison, AER used the same average heat input projections as were used to support the 2009 rule revisions to the MPS." Exh. 6 at 3.

- (a) Should the units for "Baseline Heat Input" in Attachment 1 to Exhibit 7 be MMBtu/year instead of lb/MMBtu?
- (b) What heat input was used in the recently approved SIP (mentioned in question 2 below)?
- (c) If the heat input values are not the same, please explain which value is most appropriate for calculations to support an SIP revision.
- (d) It appears the "MPS Baseline SO₂ Tons" is calculated by multiplying "Baseline Heat Input" by the SO₂ annual emission rates from Section 225.233(e)(3)(C). Please explain how the "Variance SO₂ Tons" are calculated and what heat input Ameren used. Please explain if the heat input is adjusted to reflect the cessation of operations at Meredosia and Hutsonville Energy Centers.
- (e) Please define the term for "nominal" (mmBtu/hr) as used in Exhibit 2.
- (f) For 2010 and 2011, the "Variance SO₂ Tons" in the tables are listed as 70,560 and 72,539, respectively. The sum of "2011 SO₂ mass emissions" from Exhibit 2 is 72,538. Please indicate if these values are based on actual emissions.
- (g) Please explain why the "Variance SO₂ Tons" for 2010 and 2011 are both lower than the "MPS Baseline SO₂ Tons".
- (h) Please explain the reasoning behind including years 2010 and 2011 in the calculation of "Cumulative SO₂ Variance Reduced Tons" if the variance were to be granted in 2012.

The Illinois Environmental Protection Agency's (IEPA) Recommendation filed July 23, 2012, (Ag. Rec.) stated, "Petitioner proposes to commit to a system-wide annual average SO_2 emission rate of 0.35 lb/mmBtu, as opposed to 0.38 lb/mmBtu as set forth in the Petition, from January 1, 2013, through December 31, 2019." Ag. Rec. at 20, 21.

- (i) Does Ameren affirm the commitment above that IEPA referred to on pages 20 and 21?
- (j) Please readdress Table 1 on page 26 of the petition and Attachment 1 of Exh. 7 to reflect the SO₂ emission rate of 0.35 lb/mmBtu for the specified time period. Please show your calculations for all values in the Table.
- (k) Please readdress Table 1 on page 26 and Attachment 1 of Exh. 7 of the petition to also show "Cumulative SO₂ Variance Reduced Tons" if 2010 and 2011 are not considered.

3. <u>104.204(l)</u>

The petition on page 32 states, "...once the Illinois BART [best available retrofit technology]/SIP [State Implementation Plan] is adopted as final, Illinois must seek revisions to the SIP reflecting the terms of the variance." Pet. at 32. Ameren filed its petition on May 3, 2012, and USEPA published its approval of the Illinois regional haze SIP on July 6, 2012. 77 Fed. Reg. 39943 (July 6, 2012). The final rule is effective on August 6, 2012. Under the final rule for Ameren, "three of its power plants meet the criteria for being subject to BART, and five coal-fired plants are governed by the SO₂ and NO_x limits in the (CPS) [Combined Pollutant Standard]. 77 Fed. Reg. 39944.

USEPA stated, "In the notice of proposed rulemaking, [US]EPA proposed to conclude that the emission reductions from the (MPS [Multi-Pollutant Standard]) and the (CPS) would be greater than the reductions that would occur with unit-specific implementation of BART on the subset of these sources that meet the criteria for being subject to BART. Therefore, [US]EPA proposed to find that the (MPS) and the (CPS) suffice to address the BART requirement for the power plants of these three utilities [Midwest Generation, Dynegy, and Ameren]." 77 Fed. Reg. 39944 (July 6, 2012).

The petition on page 31 states, "Illinois estimated that its plan will require 96,927 tons per year lower SO₂ emissions by 2015 than simply requiring BART and USEPA accepted Illinois' plan as satisfying BART requirements." Pet. at 31. Ameren follows, "...the variance will result in mass emissions of SO₂ by 2015 even lower than Illinois' estimates under current MPS requirements. The net reduction in SO₂ emissions continues to 2020 and beyond and, thus, does not impact the state's BART determinations." Pet. at 31.

Exhibit 15 of the petition (77 Fed. Reg. 3973 (January 26, 2012) states:

The MPS and CPS provide emission reduction well in excess of simply implementing BART on subject units. The reduction in NO_x emissions from the Ameren, Dynegy, and Midwest Generation unit by 2015 from MPS and CPS is expected to be 89,882 TPY. Illinois estimated that simply implementing BART on the subject units from these entities would yield 32,992 TPY of NO_x emission reductions, which is 56,890 TPY less [than] that from MPS and CPS. Illinois estimated that implementing BART on the subject units at Ameren, Dynegy, and Midwest Generation facilities would require an 117,252 TPY reduction in SO₂ emission, but MPS and CPS will require a 214,179 TPY SO2 reduction by 2015. Thus, Illinois estimated that its plan will require 96,927 TPY lower SO₂ emissions than simply requiring BART. EPA believes that Illinois has thereby demonstrated that the emission limits on the subject to BART units covered by MPS and CPS satisfy the BART requirements. 77 Fed. Reg. 3973 (January 26, 2012)

In the July 6, 2012 USEPA approval of the Illinois regional haze SIP, Table 1 lists the following emission reductions for Ameren from Illinois' plan, including reductions from the MPS and CPS:

	NOx reductions (tons/year)		SO2 reductions (tons/year)	
<u>Company</u>	IL Plan	Lowest BART	IL Plan	Lowest BART
Ameren	24,074	23,849	111,997	74,349

(77 Fed. Reg. 39946 (July 6, 2012))

The petition on page 31 states, "Given the voluntary compliance with a lower emission rate of 0.38 lb/MMBtu beginning in 2012 (as opposed to 0.50 lb/MMBtu through 2013 and 0.43 lb/MMBtu during 2014) through 2019, the variance will result in mass emissions of SO_2 by 2015 even lower than Illinois' estimates under current MPS requirements. The net reduction in SO_2 emissions continues to 2020 and beyond and, thus, does not impact the state's BART determinations." Pet. at 31.

- (a) Please comment on how the proposed variance if granted will impact the values cited from the Federal Register above (77 Fed. Reg. 3973 (January 26, 2012) and 77 Fed. Reg. 39946 (July 6, 2012)).
- (b) Please comment on the assertion by the Illinois Attorney General's Office (PC 249): "The problem with this framework [Ameren's compliance plan] is that the MPS was not intended to be a 12-year averaging period of pollution reduction." PC 249 at 4.

IT IS SO ORDERED.

Carol Webb

Carol Webb Hearing Officer Illinois Pollution Control Board 1021 North Grand Avenue East P.O. Box 19274 Springfield, Illinois 62794-9274 217/524-8509 webbc@ipcb.state.il.us It is hereby certified that true copies of the foregoing order were mailed, first class, on July 25, 2012, to each of the persons on the service list below.

It is hereby certified that a true copy of the foregoing order was hand delivered to the following on July 25, 2012:

John T. Therriault Illinois Pollution Control Board James R. Thompson Center 100 W. Randolph St., Ste. 11-500 Chicago, Illinois 60601

Carol Webb

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