BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

AMEREN ENERGY RESOURCES,)
Petitioner,)
) PCB 12
v.) (Variance – Air)
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

NOTICE OF FILING

To: ALL PARTIES ON THE ATTACHED SERVICE LIST

PLEASE TAKE NOTICE that we have today electronically filed with the Office of the Clerk of the Illinois Pollution Control Board a **PETITION FOR VARIANCE**, and the **APPEARANCES OF AMY ANTONIOLLI and RENEE CIPRIANO**, copies of which are herewith served upon you.

Amy Antonialli

Dated: May 3, 2012

Amy Antoniolli Renee Cipriano SCHIFF HARDIN LLP 233 South Wacker Drive Suite 6600 Chicago, Illinois 60606 312-258-5500

CERTIFICATE OF SERVICE

I, the undersigned, certify that on this 3rd day of May, 2012, I have served electronically the attached **PETITION FOR VARIANCE**, and **APPEARANCES OF AMY ANTONIOLLI** and **RENEE CIPRIANO**, upon the following persons:

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

and electronically and by first class mail, postage affixed, upon:

Division of Legal Counsel Illinois Environmental Protection Agency 1021 North Grand Avenue, East P.O. Box 19276 Springfield, Illinois 62794-9276

Amy antonisch Amy Antoniolli

Amy Antoniolli Renee Cipriano SCHIFF HARDIN LLP 233 South Wacker Drive Suite 6600 Chicago, Illinois 60606 312-258-5500

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

AMEREN ENERGY RESOURCES,)	
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ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

APPEARANCE

I, Amy Antoniolli, hereby file my appearance in this proceeding on behalf of Petitioner,

Ameren Energy Resources.

Any Antonialli Any Antoniolli

Schiff Hardin LLP 233 South Wacker Drive Suite 6600 Chicago, Illinois 60606 312-258-5500 aantoniolli@schiffhardin.com

Dated: May 3, 2012

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

AMEREN ENERGY RESOURCES,)
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ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
Respondent.)

APPEARANCE

I, Renee Cipriano, hereby file my appearance in this proceeding on behalf of Petitioner,

Ameren Energy Resources.

Renee Cipriano

Schiff Hardin LLP 233 South Wacker Drive Suite 6600 Chicago, Illinois 60606 312-258-5500 rcipriano@schiffhardin.com

Dated: May 3, 2012

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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AMEREN ENERGY RESOURCES,		
Petitioner,		
v.		
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,		
Respondent.		

PCB 12-_____ (Variance – Air)

PETITION FOR VARIANCE

NOW COMES AMEREN ENERGY RESOURCES ("AER" or "Petitioner"), by and through its attorneys, SCHIFF HARDIN, LLP, and, pursuant to Sections 35 and 37 of the Illinois Environmental Protection Act, 415 ILCS 5/35, 37, ("Act") and 35 Ill. Adm. Code Part 104, Subpart B, respectfully requests that the Illinois Pollution Control Board ("Board") grant Petitioners a variance from both the 2015 and 2017 sulfur dioxide (SO₂) emission rate provisions of the Illinois Multi-Pollutant Standard ("MPS"), 35 Ill. Adm. Code § 225.233,¹ specifically the SO₂ emissions standards set forth in Section 225.233(e)(3)(C)(iii) and (iv). AER seeks relief from Section 225.233(e)(3)(C)(iii) for five years beginning January 1, 2015, and ending December 31, 2019, and relief from Section 225.233(e)(3)(C)(iv) for four years, beginning January 1, 2017, and ending December 31, 2020.

AER requests additional time to comply with the 2015 and 2017 SO₂ emission rates because, among other things, declining power market prices have resulted in an insufficient cash flow necessary to finance and maintain the construction completion schedule of flue gas desulfurization ("FGD") equipment at the Newton Energy Center ("Newton FGD Project") in time to meet those rates. By seeking relief now, which is critical from a timing standpoint, AER will conserve cash flow and stave off draconian operational measures with the hope that

¹ Hereinafter, citations to the Board's regulations will be by section number only.

stability will eventually return to the marketplace thereby allowing the completion of the Newton FGD Project. Absent such stability and the improvement of power prices, AER will be left with no choice but to cease operations at additional energy centers as its only other viable compliance alternative. The mothballing of such facilities would be disruptive to AER and its employees, the local communities, equipment suppliers and contractors, state taxing authorities and already struggling local school districts. The additional time AER seeks due to hardship will provide the needed time to allow recovery of the power market and the orderly planning, mobilizing and completion of the Newton FGD Project.

A series of events over the past several months has contributed to the swift erosion of already declining power prices. The statewide emission reduction requirements, including most pointedly the MPS, were adopted in anticipation of federal requirements that were subsequently vacated or remanded. Most recently, on December 30, 2011, the Cross-State Air Pollution Rule ("CSAPR"), the replacement regulatory scheme for the previously judicially-reversed national emission reduction program developed by the United States Environmental Protection Agency ("USEPA"), was appealed and stayed less than 48 hours before its effective date. Indeed, CSAPR, like the regulatory schemes before it, would have brought the surrounding region back on more equal ground with Illinois. It is this action, coupled with other challenging market conditions that contributed to the collapse of power prices in 2012 to the lowest they have been in decades. Poor economic conditions resulting in low demand for power, increased natural gas supplies combined with one of the mildest winters of record resulted in a "perfect storm" of events, where cash flows have dropped precipitously and financing is simply not currently available to complete the Project in time to meet the 2015 and 2017 system-wide rates.²

² AER is not the only coal-fired generation company feeling the devastating effects of current market conditions and seeking relief from Illinois emission reduction requirements in recent months. Midwest Generation, LLC has recently announced significant operational curtailments at its Fisk and Crawford facilities and, on April 10, 2012, filed a petition for variance with the Board from the Combined Pollutant Standard. Dynegy has

Such events have been particularly onerous to downstate Illinois merchant generators such as AER who are at an economic disadvantage compared to generators in surrounding states. Illinois has adopted emission reduction requirements for coal-fired power plants, including the MPS, significantly more stringent than requirements currently in place in most other states. For example, to comply with the MPS, AER must purchase pollution control equipment, incur high annual commodity costs associated with mercury control, and meet compliance deadlines not required of companies in surrounding states. Such costs must be built into the AER's power price structure further exacerbating market inequities as compared to generators who have not made such investments, and, therefore are able to offer their products into the marketplace without such cost considerations. Illinois is a regulated power market ringed by regulated rate states.³ As a result, merchant generators, who must finance pollution control equipment based upon market revenue, are competing with generators operating in a regulated regime that can finance capital projects based on a rate-based revenue stream. Regulated generators are also able to offer their power into the market at levels below those needed to cover the costs of the investments due to this rate recovery mechanism. In essence, this creates a double hit for AER that is subject to environmental requirements⁴ that competitors do not have and a pricing structure that limits recovery to market conditions.

legislation pending in the Illinois General Assembly that would suspend portions of the MPS (HB 5168, SB 3283).

³ Illinois deregulated its electricity market in 1997, following passage of the deregulation law. At that time, Ameren Corporation's rate regulated utilities transferred generating facilities formerly owned by Central Illinois Public Service Company ("CIPS") and Central Illinois Light Company ("CILCO"), into merchant generating companies known as Ameren Energy Generating Company ("AEG") and AmerenEnergy Resources Generating Company ("AERG"). AER is the parent company of AEG and AERG . (a.k.a. "GENCO" in federal securities filings and third party financial analysis). AER owns, respectively, the former Central Illinois Public Service Company (Newton, Coffeen, Meredosia, Hutsonville) plants and Central Illinois Lighting Company (Duck Creek, E.D. Edwards) plants. In addition, AER owns 80% of the common stock of EEI which operates the Joppa Energy Center.

⁴ The potential mothballing of generating units does not necessarily improve ambient air quality in the Illinois in that power producers from out of state who have not made capital investments in pollution control equipment can continue to operate at potentially higher capacity and emission levels.

AER has instituted measures to conserve cash and has already ceased operation at two of its least economical facilities, all with the hope that the power price market will eventually recover sufficiently to support future capital expenditures at its operating energy centers. In recent years, the Petitioner has spent nearly \$1 billion installing state-of-the-art FGD systems and ancillary pollution control equipment at its energy centers resulting in a drop in SO₂ emissions of 79% since 1990 and 23%. over the past four years. Under AER's current MPS compliance plan, the completion of the Newton FGD Project is the next step in complying with the 2015 and 2017 MPS SO₂ annual emission rates.⁵ In support of its request for relief, and as part of its variance compliance plan ("Compliance Plan"), AER expects to continue various limited construction activities at the Newton Energy Center to the extent it can financially do so. By continuing limited construction activities, AER will be in a position to respond quickly once power market prices and cash flows improve. Weighing these factors against the net benefit to the environment the Compliance Plan will provide, AER demonstrates in this petition that compliance with each the 2015 and 2017 SO₂ emission rates will impose an arbitrary and unreasonable hardship and the requested relief is warranted.

I. AER ILLINOIS FLEET INFORMATION

A. As of 2012, AER Generates Electricity in Illinois at Five Coal-Fired Energy Centers.

AER owns seven coal-fired power plants for the generation of electricity in several locations in downstate Illinois.⁶ These plants are the Coffeen Energy Center located in

⁵ The FGD system at Newton would have also supported compliance with the currently appealed and stayed CSAPR.

⁶ The Ameren MPS Group includes units owned or operated by AEG, AmerenEnergy Resources Generating Company, and Electric Energy, Inc., all subsidiaries of AER, which is a subsidiary of Ameren Corporation. The MPS required that the units of all of these subsidiaries of Ameren Corporation be included in a single MPS group, 35 Ill. Adm. Code 225.233(a)(2). The seven Illinois power plants owned and operated by AER include 21 individual electric generating units ("EGUs") that comprise the Ameren MPS Group. Please refer to the Affidavit of Ryan Martin for a more detailed explanation of the corporate structure of Ameren Corporation and AER.

Montgomery County, the Duck Creek Energy Center located in Fulton County, the E.D. Edwards Energy Center located in Peoria County, the Joppa Energy Center located in Massac County, the Hutsonville Energy Center located in Crawford County, the Meredosia Energy Center located in Morgan County, and the Newton Energy Center located in Jasper County. As of January 2012, AER generates electricity at five of these facilities, having ceased operation of the Meredosia and Hutsonville Energy Centers. All of these counties are currently designated attainment for all pollutants.⁷

The Illinois Environmental Protection Agency ("Agency") maintains a comprehensive, state-wide network of air quality monitoring stations.⁸ The principal emissions at AER's coal-fired power plants are SO₂, nitrogen oxides ("NOX"), and particulate matter ("PM"). AER generally controls SO₂ emissions with pollution control equipment at several facilities as well as through the use of low sulfur coal or blending low sulfur coal with Illinois coal containing higher levels of sulfur. Three scrubbers (a.k.a. FGD units) are in service at the Duck Creek and Coffeen Energy Centers. AER generally controls NOx emissions by burning various combinations of low sulfur coal, low NOx burners, over-fired air, and selective catalytic reduction systems ("SCRs"). PM is generally controlled through the use of flue gas conditioning and electrostatic precipitators ("ESPs"). AER controls mercury emissions through the use of scrubbers and sorbent injection technologies.

In 2011, the Ameren MPS Group achieved an overall NOx annual emission rate of 0.11 lb/mmBtu and an overall SO₂ emission rate of 0.46 lb/mmBtu. The addresses of the seven energy centers, their Illinois Environmental Protection Agency identification numbers,

⁷ See the United States Environmental Protection Agency's ("USEPA") Green Book (list of national attainment and nonattainment designations) at < http://www.epa.gov/oar/oaqps/greenbk/>.

⁸ Exhibit 1, which consists of selected pages of the Agency's *Illinois Annual Air Quality Report 2010*, includes a copy of the map at page 34 (http://www.epa.state.il.us/air/air-quality-report/2010/air-quality-report-2010.pdf) depicting the locations of the air quality monitoring stations with the locations of AER energy centers superimposed.

permit application numbers, and other pertinent information regarding their output, pollution control equipment, and SO₂ emissions are provided in Exhibit 2, attached to this Petition. As of the date of this filing, AER employs approximately 750 persons at these seven energy centers.

B. AER Has Not Received Any Other Variance of Similar Relief-Amendments to the MPS Were Adopted by the Board in 2009.

AER has not received any other variance concerning similar relief. AEG, AER, and AERG filed a petition for variance from the 2013 and 2014 MPS SO₂ emission rates in 2008. However, the Board denied the request for variance, finding that a variance was not the appropriate form of relief. *Ameren Energy Generating Co. et al v. IEPA ("Ameren v. IEPA")*, PCB 09-21 (Jan. 22, 2009). However, at the time of the variance denial, the Agency had a rulemaking proposal pending before the Board to amend portions of Section 225 to add mercury monitoring requirements. *In the Matter of: Amendments to 35 Ill. Adm. Code 225: Control of Emissions from Large Combustion Sources (Mercury Monitoring)*, R09-10 (Jun. 18, 2009). AEG, AER, and AERG participated in that rulemaking, seeking revisions to the 2013 and 2014 SO₂ emission rates of the MPS and agreeing to additional and more stringent SO₂ and NOx emission limits. The final rule, including revisions to Ameren's MPS Group SO₂ emission rates, became effective on July 15, 2009.

II. REGULATION FROM WHICH VARIANCE IS SOUGHT

AER seeks a variance extending compliance with both the 2015 and 2017 SO₂ system annual emission rates of the MPS. Section 225.233(e) states in relevant part:

- e) Emission Standards for NO_x and SO_2 .
 - 3) Ameren MPS Group Multi-Pollutant Standard ***
 - C) SO₂ Emission Standards ***
 - iii) Beginning in calendar year 2015 and continuing in calendar year 2016, for the EGUs in the Ameren MPS

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Group, the owner and operator of the EGUs must comply with an overall SO_2 annual emission rate of 0.25 lb/million Btu.

iv) Beginning in calendar year 2017 and continuing in each calendar year thereafter, for the EGUs in the Ameren MPS Group, the owner and operator of the EGUs must comply with an overall SO₂ annual emission rate of 0.23 lb /million Btu.

The original MPS became effective on January 5, 2007. In the Matter Of: Proposed New 35 Ill. Adm. Code 225 Control of Emissions from Large Combustion Sources (Mercury), R06-25 (Dec. 21, 2006). Sections 225.233(e)(3)(C)(iii) and (iv) were added to the MPS on June 18, 2009 and became effective July 15, 2009. Mercury Monitoring, R09-10 (Jun 18, 2009).

III. NATURE OF VARIANCE RELIEF REQUEST

AER seeks relief from Section 225.233(e)(3)(C)(iii) for five years beginning January 1, 2015, and ending December 31, 2019, and relief from Section 225.233(e)(3)(C)(iv) for four years, beginning January 1, 2017, and ending December 31, 2020. AER seeks the variance almost three years in advance of the 2015 compliance date and five years in advance of 2017 because eroding financial conditions make compliance with those requirements untenable. As set forth more fully in this Petition, inadequate cash flow and restrictions on additional borrowings preclude the completion of the Newton FGD Project as scheduled.⁹ Since the timing of the construction and installation of the two Newton FGDs was coordinated so as to allow the Ameren MPS Group to meet **both** the 2015 and 2017 SO₂ annual emission rates, AER will not under current market conditions be able to meet either compliance date. If relief is not granted then AER will need to mothball multiple units across AER's coal fleet, which may include E.D. Edwards, Joppa, and/or Newton units, so as to comply with the MPS SO₂ annual emission rates until such time as market prices recover to

⁹ The Newton Energy Center FGD Project construction permit is attached as Exhibit 3.

the level that the Newton FGD Project is financially viable and installation can be completed. As is described in more detail further in this petition, such decisions have broad impact and require adequate time to properly implement. A variance term of five years from Section 225.233(e)(3)(C)(iii) and four years from Section 225.233(e)(3)(C)(iv) would allow for power price market conditions to improve and regulatory certainty at the federal level to crystallize. The variance period would also afford AER sufficient time to implement the Compliance Plan as detailed below namely planning, mobilizing and completing the Newton FGD Project

The Act allows the Board to grant variances "for such period of time, not exceeding five years, as shall be specified by the Board" 415 ILCS 5/36(b) (2010). Binding declining emission rates to dates certain, Section 225.233(e)(3)(C) was not drafted with the variance strutures in mind. Nonetheless, the Board has authority to grant a variance with a term of five years from Section 225.233(e)(3)(C)(iii), and four years from Section 225.233(e)(3)(C)(iv). The Board has granted a prospective variance in the past (*e.g. ExxonMobil Oil Corp. v. IEPA*, 11-86, 12-46 (Dec. 1, 2011)), as well as a single variance from multiple Board regulations (*e.g. Citizens Utilities Co. of Illinois v. IEPA*, PCB 85-95 (Oct. 24, 1991). The declining emission rates are tethered to dates certain in the MPS. Therefore, this petition does not request a variance exceeding five years from either of the two sections.

IV. DETAILED COMPLIANCE PLAN

A. AER's Compliance Plan Will Achieve Compliance with Section 225.233(e)(3)(C)(iii) by January 1, 2020 and Section 225.233(e)(3)(C)(iv) by January 1, 2021.

As an integral part of its Compliance Plan accompanying this variance request, and in mitigation of the relief requested, AER first voluntarily offers that the Ameren MPS Group

will meet an overall annual SO_2 annual emission rate in 2012 through 2019 of 0.38 lb/MMBtu, essentially the time period during the pendency of the variance.

Importantly, committing to this voluntary SO₂ annual emission rate in its Compliance Plan, and in mitigation of the requested relief, will impose significant operational restrictions on AER. The proposed voluntary rate will effectively commit AER to the cessation of operations at the Hutsonville and Meredosia Energy Centers while maximizing FGD performance at the Duck Creek and Coffeen Energy Centers. Nonetheless, AER agrees to voluntarily meet this Compliance Plan rate in spite of the associated constraints and operating requirements, to mitigate any potential negative environmental impacts resulting from the variance.

AER will also continue to burn low-sulfur coal from the Powder River Basin and manage operations as necessary to maintain compliance. Further, consistent with cash flows, AER expects to maintain a continuous program of construction at the Newton Energy Center so as to be in a position to have the Newton FGD Project completed and operational to meet compliance obligations. All major equipment components required to complete the Newton FGD Project has been procured and will be stored on site during the variance period. Site preparation, foundation work and duct work fabrication will all be expected to continue over the next few years. Assuming power prices rebound, field construction activities including the mobilization of skilled craft labor and the procurement of commodity items could take approximately 24 months to complete once the project ramps back up. Proceeding in this manner will position AER for compliance with the 2015 SO₂ annual emission rate by January 1, 2020 with the installation of the Newton FGDs. AER requires a four-year variance from Section 225.233(e)(3)(C)(iv), a year beyond compliance with the 2015 rate, to comply with the 2017 SO₂ annual emission rate, so that it can properly stage and stagger the in-service

date of each of the two Newton FGDs and to ensure that the Project achieves the expected reductions.

V. ARBITRARY AND UNREASONABLE HARDSHIP

It is well-recognized that Illinois has adopted emission reduction requirements significantly more stringent than other states. Illinois adopted these requirements to satisfy, even exceed, federal requirements expected for Clean Air Mercury Rule, known as CAMR, and those requirements that were in effect at the time for the federal Clean Air Interstate Rule, known as CAIR. Subsequently, the federal requirements which drove, in great part, the creation of the State's programs were vacated or remanded, while the State programs have remained intact, resulting in generally more stringent requirements in Illinois than surrounding states.¹⁰ In addition, as noted previously, Illinois' deregulated energy markets remain surrounded by states that allow generators rate recovery of capital projects including those relating to environmental mandates from a captive consumer base, putting the deregulated generation at a competitive disadvantage. This gives rise to a crippling "double whammy" for Illinois coal-fired electric generators. Illinois merchant generators must install controls not required in surrounding states, without the benefit of a regulated rate regime that allows recovery of the costs through captive customer rates. Rather, Illinois merchant generators are entirely dependent on the power price market for their revenue stream. With the price of power at or near the cost of power production, there is no excess revenue to fund capital projects such as the construction of Newton FGD Project or frankly, any similar

¹⁰ For example, Indiana, Kentucky, Missouri, Iowa and Ohio have no mercury rules. Wisconsin requires that large coal-fired EGUs apply control technology to reduce mercury emissions 90% by January 1, 2015, or comply with a multi-pollutant option that achieves 90% mercury reduction by January 1, 2021. Wis. Adm. Code, Department of Natural Resources, NR 446 *et seq*. Michigan requires mercury reductions from coal-fired EGUs by January 1, 2015, or achieve 75% reduction under a multi-pollutant option. Mich. Adm. Code, Part 15, R 336.2501 *et seq*. Minnesota requires 90% mercury reduction by 2015 from the State's three largest electric power plants; remaining facilities must reduce mercury emissions 70-90% by 2025. Minn. Stat. §115A.932 *et seq*.

project. Given this context, these events result in a "Black Swan"¹¹ for Illinois merchant generation companies — no one, not AER, the Agency, the Board, nor the General Assembly could have foreseen this chain of events nor their impacts at the time the State programs were proposed or adopted.

AER contends that Illinois companies are now disproportionately bearing costs because of these unintended events. For AER, the requested variance helps address the compliance challenges temporarily while mitigating environmental impacts. For all of these reasons, today's regulatory and economic environment has made compliance with the 2015 and 2017 MPS SO₂ annual emission rates an arbitrary and unreasonable hardship for AER. The following sections explain the series of events leading to this request in more detail.

A. Regulatory Uncertainty Creating an Unlevel Playing Field and Eroding Market Conditions Have Made Compliance with the 2015 and 2017 SO₂ Annual Emission Rates an Arbitrary and Unreasonable Hardship for AER.

1. Ameren's MPS Group Opted In the MPS in 2007 With the Expectation that Future Federal Regulatory Requirements Were Imminent.

In May 2005, the USEPA promulgated regulations requiring reductions of emissions of SO₂ and NOx in the Clean Air Interstate Rule ("CAIR") to address ozone and fine particulate ("PM_{2.5}") nonattainment areas, 70 Fed. Reg. 25162 (May 12, 2005), and of mercury emissions in the CAMR, 70 Fed. Reg. 28606 (May 18, 2005). The CAIR included most of the eastern United States as well as several states west of the Mississippi River, while the CAMR applied to the lower 48 states. Both of these rules applied to coal-fired EGUs serving generators with nameplate capacities greater than 25 megawatts ("MW").¹² Both of

¹¹ The "Black Swan" phenomenon is a metaphor used to identify events that are (1) a surprise to the observer, (2) have a major impact, and (3) are susceptible to after-the-fact rationalization. The theory was developed by Nassim Nicholas Taleb in his 2004 book *Fooled By Randomness*, which concerned financial events. His 2010 book, *The Black Swan* extended the metaphor to events outside of financial markets.

¹² The CAIR applied more generally to fossil fuel-fired EGUs, while the CAMR was limited in applicability to just coal-fired EGUs.

these programs established caps on emissions of certain pollutants for each affected state and provided that the states could choose to participate in USEPA-administered emissions trading programs if their state programs met certain minimum requirements. Both federal programs applied to AER's coal-fired EGUs.

The Board adopted the Illinois mercury rule on December 21, 2006, and the Illinois CAIR on August 23, 2007. In the Matter Of: Proposed New 35 Ill. Adm. Code 225 Control of Emissions from Large Combustion Sources (Mercury), R06-25 (Dec. 21, 2006); In the Matter Of: Proposed New Clean Air Interstate Rule (CAIR) SO2, NOx Annual and NOx Ozone Season Trading Programs, 35 Ill. Adm. Code 225 Subparts A, C, D, E and F, R06-26 (Aug. 23, 2007). Even though the Illinois mercury rule proposed was among the most stringent in the nation and was proposed in advance of an effective federal mercury reduction program, AER was the first power generator to work with the Agency in good faith on the proposal. Specifically, AER had approached the Agency with a proposal that is reflected in the MPS adopted by the Board as part of the Illinois mercury rule at Section 225.233.¹³ The MPS was intended to be a comprehensive approach to the Illinois mercury rule that addressed mercury in coordination with other known air emission regulatory requirements, notably the CAIR, including use of potential co-benefit emission control technologies that reduce not only mercury but also NOx and/or SO₂. The Ameren MPS Group, indeed, opted in to the MPS on December 27, 2007 (the Ameren MPS Group opt-in letter is attached hereto as Exhibit 4), and became subject to the NOx and SO₂ provisions of the MPS at that time.

¹³ The MPS is a rule of general applicability, available to any of the Illinois coal-fired generation companies who chose to take advantage of its provisions. Nevertheless, it was the result of negotiations between the Ameren MPS Group and the Agency and was born from Ameren's analysis of foreseeable regulatory requirements, the interrelationship and need for coordination between mercury, NOx, and SO₂ control planning, and its resulting business plan.

2. The Vacatur of the CAMR and Remand of the CAIR in 2008 Created Regulatory Uncertainty Leading to the Ameren MPS Group's Request for MPS Revisions in 2009.

At the time the Board adopted the MPS, power producers such as AER were finalizing compliance plans required by the CAIR, as adopted in 2005, including other regulatory schemes on the horizon including, CAMR. CAIR relied on an emissions cap and trade program with declining emissions rates beginning in 2009 and ending in a final reduction phase for each pollutant in 2015. The MPS imposed more stringent reductions in NOx and SO₂, but at the time of the rulemaking, and despite the pending appeals, all stakeholders, including AER, the Agency, and the Board, believed that CAMR and CAIR, or some version thereof, would become effective. Indeed, AER and others believed that Illinois power producers would be competing in a market where power plants outside Illinois would also be subject to similar schemes of emission reduction requirements. However, the courts issued two unexpected judicial decisions. First, in February 2008, the U.S. Court of Appeals for the District of Columbia ("D.C. Circuit") vacated the CAMR. See State of New Jersey v. Environmental Protection Agency, 517 F.3d 574 (D.C. Cir. 2008). The court determined that the USEPA had erred in the methodology it had used to remove EGUs from the list of sources subject to the maximum available control technology ("MACT") requirements of the Clean Air Act.

Second, on July 11, 2008, the D.C. Circuit vacated the federal CAIR. *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008). Subsequently, the court remanded the CAIR in its entirety without vacatur, *North Carolina v. EPA*, 550 F.3d 1176 (D.C. Cir. 2008), ordering that the CAIR remain effective until the USEPA replaced it with a new rule. These decisions, although praised nationally by the industry as a whole, presented what has proved to be significantly more confining constraints for Illinois generating companies that had opted into

the MPS, as the impacts of having an uneven playing field began revealing themselves. These judicial decisions, coupled with pending greenhouse gas emission regulations, severe market liquidity conditions, and the near collapse of the banking system *first* presented difficulty for the Ameren MPS Group in 2008. At that time, the AER companies sought additional time to comply with the system-wide 2013 SO₂ MPS annual emission rate in order to avoid stranded costs of compliance. Additional time allowed the AER companies to make more educated and sustainable investment decisions on how to comply with the MPS in light of the regulatory uncertainty on both the federal and regional levels.

3. The Appeal of the CSAPR Has Caused a New Wave of Uncertainty and an Unlevel Playing Field, With Greater Ramifications for Merchant Generators in States with State-Only Emission Reduction Requirements.

On July 6, 2011, the USEPA adopted the CSAPR as a replacement to the CAIR. 76 Fed. Reg. 48208 (Aug. 8, 2011). The final rule was designed to reduce the impact of SO₂ and NOx emissions from sources in upwind states to areas in downwind states by restricting the amount of emissions allowed on an annual or seasonal basis. USEPA claims the CSAPR would have reduced power plants SO₂ emissions by 73% and NOx by 54% from 2005 levels. 76 Fed. Reg. 48349 (Aug. 8, 2011). Several parties challenged the rule immediately prior to the effective date. *EME Homer City L.P. v. EPA*, No. 11-132 (D.C. Cir. filed Aug. 23, 2011). On December 30, 2011, the United States Court of Appeals for the District of Columbia issued an order staying the rule (and ordering the continuation of the previously remanded CAIR program) until final resolution of the appeals. *EME Homer City Generation L.P. v. EPA*, No. 11-1302 (D.C. Cir. filed Dec. 30, 2011). Since the fate of CSAPR is uncertain, as is the continuation of any federal emission reduction program, the very basis of the MPS that is, an effective and permanent federal program—has yet to become a reality.

Certainly, the possibility of future changes in the law does not alone constitute an arbitrary and unreasonable hardship. Unfortunately, the industry generally has been asked to operate in a continuing, uncertain environmental regulatory climate. But in this case, the impact of the CSAPR stay, felt nationally but most acutely in Illinois where a uniquely structured emission reduction program exists, coupled with the drastic changes in power prices and market conditions in the span of several months preceding this variance request make compliance with the emission rates at issue an arbitrary and unreasonable hardship. Indeed, the reality of this hardship hit home for AER again in October 2011. Faced with deteriorating market conditions and compliance with what was anticipated to be an effective CSAPR program in 2012 compounded by other environmental mandates, AER announced the cessation of operations at its Hutsonville and Meredosia Energy Centers. At a loss of 90 good paying jobs and much needed revenue to the local economy as well as the State, the cessation of operations at such plants demonstrates the vulnerability of coal-fired power producers when faced with an uncertain federal environmental regulatory landscape and an extremely volatile energy market. Importantly, and not intended as a criticism of Illinois' environmental stewardship, the financial ramifications of the CSAPR appeal are exacerbated for Illinois power companies compared to companies in other states for the two reasons noted previously.

First, it is well-recognized that Illinois is in a "distinctive situation" because the MPS requires Illinois EGUs to control NOx and SO₂ emissions even in the absence of a permanent and effective federal emission program like CAIR. Whereas, the financial markets, USEPA, and coal-fired power producers all expected CSAPR to take effect on January 1, 2012 as the replacement of the remanded CAIR, it is now unknown when or if CSAPR will become effective. AER believes that either CASPR or a regulatory replacement will be in place before the expiration of the requested variance term. However, such "crystal balling" has

proven to be perplexing. Should it happen, though, AER may then be competing on a more equal footing in the market place.

Second, AER is a merchant generator in an unregulated or consumer choice market. AER and its subsidiaries face significant challenges that limit their ability to access third party capital to continue to invest in state and federally-mandated environmental control equipment.¹⁴ Rygh Aff., Par. 4, 5. Unlike regulated rate utilities, merchant generators do not have rate-regulated revenue streams from a captive customer base that allow for the recapturing of environmental compliance costs.¹⁵ Martin Aff., Par. 5. Rather, merchant power companies' investment decisions such as the installation of pollution control equipment are based on the ability to recoup such expenditures from expected future market prices for power. As Illinois proceeded towards deregulation, regional transmission organizations formed through which power generators were more easily and efficiently able to sell power across state lines. As a result, AER now competes with generators in several nearby states that have neither deregulated their energy markets nor invested significant capital in environmental pollution control projects to address stringent state requirements.

As such, requiring compliance with state-only emission reduction mandates in an unregulated state like Illinois places power generators in an unintended position of financial inequity since merchant generators have to absorb internally the cost of compliance with those state-specific rules. This inequity is most significantly felt by merchant generators like AER because it competes with regulated power generators that are able to recover any compliance costs through customer rates. If CSAPR had gone into effect January 1, 2012, it would have helped by at least leveling the playing field between Illinois merchant generators

¹⁴ The Affidavit of Gary M. Rygh is attached as Exhibit 5 and will be cited to hereinafter as "Rygh Aff., Par. __."

¹⁵ The Affidavit of Ryan J. Martin is attached as Exhibit 6 and will be cited to hereinafter as "Martin Aff., Par. __...

and competitors in other states from an environmental compliance perspective. However, the appeal and stay of CSAPR on December 30, 2011, less than 48 hours before its effective date, injected additional regulatory uncertainty, a seeming tipping point for the industry. In fact, power prices declined 12% in the month following issuance of the stay. Martin Aff., Par. 13.

B. The Costs of Compliance with the MPS are Substantial and Certain.

The AER companies have been aware since approaching the Agency with the idea of the MPS that the costs necessary to comply with the MPS would be substantial and certain. But as illustrated, underlying conditions have changed dramatically. During the mercury rulemaking, the AER companies explained that the costs necessary to achieve the MPS would be greater than those required by the original proposal because of the added SO₂ and NOx controls, but should carry a "more manageable rate of increase in demands on cash flow." *Mercury Rule*, R06-25, pg. 74, P.C. 6301, at 7 (Nov. 2, 2006) (second notice opinion and order). In analyzing the economic reasonableness of the mercury rule, including the MPS, the Board stated the economic impact of the rule was reasonable when weighed against the benefits of mercury emission reductions. *Mercury Rule*, R06-25, pg. 74 (Nov. 2, 2006). AER is on track to meet all other components of the MPS, including the annual mercury emission rate effective in 2015 which was the driver behind the MPS, and Illinois will enjoy the benefits of mercury emission reductions. However, compliance with the 2015 and 2017 SO2 annual emission rates is no longer economically reasonable. In fact, compliance with those provisions will impose an arbitrary and unreasonable hardship.

1. The AER Companies Have Spent Over \$1 Billion To Date on the Environment and to Comply With the MPS.

The SO₂ provisions of the MPS do not mandate the installation of specific control technology. Specific technology choices are left to the discretion of the owner of regulated

EGUs subject to a compliance demonstration with the designated system rates. Compliance with the system rates can be accomplished through a series of mechanisms ranging from pollution control equipment, fuel content or quality, or operational changes such as unit retirements or capacity restrictions.

Since 2006, AER has spent over \$1 billion on pollution control equipment across its five active coal plants. Specifically with respect to the MPS, three scrubbers that control SO₂, mercury and hazardous gases have been installed at two plants. In addition, SCRs to control NOx have been installed at three facilities. State-of-the-art landfills exist at four facilities and mercury controls are in place across the fleet.¹⁶

AER, along with Ameren Corporation, has also been a leader in the advancement of new technology including the testing of various mercury control technologies in order to achieve more effective mercury control.¹⁷ AER has implemented and demonstrated alternative control technologies for mercury at the Duck Creek and Newton energy centers resulting in enhanced mercury removal. These expenditures and efforts to meet environmental requirements reflect AER's continued commitment to compliance and environment benefits despite negative economic forecasts.

2. AER Incurred an Additional \$237 Million to Fund the Newton FGD Project.

AEG applied for a permit to construct two FGD units at the Newton Energy Center (previously referred to as the "Newton FGD Project" or "FGD Project") on January 27, 2010. The FGD Project was to be completed in order to comply with both future environmental requirements but timing-wise, particularly for compliance with the MPS. The FGD Project

¹⁶ Despite deciding to close the Meredosia Energy Center, AER has remained committed to making the Meredosia site available for the FutureGen 2.0 project. FutureGen 2.0 is an experimental project that would burn coal for power, but store carbon dioxide (CO₂) emissions underground. Ameren personnel have worked closely with the FutureGen Alliance and the Agency on a variety of permitting and regulatory approval issues in support of the project's clean coal technology objectives.

¹⁷ In reference to mercury control, "more effective" means higher mercury control in a cost effective manner.

also contemplated the construction of a new chimney with separate flues for each unit; new induced draft fans for each unit; and gypsum and limestone handling facilities, among other improvements. On December 20, 2010, the Agency issued a construction permit authorizing the Newton FGD Project.¹⁸ The Company immediately commenced engineering, procurement and construction activities, and continued construction activities even as market conditions began to erode. Facing insurmountable eroding cash flows and borrowing restrictions stemming from a faltering power price market, among other things, AER had no choice but to initiate a deceleration of its construction efforts. As a result, the Company will not have the Newton FGD Project complete in time to meet either the 2015 or 2017 MPS SO₂ annual emission rate compliance deadlines. Despite the need to decelerate the FGD project, AER has incurred \$237 million on the Newton FGD Project to date and intends to continue the various engineering and construction activities it can fund so as be positioned to complete the FGD Project in time to comply with the 2015 MPS SO₂ annual emission rate by January 1, 2020 and the 2017 rate by January 1, 2021. By the end of 2012, AER will have spent over 50% of the project cost.

3. Due to Low Power Prices, AER Can No Longer Fund the Newton FGD Project in Time to Comply with the Current 2015 and 2017 MPS SO₂ Rates.

Power prices in the Midwest impact both the cash flow of AER and the borrowing capability of its subsidiary AEG. Sales of power from AER generating units and the associated power prices are the source of cash flow and earnings for Ameren's unregulated merchant generation business segment. Martin Aff., Par. 12. During 2012, the market prices for power have collapsed, falling to levels not seen since 1978. The sharp decline in power prices is due to lower demand because of the recession, the exceptionally mild weather this winter, and an increased supply of natural gas from shale gas that has contributed to lower

¹⁸ See Exhibit 3.

natural gas prices. Given these conditions, AER's financial health and access to capital have both been severely impaired. Rygh Aff., Par. 5. AEG, owner and operator of Newton Energy Center and publicly registered subsidiary of AER, has seen its credit rating cut 3 notches by S&P and 4 notches by Moody's since 2008. Net income over the same time period has dropped by over 95%. *Id.* The current outlook for the next several years is no better. Financial analysts predict low natural gas prices will continue to keep margins and cash flow under pressure for most unregulated power producers.¹⁹ *Id.* at Par. 5-7. Further, as discussed previously, unlike their regulated peers, unregulated power companies do not enjoy the benefits of rate recovery assurance for capital investments. Instead, unregulated power companies can only turn to the markets to generate positive cash flow to help pay for capital investments. *Id.* at Par. 13.

In 2006 and 2007, the price per megawatt hour ("Mwh") was in the \$60 range. At a February 16, 2012 auction, the purchase price per Mwh electricity for AER was in the range of \$29.50 Mwh to \$33.60 Mwh for June 2013 through May 2014.²⁰ Based on available information, and analyst predictions, power prices over the next three years are not expected to improve to the level to support the installation of the Newton FGD Project by either 2015 or 2017. *Id.*

Again, as previously discussed, companies in rate-regulated markets ultimately can recover large capital investments from rate payers and do not require market prices to be at a level necessary to fund the investments. Lenders look to this revenue stream in evaluating the credit worthiness of companies and establishing lending terms. In contrast, a merchant

¹⁹ On April 17, 2012, USEPA issued final regulations delaying requirements for capturing air emissions from oil and gas wells until 2015 (<u>http://www.epa.gov/airquality/oilandgas/actions.html</u>). The goal of the rules was to reduce methane emissions during hydraulic fracturing by requiring a gas capture method known as "green completion." The extension is seen as a victory for firms that use hydraulic fracturing to tap natural gas resources trapped in shale rock and favors continued low natural gas prices. An article discussing the move is attached hereto as Exhibit 8.

²⁰ Public notice of Winning Bidders and Average Prices, (Feb. 16, 2012), attached as Exhibit 9.

generator's revenues are determined through power prices established by a dynamic and competitive energy market and by power supply contracts. Martin Aff. Par.5. Lenders typically look to a projection of future power prices in assessing the creditworthiness of a borrower and potential investment risk. *Id.* The dramatic dive in market prices for power over the last three years has adversely impacted AER's source of revenue and ability to access short-term and long term capital markets.²¹ *Id.* AEG's operating proceeds are now insufficient to fully fund large-scale capital projects such as the Newton scrubbers. Martin Aff., Par. 6.

As explained, AER has already spent over \$1 billion on the installation of pollution control facilities, including scrubbers, SCRs, landfills, cooling basins and towers, and precipitators, at Duck Creek, E.D. Edwards, Coffeen, and Newton, not including the Newton FGD Project. Martin Aff., Par. 7. To fund its business operations, including the \$1 billion in environmental compliance capital projects, AEG issued an \$825 million secured debt held by bondholders. As conditions of various loan agreements for the secured debt issued between 2002 and 2008, AEG agreed to operate the business in particular manner to provide additional assurances to bondholders that they would be repaid. In order to be eligible for additional borrowings, AEG must maintain specified interest-coverage and debt-to-capital ratios. See Martin Aff., Par. 8 for specific ratios. AEG's operating cash flow has been adversely affected by the decreasing market price for power over the last few years. In fact, despite a number of steps taken to reduce cash flows and capital expenditures, including cessation of operations at the Hutsonville and Meredosia Energy Centers and decelerating construction of the Newton FGD Project, AEG's interest rate ratio is expected to fall below the required minimum contained in the debt covenants by 2013. Accordingly, unless and

²¹ AEG's recent rating downgrade by Standard & Poor's places it within the upper tier of junk grade status, which increased financing costs and applicable interest rates.

until power price market conditions improve, AEG will not be able to borrow additional funds to finance any project of the magnitude of the FGD Project. Martin Aff., Par. 9.

AEG's bond maturities also require AEG to preserve cash until market prices recover. Approximately \$300 million of AEG's \$825 million in long-term public bonds matures in 2018, and approximately \$250 million of this debt matures in 2020. Generally, AEG would plan to refinance these bonds in the public market and extend the maturity of the debt. However, if AEG's interest coverage ratios do not improve materially by 2018, indenture borrowing restrictions will prohibit refinancing the 2018 maturity, and the \$300 million will have to be repaid to bondholders. An inability to repay the bonds when due would constitute an event of default under the AEG bond indenture, which would likely lead to an AEG bankruptcy. The same is true for the 2020 maturity. Given these pending maturities, a weak financial forecast, and covenant provisions that are expected to restrict AEG's access to debt capital market, it is vitally important that AEG preserve cash until market prices recover, operating results and cash flows improve, and borrowing capacity is restored. Failure to do so could threaten the long-term viability of the business and result substantial losses for all AER stakeholders, including both investors and those in the communities in which AER operates. Martin Aff., Par. 9.

Additionally, funding from Ameren Corporation is also not a viable option because merchant business segment must be self-funding and its expenditures must be supported by its operating revenues. Ameren Corporation must balance the credit and lending needs of all of its businesses, and similar to third party lenders, it cannot assume additional unsecured debt on behalf of AER where there is not a secure revenue stream to support such an obligation. Martin Aff., Par. 9. Furthermore, credit rating agencies have been very clear that if Ameren Corporation were to lend additional monies to AER such a capital injection would have adverse financial consequences on the ratings of the parent corporation. Rygh Aff., Par.

11. As such, the financial distress of AER and its subsidiaries cannot extend to the parent company.

C. If Denied Relief, AER Must Cease Operations at Two of Its Energy Centers--Joppa, E.D. Edwards and/or Newton—Which Would Substantially Impact AER Employees, the Surrounding Community, and Ultimately, Illinois Electricity Consumers.

With power prices at depressed levels and restrictions of additional borrowings, there is no viable funding mechanism for completion of the Newton FGD Project by 2015 or 2017. Without relief from the Board, and in the absence of the Newton FGD, AER's only other compliance alternative has severe consequences. At this time and under existing conditions, retiring at least two plants across AER's fleet such as, for example, Joppa, E.D. Edwards, and/or Newton, would be necessary in order to maintain compliance in absence of completing the Newton FGD Project. Martin Aff., Par. 9. One of the main drivers for AER's petition for relief now is that if mothballing of facilities must occur, AER must have the necessary time to make and effectuate these critical decisions in the best possible way.

1. Retiring Plants Would Substantially Impact AER Employees and Local Communities.

The economic hardship experienced as a result of AER's failure to obtain regulatory relief will not be limited to AER alone. AER currently employs approximately 750 people at energy centers across the State. Both options negatively impact the company, local economy, and State. Should AER be forced to mothball power plants as a direct result of economic hardship brought on by compliance with the MPS, AER employees, contractors and the State will bear a significant portion of the economic impact as well as the almost certain loss of employment. Indirect effects will be felt in communities hosting AER Energy Centers as well as communities that host suppliers. The devastating impact of this on the State and citizens of Illinois cannot be understated given the current economic conditions.

At the request of AER, consultant Development Strategies performed an independent analysis of the economic impact the E.D. Edwards and Joppa Energy Centers have on the Illinois and local economies.²² Development Strategies estimated the *direct economic impacts*, which include the dollars AER spends at each energy center on capital expenditures, non-payroll operations, and salaries paid to employees, and the *indirect economic impacts*, which include the multiplier ("ripple") effect of wages and expenditures associated with AER's direct spending. Employees living in Illinois spending a portion of their earnings on housing and at local businesses (i.e. restaurants, mechanics, and grocery stores) are examples of the *indirect economic impacts* category. According to Development Strategies, AER puts \$44.4 million into the local economy surrounding the E.D. Edwards energy center, including Peoria, Fulton, Mason, and Tazwell counties, and \$76.7 million into the local economy surrounding the Joppa Energy Center, including Johnson, Pulaski, and Massac counties. Combining the direct and indirect economic impacts, Development Strategies estimates that the E.D. Edwards Energy Center has a \$124,071,000 impact on the State's economy and the Joppa Energy Center has a \$214,221,000 impact on the State's economy annually. Together the energy centers provided 274 good paying and much needed jobs for Illinois residents. Development Strategies estimates that because the AER facilities contribute to additional job support in the community and the State of Illinois, the two plants supported an additional 1,209 total jobs held by Illinois residents. Thus ceasing operations at facilities such as the E.D. Edwards and Joppa Energy Centers would cause dramatic "ripple effect" impacts to the regional and state-wide market economies. Such closures would cause the loss of good paying direct and indirect jobs for Illinois residents, reduce household earnings in regional

²² Economic impacts of E.D. Edwards and Joppa Energy Centers of Illinois and surrounding market areas, Memorandum to Mike Kearney, Manager, Economic Development, Ameren Services from Development Strategies (Apr. 19, 2012), attached as Exhibit 10.

labor markets, and result in the loss of significant economic output that helps drive the Illinois economy.²³

2. Ceasing Operations at Plants Will Indirectly Impact Illinois Electricity Consumers through the Power Market

Illinois consumers of electricity could also feel the effects of reduced competition and the retirement of efficient plants if AER must mothball units. AER's units are some of the more efficient units in the power markets serving Illinois customers.²⁴ Schukar Aff., Par. 3. If the requested relief is not granted and multiple units are shuttered, there will be less competition in AER's area, which will negatively affect markets. Power producers typically bid generating units into the marketplace based on the marginal cost of the unit. When efficient units are removed, they are replaced by less efficient units with a higher marginal cost. Power prices would likely increase appreciably for consumers. *Id.* at Par. 6. In addition, AER's higher efficiency units that cannot continue to operate because of lack of access to financing options could be displaced by less efficient units from generation companies that do not have these same environmental mandates.

VI. ENVIRONMENTAL IMPACT

A. AER's Compliance Plan Will Provide Overall Greater SO₂ Reductions Under the Requested Variance Than Anticipated Under Current MPS Requirements.

In a variance proceeding, a petitioner must demonstrate that the hardship resulting from a denial would "outweigh any injury to the public or the environment" from granting the relief. *Marathon Oil Co. v. EPA*, 242 III. App. 3d 200, 206, 610 N.E.2d 789, 793 (5th Dist. 1993). AER has crafted its mitigation and Compliance Plan with such demonstration in

²³ Exh. 10, Tables 2 through 4.

²⁴ The Affidavit of Shawn E. Schukar is attached as Exhibit 11 and will be cited to hereinafter as "Schukar Aff., Par. __."

mind. Despite delaying the effective date of the 2015 and 2017 MPS SO₂ annual emission rates during the variance period, AER has voluntarily offered to meet an earlier more stringent SO₂ emissions rate in mitigation resulting in total SO₂ mass emissions lower than the projected emissions under the current MPS SO₂ annual emission rates, and providing a net environmental benefit to the State. Table 1 below sets forth projected SO₂ emissions through 2021 if the variance were not granted, the projected emissions under the variance SO₂ annual emission rates and Compliance Plan, and the cumulative SO₂ reduction under the requested relief through 2021.²⁵ The cumulative SO₂ reduction reflects the cessation of operations at the Hutsonville and Meredosia Energy Centers through 2021.

	MPS Baseline	Variance SOa	Cumulative SO ₂ Variance
Year	Tons	Tons	Tons
2010	85,112	70,560	14,552
2011	85,112	72,539	27,125
2012	85,112	56,986	55,251
2013	85,112	56,986	83,377
2014	73,196	56,986	99,587
2015	42,556	56,986	85,157
2016	42,556	56,986	70,727
2017	39,151	56,986	52,892
2018	39,151	56,986	35,058
2019	39,151	56,986	17,223
2020	39,151	34,857	21,518
2021	39,151	31,452	29,217
Total	694,510	665,294	29,217

²⁵ See Affidavit of Steven Whitworth, attached as Exhibit 7.

AER specifically offers to meet an annual emission rate of 0.38 lb/mmBtu SO₂ on a yearly system average from 2012 through 2019 (with a 0.55 lb.mmBtu or less SO₂ coal on the non-scrubbed units) that is more stringent than the existing 2012 and 2013 SO₂ emission rate of 0.50 lb/mmBtu and the 2014 SO₂ emission rate of 0.43 lb/mmBtu. By offering to meet this mitigation rate, the total projected SO₂ emissions from the Ameren MPS Group will be *lower* than anticipated under the current MPS from 2012 through 2021. Therefore, AER's Compliance Plan results in a net benefit to the environment that exceeds the little, if any, harm that would result from the grant of this variance. Indeed, the Agency's *2010 Air Quality Report* shows that air quality in Illinois is steadily improving.²⁶ Statewide trends for the SO₂ 24-hour average and 1-hour average maximums have been overall downward for the period of 2001-2010.²⁷

AER anticipates the Newton FGD Project can be completed by January 1, 2020 and the Ameren MPS Group SO₂ annual emission rate will reduce to 0.25 lb/mmBtu, and then to 0.23 lb/mmBtu by the end of 2020. Again, the extra time during 2020 will allow AER to properly state and operate the newly installed FGD and allow for any further refinement to meet the lower rate. AER contends that, given the net benefit to the environment that granting the variance would impart, AER has met the demonstration required by the Board for variance relief.

²⁶ See Exhibit 1, Illinois Air Quality Report, pg. ix.

²⁷ Id. at Fig. 6, pg. 11.

B. AER Will Continue to Comply with NOx and Mercury Control MPS Annual Emission Standards.

AER has worked diligently to comply with all other components of the MPS. The Illinois MPS mercury emission limit (0.008 pounds per gigawatt hour (lb/GWH)) applicable January 1, 2015 is stricter than the recently adopted federal limit. The current federal mercury standard under the MATS requires existing coal-fired sources to comply with a mercury emission limit of 0.013 lb/GWH by 2015, by 2016 if granted by state permitting authorities, or by 2017 if necessary to mitigate risks to electric reliability. 77 Fed. Reg. 9304 (Feb. 16, 2012).

AER has installed activated carbon injection ("ACI") systems on 12 units at 4 plants to control mercury emissions at a capital cost in excess of \$20 million. The operating costs associated with these systems exceed \$17 million annually in procurement of expensive activated carbon and fuel additives commodities (in addition to capital expenditures, these operating and maintenance expenditures must be built into AER's pricing structure, again, a cost generators in surrounding states have not yet incurred). Four SCRs and three wet FGD systems have been installed on AER units to control mercury as well as NOx and SO₂. Ameren spent \$813 million installing the three wet FGD systems and spends approximately \$3.5 million annually in operating and maintenance costs. Capital costs for installing the SCRs totaled \$177 million and operating and maintenance costs for the SCRs amount to approximately \$3.9 million per year.

AER continues to test and evaluate the performance of fuel additives to enhance mercury removal. Earlier than anticipated mercury reductions will also provide a benefit to human, plant, and animal life impacted by mercury emissions from the Ameren MPS Group fleet.

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C. AER Continues to Take Action to Reduce Greenhouse Gases.

Ameren Corporation continues to support research into clean coal technologies, voluntarily reduce greenhouse gas emissions, and purchase offsets to address climate change. In collaboration with the U.S. Department of Energy, Ameren Corporation researches the feasibility of carbon sequestration, the capture and underground storage of CO_2 emitted from coal-fired EGUs, in Missouri and Illinois; increases the operating efficiency and capacity of nuclear and hydroelectric facilities to further offset fossil fuel generation; funds the investigation of ways to reduce nitrous oxide from agriculture; reduces coal ash waste in landfills by recycling more than half of the coal combustion wastes into beneficial uses; and participates in a reforestation organization which funds projects as a means of removing CO_2 .

D. Cross-media impacts are not an issue in this matter.

The slight increase in AER's SO_2 annual emission rate during the pendency of the variance should have no significant impact on water quality. In fact, there will be a net benefit with respect to air emissions associated with granting the variance.

VII. COMPLIANCE WITH FEDERAL LAW

The Board may grant the variance consistent with federal law and, specifically, with the Clean Air Act, 42 U.S.C. 7401 *et seq*. The requested variance is consistent with current federal law. However, on June 24, 2011, the Agency submitted portions of the MPS to USEPA for inclusion in the Illinois' SIP addressing Best Available Retrofit Technology ("BART") and regional haze. The proposal has not yet been adopted as final and it is not known at this time when and if final adoption will occur. Also, as noted above the CSAPR has been stayed pending the outcome of current litigation regarding the rule. The following paragraphs explain why the Board can grant the requested relief consistent with the Clean Air Act and pending regulations.

A. The Terms of the Requested Variance Are Consistent with Federal BART Regional Haze Requirements.

The state of Illinois submitted a regional haze plan, including revisions to the Illinois SIP to address regional haze, on June 24, 2011. USEPA regulations mandate that regional haze plans include emission limitations representing BART for each BART-eligible source. 40 C.F.R. §51.308(e). BART is defined as follows: "an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility." 40 C.F.R. §51.301.

For coal-fired EGUs, BART guidelines provide presumptive emission limits for various boiler type and coal type combinations.²⁸ These emission limits are what the Agency calls "presumptive BART" emission limits. The Agency compared presumptive BART to Illinois' "on the books" emission reduction requirements in Illinois and determined that Illinois' approach will "yield much larger reductions of NOx and SO₂ than will implementation of BART controls on just subject-to BART emission units."²⁹

Despite the delay in complying with the 2015 SO_2 annual emission rate, the variance will be consistent with federal BART requirements. First, according to BART guidelines, a source "contributes" to visibility impairment if it imparts a change of visibility of at least 0.5 deciviews. Illinois adopted this threshold as adequate and, using this threshold, concluded that PM emissions from its subset of BART sources have a negligible visibility impact.

Second, USEPA stated in the proposed BART/regional haze SIP revisions that "[t]he MPS and CPS provide emission reduction well in excess of simply implementing BART on

²⁸ Selected pages of the Agency's *Technical Support Document for Best Available Retrofit Technology Under the Regional Haze Rule* ("TSD"), Illinois Environmental Protection Agency, AQPSTR 09-06, pg. 23 (Apr. 29, 2011) are attached as Exhibit 12.

²⁹ Exh. 12, TSD, pg. 25.

the subject units.³⁰ Illinois estimated that its plan will require 96,927 tons per year lower SO_2 emissions by 2015 than simply requiring BART and USEPA accepted Illinois' plan as satisfying BART requirements.³¹

AER's system-wide emissions under the proposed variance will provide even greater reductions compared to presumptive BART by 2015. 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 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.

B. Once Effective, the Ameren MPS Group Will Comply with CSAPR.

As with the Illinois BART/Regional Haze SIP, CSAPR is not yet effective. However, AER must comply with CSAPR when it becomes effective. USEPA released the final CSAPR regulation on July 7, 2011. There are important differences between the CSAPR and the MPS. As currently promulgated, the CSAPR is not as onerous as the MPS because while the MPS requires a stringent emission rate, CSAPR is based on mass emissions. Also as currently promulgated, the CSAPR allows for compliance to be achieved through the purchase allowances while the MPS does not. The anticipated cost of buying allowances to comply with the proposed the CSAPR is not anticipated to be as financially challenging for

³⁰ USEPA's proposed *Approval and Promulgation of Air Quality Implementation Plans; Illinois; Regional Haze*, 77 Fed. Reg. 3973 (Jan. 26, 2012) is attached as Exhibit 13.

 $^{^{31}}$ *Id.* In its TSD, the Agency recognized that BART-eligible units must comply with BART controls within five years of USEPA's approval of the State's SIP. Exh. 12, TSD, pg. 25. If approved in 2012, for example, the compliance date for BART controls would be in 2017. The Agency also recognized that the agreements between Illinois and the utilities contain compliance dates that extend through 2019. Illinois' demonstration, however, relied on emission reductions required under the MPS and CPS *by 2015*, and emission reductions occurring after that date would simply serve to further improve visibility in Class I areas impacted by Illinois' sources. USEPA accepted Illinois' plan for SO₂ emissions reductions by 2015 as satisfying BART. *Id.*

AER as installing the pollution control technology in the current time frame required to meet current MPS emission rates.

C. AER Must Also Comply with the MATS.

In response to the vacatur of the CAMR in 2008, USEPA proposed national emissions standards for hazardous air pollutants and for coal and oil-fired EGUs on March 16, 2011, known as the MATS. For coal-fired EGUs, the rule sets emission limits for mercury, PM, hydrogen chloride, and trace metals. The rule also establishes alternative numeric emissions limits. The final rule became effective on April 16, 2012,³² and allows at least three years and, in certain circumstances, up to five years to achieve compliance with the standards. AER intends to comply with the MATS at its facilities through the use of a combination of existing FGD systems and sorbent injection technologies.

VIII. REQUEST TO WAIVE HEARING

AER does not request that the Board hold a hearing in this matter. A hearing is not necessary at this time, but once the Illinois' BART/SIP is adopted as final, Illinois must seek revisions to the SIP reflecting the terms of the variance. The SIP revision process will require a public hearing.

IX. CERTAIN PROVISIONS OF THE BOARD'S VARIANCE PROCEDURAL RULES ARE NOT APPLICABLE TO THIS REQUEST

This request does not involve any existing permit or pending permit application.

X. CONCLUSION

AER's goal through this request is not to increase the burden on the consumer or cause additional environmental impact. Illinois strove to achieve early and more stringent reductions in air emissions from power plants. As a result, plants across Illinois have made

³² The rule became effective 60 days after the date of publication in the Federal Register on February 16, 2011. 77 Fed. Reg. 9304 (Feb. 16, 2012).

great strides in reducing air emissions. AER does not take its variance request lightly nor does it intend to be critical of Illinois' achievements that it too has been a part of.

Section 35(a) of the Act states that "the Board is not required to find that an arbitrary or unreasonable hardship exists exclusively because the [state] regulatory standard is under review and the costs of compliance are substantial and certain." 415 ILCS 5/35(a)(2010). However, the Board has recently granted a variance to a petitioner faced with unique regulatory uncertainty where the costs of compliance were also determined both substantial and certain. *ExxonMobil Oil Corp. v. IEPA*, 11-86, 12-46 (Dec. 1, 2011). Like ExxonMobil, AER is faced with stringent Illinois requirements in a landscape of regulatory uncertainty at the federal level and deteriorating market conditions. Additional time will allow for the CSAPR appeal to be resolved and the possibility of federal regulation putting companies back on equal footing.

AER, however, does not come to this Board and seek relief solely on the basis of regulatory uncertainty. Although AER wishes it did not exist, the "perfect storm" of regulatory uncertainty, state mandates that impose capital costs which cannot be financed through the rate base, unique market conditions, and severely depressed power price brings AER before the Board as its last and only resort for temporary relief.

WHEREFORE, for the reasons set forth above, Petitioner AMEREN ENERGY RESOURCES, respectfully requests that the Board grant AER a variance from the requirement that it comply with a system-wide SO_2 annual emission rate of 0.25 lb/mmBtu for the period from January 1, 2015, through December 31, 2019, and from the requirement that it comply with a system-wide SO_2 annual emission rate of 0.23 lb/mmBtu for the period from January 1, 2017, through December 31, 2020.

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Respectfully submitted,

AMEREN ENERGY RESOURCES

by:

One of Its Attorneys my

Dated: 5/3/2012

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EXHIBIT LIST

- Exhibit 1. Selected Portions of the 40th Annual Illinois Air Quality Report, 2010
- Exhibit 2. Table 1: Ameren MPS Group Information
- Exhibit 3. Newton Energy Center FGD Project Construction Permit
- Exhibit 4. Ameren's MPS Opt-in letter
- Exhibit 5. Affidavit of Gary M. Rygh
- Exhibit 6. Affidavit of Ryan J. Martin
- Exhibit 7. Affidavit of Steven C. Whitworth
- Exhibit 8. *EPA gives oil companies more time to capture emissions from wells*, Washington Post, Apr. 18, 2012.
- Exhibit 9. Public Notice of Winning Bidders and Average Prices, (Feb. 16, 2012).
- Exhibit 10. Development Strategies Memorandum
- Exhibit 11. Affidavit of Shawn E. Shukar
- Exhibit 12. Selected Pages of the Technical Support Document for Best Available Retrofit Technology Under the Regional Haze Rule
- Exhibit 13. Proposed Revisions to Illinois SIP for Regional Haze