#### **BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

MIDWEST GENERATION, LLC,	)
Petitioner,	)
v.	) PCB 13
	) (Variance – Air)
ILLINOIS ENVIRONMENTAL	)
PROTECTION AGENCY,	)
	)
Respondent.	)

**NOTICE OF FILING** 

To:

John T. Therriault, Assistant Clerk Illinois Pollution Control Board James R. Thompson Center Suite 11-500 100 West Randolph Chicago, Illinois 60601 Julie Armitage Acting General Counsel Illinois Environmental Protection Agency Division of Legal Counsel 1021 North Grand Avenue, East P.O. Box 19276 Springfield, Illinois 62794-9276

PLEASE TAKE NOTICE that we have today filed with the Office of the Clerk of the Pollution Control Board a PETITION FOR VARIANCE on behalf of MIDWEST GENERATION, LLC, with a REQUEST FOR HEARING and the APPEARANCES OF KATHLEEN C. BASSI, STEPHEN J. BONEBRAKE, and ANDREW N. SAWULA, copies of which are herewith served upon you.

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Andrew Sawula

Dated: November 30, 2012

SCHIFF HARDIN LLP Attorneys for Midwest Generation, LLC Kathleen C. Bassi Stephen J. Bonebrake Andrew N. Sawula 233 South Wacker Drive, Suite 6600 Chicago, Illinois 60606 Phone: 312-258-5500 Fax: 312-258-5600 kbassi@schiffhardin.com sbonebrake@schiffhardin.com

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#### **APPEARANCE**

I hereby file my appearance in this proceeding, on behalf of Midwest Generation, LLC.

Hatteleen C. Bassi

Dated: 11/26/12

Kathleen C. Bassi SCHIFF HARDIN, LLP 233 South Wacker Drive, Suite 6600 Chicago, Illinois 60606 312-258-5567 Fax: 312-258-5600 kbassi@schiffhardin.com

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Dated: November 30, 2012

Stephen J. Bonebrake SCHIFF HARDIN LLP 233 South Wacker Drive, Suite 6600 Chicago, Illinois 60606 312-258-5500 Fax: 312-258-5600 sbonebrake@schiffhardin.com

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#### **APPEARANCE**

I hereby file my appearance in this proceeding, on behalf of Midwest Generation, LLC.

Andrew N. Sawula

Dated: November 30, 2012

Andrew N. Sawula SCHIFF HARDIN LLP 233 South Wacker Drive, Suite 6600 Chicago, Illinois 60606 312-258-5500 Fax: 312-258-5600 asawula@schiffhardin.com

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Respondent.	)	

#### PETITION FOR VARIANCE

NOW COMES Petitioner, MIDWEST GENERATION, LLC, ("Midwest Generation" or "Petitioner") by and through its attorneys, SCHIFF HARDIN LLP, and, pursuant to Sections 35 and 37 of the Environmental Protection Act, 415 ILCS 5/35, 37 (2010) ("Act"), and 35 Ill. Adm. Code Part 104, Subpart B, requests that the Board grant Petitioner a variance from provisions of the Combined Pollutant Standard ("CPS")<sup>1</sup> set forth at 35 Ill. Adm. Code § 225.295(b)<sup>2</sup> for the two-year period beginning January 1, 2015, and ending December 31, 2016, and from Section 225.296(a)(2) for a period of five months, delaying that requirement until May 31, 2015, and that the Board schedule a hearing in this matter.

Additionally, to align with the variance requested in this Petition, Midwest Generation seeks a variance from the Board's Order in *Midwest Generation*, *LLC – Waukegan Generating Station v. Illinois Environmental Protection Agency*, PCB 12-121 (August 23, 2012) ("Waukegan Order") at page 20, where the Board ordered Midwest Generation to comply with the system-wide emission rates for sulfur dioxide ("SO<sub>2</sub>"), or, in the alternative, Midwest

<sup>&</sup>lt;sup>1</sup> Codified at 35 Ill. Adm. Code §§ 225.291-225.299 and 225.Appendix A.

<sup>&</sup>lt;sup>2</sup> Hereinafter, citations to the Board's regulations will be by section number only.

Generation requests that the Board adjust that portion of the Waukegan Order to be consistent with the relief requested herein or specifically find that the variance requested here supersedes only that provision of the Waukegan Order that requires compliance with the system-wide  $SO_2$ emissions rate but not the provisions regarding the retrofit of the hot-side precipitator and the installation of the flue gas desulfurization equipment or the shutdown deadline as applicable to Waukegan Unit 7.

This request for a variance is an option of last resort that is intended to enable the company to manage through exceptionally difficult economic circumstances and financial hardship that could not have been foreseen when the CPS was adopted in 2007. Midwest Generation does not seek changes to the CPS program for reducing SO<sub>2</sub> emissions in 2013 or 2014 or in 2017 or thereafter but, rather, proposes a "pause" in the pace of the decline of  $SO_2$ emission rates in the middle of the program (2015-2016), accompanied by enforceable commitments to ensure that total SO<sub>2</sub> tons of emissions are less than projected under the CPS during the period from 2013 through 2016. This request follows Midwest Generation's significant efforts to date to comply with the CPS, including major investments for pollution controls that now enable full compliance with CPS mercury and nitrogen oxide ("NOx") emission reduction requirements. Installation of such controls at Midwest Generation's Crawford Station in late 2011, only to cease operation of that station by the end of August 2012, provides clear evidence of the unforeseen economic circumstances now facing the company. Midwest Generation's record is one of continuous improvement and national leadership among existing coal-fired generating stations in achieving significant emission reductions. The requested short "pause" in the decline of CPS SO<sub>2</sub> system-wide emission rates will cause no environmental harm and is needed to avoid arbitrary and unreasonable hardship.

#### I. INTRODUCTION

Midwest Generation has already expended considerable resources to comply with the state's CPS rule, resources that competitors in other states generally have not been required to expend. For instance, Midwest Generation has installed activated carbon injection ("ACI") systems for mercury control at all of its operating coal-fired units. The company has installed selective non-catalytic reduction ("SNCR") systems to control NOx emissions in order to comply with new NOx limits that took effect January 1, 2012. To control SO<sub>2</sub> emissions, Midwest Generation uses ultra-low sulfur coal and has begun installation of dry sorbent injection systems utilizing Trona. Midwest Generation has also begun related necessary upgrades of its electrostatic precipitators ("ESPs") to control emissions of particulate matter ("PM") associated with the Trona injection systems. Midwest Generation has incurred more than \$170 million in capital costs for this CPS compliance work to date. That is in addition to more than \$160 million in capital costs that Midwest Generation spent on environmental improvement and control projects prior to the CPS. Midwest Generation is also expending tens of millions of dollars per year on operating costs related to CPS compliance, including for the purchase of urea for the SNCR systems to control NOx emissions and sorbent for use in the ACI systems to control mercury emissions, as well as for increased ash disposal costs caused by the use of these commodities.

Even with approval of this requested variance, Midwest Generation currently plans to spend approximately \$230 million on SO<sub>2</sub> emission controls and related PM controls in 2013 and 2014, including for Trona system installations at Powerton Unit 6 and Waukegan Unit 7. However, to comply with the 2015 and 2016 CPS SO<sub>2</sub> system-wide rates and the CPS requirement to install flue gas desulfurization ("FGD") equipment on Waukegan Unit 8 by the

-3-

end of 2014, Midwest Generation would be required to spend an estimated additional \$210 million in 2013 and 2014. Midwest Generation's ability to fund \$210 million in additional controls costs in that timeframe has been impacted by a tsunami of adverse developments, the impact of which could not have been reasonably foreseen at the time that the CPS was adopted in 2007 or even when Midwest Generation filed the Waukegan variance petition in April 2012. In light of significantly changed regulatory, market, and financial circumstances since the CPS was adopted, Midwest Generation seeks more time to complete the additional pollution work in 2013 and 2014 that would be required to satisfy the CPS 2015 and 2016 system-wide SO<sub>2</sub> emission rates and the Waukegan Unit 8 FGD equipment installation requirements while also maintaining adequate cash flow while it works through a financial restructuring.

Recently, revenues have declined while costs have precipitously increased. Electricity prices have significantly declined due to weak demand and unprecedented natural gas production from shale gas reserves. On the other hand, the cost of coal as delivered to Midwest Generation's coal-fired units, the most significant element of its production costs, rose earlier this year under a new rail contract for the transportation of low sulfur coal to those units. Reflecting these adverse developments, Midwest Generation has suffered a significant net loss of \$63 million for the first three quarters of 2012.

These recent adverse revenue and cost developments are exacerbated by the need to compete against power generators in other states while Midwest Generation incurs substantial costs to comply with stringent Illinois-specific rules such as the CPS. This competitive disadvantage is even more pronounced given the remand or vacatur and resulting delays in implementation of various rules adopted by U.S. Environmental Protection Agency ("USEPA") since the CPS was adopted in 2007. For instance, all of Midwest Generation's units have been

-4-

controlled for mercury emissions since 2009. By comparison, the control requirements for the current federal regulations for mercury emissions found in the Mercury and Air Toxics Standards ("MATS") do not take effect until 2015. USEPA's Cross State Air Pollution Rule ("CSAPR"), addressing SO<sub>2</sub> and NOx emissions, was remanded by the court in *EME Homer City Generation*, *L.P. v. E.P.A.*, 11-1302, 2012 WL 3570721 (D.C. Cir. August 21, 2012). Illinois' CPS rule required reductions in emissions of NOx effective in January 2012 that are generally as demanding as CSAPR, and Midwest Generation's competitors benefit from the delay in CSAPR's implementation. The deferral of federal requirements has delayed the day when many competitors will need to incur comparable costs. The CSPAR remand and additional uncertainty about future federal limits on emissions of SO<sub>2</sub> coincide with the need for Midwest Generation to make additional investments to comply with the SO<sub>2</sub> system emission rates of the CPS.

In addition, Midwest Generation and its indirect parent corporation, Edison Mission Energy ("EME"), are facing significant credit and cash flow challenges. EME is currently attempting to negotiate a financial restructuring with various creditors. Any funding for pollution controls from EME is in serious doubt, and EME's parent company, Edison International, has stated on numerous occasions that it will not fund additional pollution control costs for Midwest Generation given current market conditions. Given these various challenges, Midwest Generation and EME have publicly disclosed that they are working on a financial restructuring with creditors and may need to file for Chapter 11 bankruptcy, a form of bankruptcy that contemplates continuation of the business enterprise through and after the bankruptcy process.

Notwithstanding its current cash flow and credit challenges, Midwest Generation is not asking for relief from CPS provisions that will require it to spend approximately \$230 million in

-5-

2013 and 2014, including for planned controls at Powerton Unit 6 and Waukegan Unit 7 to comply with the CPS 2013 and 2014 SO<sub>2</sub> emission rates and the Waukegan Unit 7 control equipment requirements. However, Midwest Generation has not been able to identify a viable current source of funding for the approximately \$210 million in additional control installation costs that would be required for it to comply with the CPS 2015 and 2016  $SO_2$  system-wide rate requirements and Waukegan Unit 8 FGD installation requirements due by the end of 2014. To improve its ability to secure requisite financing, Midwest Generation needs time to work through the financial restructuring process, including any Chapter 11 proceedings. This places a premium on liquidity conservation in 2013 and 2014 to allow for a successful financial restructuring. The effect of granting the requested variance would be to shift around \$210 million of capital expenditures out of the critical period of 2013 and 2014 to 2015 and 2016. Electricity capacity markets show some improvement in 2014 from 2013 and more improvement in 2015. Federal regulatory requirements that become effective in 2015, including the MATS, are expected to help level the competitive playing field within this same timeframe. This additional time would provide Midwest Generation the opportunity to conduct its financial restructuring and benefit from market recovery.

Midwest Generation respectfully requests a variance from the 2015 and 2016 CPS rates. Consistent with this request for relief while Midwest Generation addresses a potential financial restructuring, it also seeks a delay of five months from the requirement to install FGD equipment at Waukegan Unit 8 by December 31, 2014. This relief would effectively provide a "pause" in some additional major pollution control expenditures while Midwest Generation continues with significant elements of its CPS compliance plan and works through its cash flow and financial

restructuring issues. Midwest Generation anticipates that following this "pause" in some expenditures, it can comply with the CPS SO<sub>2</sub> rate in 2017 and thereafter.

Midwest Generation seeks this variance in order to avoid arbitrary and unreasonable hardship. With the variance, Midwest Generation will be better able to conserve cash and meet its obligations while it addresses its current challenging financial situation and works through financial restructuring and transitions to a new capital structure. Denial of the requested variance would have a significant, adverse impact on Midwest Generation, its employees, and others. Absent relief, Midwest Generation's cash flow preservation and restructuring efforts would be threatened by an additional expenditure of approximately \$210 million in 2013 and 2014 to comply with the CPS in addition to the approximately \$230 million that Midwest Generation currently plans to spend in that period even if this variance is granted. If Midwest Generation were unable to fund those \$210 million in additional control work in 2013 and 2014, for which Midwest Generation has not yet identified a current viable source of funding, it would be required to significantly curtail generation from its fleet in at least 2015 and 2016. This would adversely impact Midwest Generation and its Stations as well as the jobs of its employees. Others would be adversely impacted as well, including Illinois businesses from which the company purchases goods and services and recipients of taxes resulting from operation of the Midwest Generation fleet. The requested temporary relief from the CPS rates in 2015 and 2016 and from the requirement for the installation of FGD equipment on Waukegan Unit 8 by the end of 2014 would significantly reduce if not eliminate the depth and breadth of potential operational cutbacks and associated job reductions and other economic impacts that could otherwise arise.

The requested variance from the system-wide SO<sub>2</sub> emission rates is for a period of two years, from January 1, 2015, through December 31, 2016, during which time Midwest

-7-

Generation proposes to comply with a system-wide average annual emission rate of 0.38 lb SO<sub>2</sub>/mmBtu rather than the emission rates required in Section 225.295(b) for those years.<sup>3</sup> While greater than the rates in Section 225.295(b), the proposed rate is less than the CPS rate for 2014 of 0.41 lb/mmBtu. Consistent with this relief, Midwest Generation also seeks a variance of five months, until May 31, 2015, from the requirement to install FGD equipment at or to permanently shut down Waukegan Unit 8 by December 31, 2014. Midwest Generation commits to not operate Waukegan Unit 8 after December 31, 2014, until the FGD equipment is installed and operational.

The overall CPS system-wide rate program remains unchanged except for years 2015 and 2016 and concludes on schedule with the installation of FGD equipment on designated units by the end of 2018 and a final step-down in the SO<sub>2</sub> emission rate limit for calendar year 2019. Midwest Generation would resume the original CPS system-wide rate schedule in 2017, which is particularly noteworthy because it is anticipated that attainment of both the new national ambient air quality standard ("NAAQS") for one-hour SO<sub>2</sub> and the Best Achievable Retrofit Technology ("BART")/Regional Haze standards must be achieved by that year.

As part of this request, Midwest Generation proposes additional compliance plan elements that would ensure a net environmental benefit if this variance is granted. Specifically, Midwest Generation will commit not to operate the Crawford coal-fired units in 2013 and 2014.<sup>4</sup> It will comply with regulatory CPS SO<sub>2</sub> emission rates in 2013 and 2014, and it will maintain

<sup>&</sup>lt;sup>3</sup> If the Board believes it is necessary for Midwest Generation to explicitly meet the rates set forth in the CPS, rather than recognizing that they are subsumed by the more stringent rate, Midwest Generation offers an alternative compliance strategy, which is set forth in footnote 36 below.

<sup>&</sup>lt;sup>4</sup> In the Waukegan Order, the Board required Midwest Generation to shut down the Crawford Station by the end of 2014; therefore, a commitment not to operate the Crawford Station in 2013 and 2014 represents voluntary reductions not otherwise required.

mass emission levels at 57,000 tons in 2013 and 54,000 tons in 2014, which are mass emissions levels lower than anticipated based on average historic system-wide 2008-2011 heat input and CPS emission rates. Finally, Midwest Generation will manage operation of its fleet to ensure mass  $SO_2$  emission levels of no greater than 39,000 tons in 2015, stepping down to 37,000 tons in 2016. Midwest Generation will thereafter comply with the CPS system-wide  $SO_2$  emission rates, starting with the CPS rate of 0.15 lb/mmBtu in 2017.

The net effect of these proposed commitments is early and cumulative decreases of SO<sub>2</sub> emissions so that SO<sub>2</sub> emissions from 2013-2016 will be 3,181 tons less than expectations under the CPS if this variance is granted. Although not included in the 3,181 tons, any environmental impact from SO<sub>2</sub> emissions that might otherwise occur by granting this variance compared to reasonable expectations under the CPS is also mitigated by the emission reductions realized by Midwest Generation's early shutdown of the Fisk Station at the end of August 2012, four months prior to the date required in the Waukegan Order. Importantly for overall environmental benefit, Midwest Generation's facilities have also achieved significant reductions in SO<sub>2</sub> emissions in 2012 that would not have been anticipated but for its decision to transition to a lower sulfur coal in preparation for compliance with the CPS in 2013. Indeed, Midwest Generation's coal-fired fleet-wide SO<sub>2</sub> emission rate in 2011 was below the CPS 2013 emission rate.

These commitments would also have the effect of decreasing emissions of other pollutants, including NOx, carbon dioxide ("CO<sub>2</sub>"), PM, and mercury. These substantial reductions go beyond the reductions Midwest Generation has already achieved. Midwest Generation has already fully achieved the CPS emissions limitation for NOx. It has achieved the CPS requirements that are in effect up to 2015 for mercury control at all operating coal-fired units through the installation of ACI systems. Seven of its nine operating coal-fired units (all but

-9-

the two units with hot-side ESPs, *i.e.*, Waukegan Unit 7 and Will County Unit 3) already comply with the 2015 mercury emission rate limits set forth in the CPS and with the mercury emission rate limits of the federal MATS. Compliance with the MATS is not due until April 2015, even assuming that the MATS survives the pending appeal, further exacerbating the company's current competitive disadvantage with power generators in other states.

In short, granting this Petition would cause no net adverse environmental impact; instead, the compliance plan would result in a net environmental benefit for years 2013-2016.

Absent a variance, by about April 2013, Midwest Generation must begin implementing, and thus funding, the additional \$210 million in control work necessary to comply with the CPS rates for 2015 and 2016 and the CPS requirement to install FGD equipment at Waukegan Unit 8 by the end of 2014. Consequently, time is of the essence and Midwest Generation seeks this relief now.

Midwest Generation did not foresee the extent of its current financial challenges, the invalidation of federal rules that would have helped to level the competitive playing field or the level of declining power market prices and is further hampered by increases in as-delivered coal prices. Moreover, it was unable to predict, and could not have been reasonably expected to foresee, that these changed conditions collectively would have such a significant impact on Midwest Generation's ability to comply with the 2015 and 2016 SO<sub>2</sub> system-wide emission rates and control equipment installation requirements.

Under these circumstances and given that Midwest Generation's proposed compliance plan would ensure a net environmental benefit, denial of this variance request and enforcement of the CPS system-wide SO<sub>2</sub> emission rates of 0.28 and 0.195 lb/mmBtu in 2015 and 2016, respectively, and the requirement that Midwest Generation install FGD equipment on Waukegan

-10-

Unit 8 by December 31, 2014, would impose undue and arbitrary hardship on Midwest Generation. Midwest Generation, therefore, respectively requests a variance from those rates and the control equipment installation requirement.

To align with the variance requested in this Petition, Midwest Generation also seeks a variance from or adjustment to the Waukegan Order where the Board orders Midwest Generation, at Condition 1(a), to comply with the system-wide SO<sub>2</sub> emission rates set forth in Section 225.295(b). Additional circumstances have arisen or clarified since Midwest Generation obtained the Waukegan variance, causing the need for Midwest Generation to seek this additional variance.

In support of its Petition, Midwest Generation states as follows:

#### II. BACKGROUND

#### (§§ 104.204(b)(1), (2), (3), (4),(5), (6), (7), (8))

1. As of 2013, Midwest Generation will or legally could generate electricity from coal-fired units at five electric generating stations<sup>5</sup> in Illinois, all subject to the CPS, namely the Crawford Generating Station located in Cook County, the Joliet Generating Station located in Will County, the Powerton Generating Station located in Tazewell County, the Waukegan Generating Station located in Lake County, and the Will County Generating Station located in Will County.

2. The Crawford Generating Station ("Crawford"), Agency I.D. No. 031600AIN, is an electric generating station owned by Midwest Generation. The two coal-fired electric

<sup>&</sup>lt;sup>5</sup> Midwest Generation also operated the coal-fired EGU at the Fisk Generating Station, Unit 19. However, as discussed elsewhere in this Petition, the Board ordered Midwest Generation to shut down Fisk Unit 19 by the end of 2012 in the Waukegan Order. Midwest Generation continues to operate the gas-fired combustion turbines at Fisk Station. Fisk Station is not affected by this requested variance.

generating units ("EGUs") at Crawford went online between 1958 and 1961. Crawford is located at 3501 South Pulaski Road, Chicago, Cook County, Illinois 60623-4987. Cook County is designated nonattainment for 2008 ozone and 1997 annual PM2.56 and attainment or unclassifiable for all other NAAQS. It is a maintenance area for the 1997 8-hour ozone standard. The Illinois Environmental Protection Agency ("Agency" or "Illinois EPA") has proposed that Cook County be designated unclassifiable for the 1-hour SO<sub>2</sub> NAAQS.<sup>7</sup> The two coal-fired boilers at Crawford were designed to fire at various modes that include the combination of coal and natural gas as principal fuels and natural gas as auxiliary fuel during startup and for flame stabilization. There was also associated coal handling, coal processing, and ash handling equipment at Crawford. There was a 550-gallon gasoline tank located at Crawford to provide fuel for Station vehicles. Midwest Generation employed approximately 108 people at the Crawford Station. In the Waukegan Order, the Board ordered Midwest Generation to shut down the coal-fired units at the Crawford Station by December 31, 2014. Midwest Generation actually ceased operation of those coal-fired units by the end of August 2012, over two years early. However, Midwest Generation maintains the permits issued to Crawford and could legally generate electricity from these coal-fired units through the end of 2014.

3. The Joliet Generating Station ("Joliet"), Agency I.D. No. 197809AAO, is an electric generating station operated by Midwest Generation. The Joliet coal-fired EGUs went online between 1959 and 1966. Joliet is located at 1800 Channahon Road, Joliet, Will County, Illinois 60436, within the Chicago 2008 ozone and 1997 annual PM2.5 nonattainment areas.

<sup>&</sup>lt;sup>6</sup> Particulate matter less than 2.5 microns in aerodynamic diameter.

<sup>&</sup>lt;sup>7</sup> Letter to Cheryl Newton, Director, Office of Air and Radiation, USEPA Region 5, from Laurel Kroack, Chief, Bureau of Air, Illinois EPA (June 2, 2011). Midwest Generation can provide the Board with a copy of this letter if the Board so requires.

Will County is designated attainment or unclassifiable for all other NAAQS and is a maintenance area for the 1997 8-hour ozone standard. The Illinois EPA has proposed that Will County (except for Lockport and DuPage Townships; Joliet Station is not located in either of these townships) be designated unclassifiable for the 1-hour SO<sub>2</sub> NAAQS.<sup>7</sup> Midwest Generation employs 253 people at Joliet. Midwest Generation operates five coal-fired boilers at Joliet that have the capability to fire at various modes that include the combination of coal or natural gas<sup>8</sup> as their principal fuels. In addition, the boilers fire natural gas as auxiliary fuel during startup and for flame stabilization. Midwest Generation also operates associated coal handling, coal processing, and ash handling activities. There are two 1,500-gallon gasoline tanks located at Joliet to provide fuel for Station vehicles.

4. The Powerton Generating Station ("Powerton"), Agency I.D. No. 179801AAA, is an electric generating station operated by Midwest Generation. The Powerton EGUs went online between 1973 and 1976. Powerton is located at 13082 East Manito Road, Pekin, Tazewell County, Illinois 61554. The area is currently designated attainment or unclassifiable for all NAAQS. However, Illinois EPA has proposed that Pekin Township, which includes Powerton, be designated nonattainment for the 1-hour SO<sub>2</sub> standard.<sup>7</sup> Midwest Generation employs approximately 181 people at Powerton. Midwest Generation operates four coal-fired boilers and an auxiliary boiler at Powerton that have the capability to fire at various modes that include the combination of coal and/or natural gas<sup>9</sup> as their principal fuels. In addition, the boilers fire natural gas as auxiliary fuel during startup and for flame stabilization. Midwest Generation also

<sup>&</sup>lt;sup>8</sup> The Title V permit issued to Joliet Station identifies fuel oil as an optional fuel, but Midwest Generation does not use fuel oil at the Station.

<sup>&</sup>lt;sup>9</sup> The Title V permit issued to Powerton Station identifies fuel oil as an optional fuel, but Midwest Generation does not use fuel oil at the Station.

operates associated coal handling, coal processing, and ash handling activities at Powerton. There is a 1,500-gallon gasoline tank located at Powerton to provide fuel for Station vehicles.

5. The Waukegan Generating Station ("Waukegan"), Agency I.D. No. 097190AAC, is an electric generating station owned and operated by Midwest Generation. The Waukegan Generating Station is located at 401 East Greenwood Avenue, Waukegan, Lake County, Illinois 60087, within the Chicago 2008 ozone and 1997 annual PM2.5 nonattainment areas. Lake County is designated attainment or unclassifiable for all other NAAQS and is a maintenance area for the 1997 8-hour ozone standard. Illinois EPA has proposed that Lake County be designated unclassifiable for the 1-hour SO<sub>2</sub> NAAQS.<sup>7</sup> The EGUs at the Waukegan Station went online between 1958 and 1962. Midwest Generation employs approximately 149 people at the Station. Midwest Generation operates two electric generating units at Waukegan with the capability to fire coal, or a mixture of gas and coal, as their primary fuel. In addition, the boilers fire natural gas as auxiliary fuel during startup and for flame stabilization.<sup>10</sup> Midwest Generation also operates associated coal handling, coal processing, and ash handling activities at Waukegan Station. In addition to the boilers, Midwest Generation operates four oil-fired turbines at Waukegan Station, used during peak demand periods. Pursuant to the CPS, Section 225.297(a)(1), Midwest Generation permanently retired Waukegan Unit 6 by December 31, 2007.

6. The Will County Generating Station ("Will County"), Agency I.D. No. 197810AAK, is an electric generating station owned and operated by Midwest Generation. The Will County EGUs went online between 1957 and 1963. Will County is located at 529 East 135<sup>th</sup> Road, Romeoville, Will County, Illinois 60446, within the Chicago 2008 ozone and 1997

<sup>&</sup>lt;sup>10</sup> The Title V permit issued to Waukegan Station identifies fuel oil as an optional fuel, but Midwest Generation does not use fuel oil at the Station.

annual PM2.5 nonattainment areas. Will County is designated attainment or unclassifiable for all other NAAQS and is a maintenance area for the 1997 ozone standard. Illinois EPA has proposed that Lockport Township, which includes the Will County Station, be designated nonattainment for the 1-hour SO<sub>2</sub> NAAQS.<sup>7</sup> Midwest Generation employs approximately 156 people at Will County. Midwest Generation operates two coal-fired boilers at Will County that have the capability to fire at various modes that include the combination of coal, petroleum coke, and/or fuel oil as their principal fuels. In addition, the boilers fire fuel oil as auxiliary fuel during startup and for flame stabilization. Midwest Generation also operates associated coal handling, coal processing, and ash handling activities at Will County. There is a 1,500-gallon gasoline tank located at Will County to provide fuel for Station vehicles. Midwest Generation permanently retired Will County Units 1 and 2 pursuant to the CPS, Section 225.297(a)(2) in December 2010.

7. Midwest Generation plans to comply with the CPS  $SO_2$  rate standards, as well as the CPS requirement to install FGD equipment on designated units by certain dates, through the use of ultra-low sulfur coal and dry sorbent injection of Trona. Dry sorbent injection is an air pollution control system in which Trona, a mineral used in the production of sodium bicarbonate or baking soda, is injected into the flue gas upstream of a PM control device, such as an ESP. The injected material reacts with and neutralizes acid gases, such as  $SO_2$ , forming a dry powder that may be removed by the PM control device. When the sorbent is delivered to a station, it will be off-loaded into bulk storage silos and subsequently conveyed through a metered system that blows the sorbent through a mill and into the flue gas duct work using injection lances. Thus, use of dry sorbent injection requires various construction activities at the Stations, including storage silos, mills, and injection ports. PM emissions from each coal-fired boiler in the

Midwest Generation system are controlled by an ESP. Injection of Trona increases the particulate loading to the ESPs such that Midwest Generation must also upgrade its ESPs or undertake other PM control measures on a number of its EGUs.

8. The locations and functions of ambient air quality monitoring stations operated by the Agency across the state are provided in Exhibit 1, an excerpt from the Agency's 40th Annual Air Quality Report (2010) ("2010 AQ Report"). Exhibit 1 also includes the Agency's map of the air quality monitoring stations with the locations of Midwest Generation's electric generating stations superimposed. The entire 2010 AQ Report is available on the Agency's website at <<u>http://www.epa.state.il.us/air/air-quality-report/2010/index.html</u>>.

9. Each of Midwest Generation's generating stations is a major source subject to the Clean Air Act Permitting Program ("CAAPP"). 415 ILCS 5/39.5 (2010). The Agency has issued a number of operating and construction permits relative to air pollution control. The current permits are listed in Exhibit 2, including the type of permit (*i.e.*, operating or construction), the date of issuance, whether the permit was appealed, and, if so, the status of the permit appeal. Because the CAAPP permits have been appealed and stayed, the sources currently operate pursuant to the authority granted in their last operating permits and, in some cases, construction permits issued since 2005. Some of the construction permits that have been issued are for projects necessary for Midwest Generation to comply with the CPS. To the extent that it is necessary, if the Board grants the requested relief, Midwest Generation will seek extensions of construction permits from the Agency. The operating permits, including the CAAPP permits, and any appeals of those permits have no direct relevance to this Petition for variance, and so no related documents are attached as exhibits hereto. Midwest Generation has included PCB docket numbers for those permits that are appealed; such permits are readily

-16-

available to the Board if the Board is interested in them. Midwest Generation can provide copies of permits that have not been appealed if the Board finds them relevant and of interest.

10. In addition to permits issued relative to air pollution control, the Agency has issued National Pollutant Discharge Elimination System (NPDES) permits for each Station and a landfill permit for bottom ash at the Joliet Station. The Army Corps of Engineers has issued maintenance dredging permits at the Crawford, Joliet, Powerton, and Waukegan Stations.

11. As further discussed in the Affidavit of Douglas McFarlan,<sup>11</sup> which is attached hereto as Exhibit 3, notwithstanding the appeals and Board-issued stays of certain provisions of the construction permits authorizing the installation of the ACI systems to control mercury emissions, Midwest Generation has operated the ACI systems since their installation beginning in July 2008, significantly reducing mercury emission since that time. The company has notified the Agency that Joliet Units 6, 7, and 8, Powerton Units 5 and 6, Waukegan Unit 8, and Will County Unit 4 will comply with the emission limit of 0.0080 lb mercury/GWh as of fall 2012, over two years before the regulations require.

12. The Board granted Midwest Generation a variance from certain provisions of the CPS related solely to the Waukegan Station on August 23, 2012 (the "Waukegan variance").<sup>12</sup> This variance allowed Midwest Generation an extra year (1) to convert the hot-side ESP on Waukegan Unit 7 to a cold-side ESP and (2) to install FGD equipment on Unit 7 or (3) to shut down the unit. Even though Midwest Generation seeks a variance in this Petition from the requirement to install FGD equipment on Waukegan Unit 8 by December 31, 2014, the variance requested in this Petition does not impact any provisions of the Waukegan variance except for

-17-

<sup>&</sup>lt;sup>11</sup> Citations to affidavits will be indicated as "\_\_\_\_\_ Aff." and to exhibits as "Exh. \_\_\_\_\_".

<sup>&</sup>lt;sup>12</sup> Midwest Generation, LLC – Waukegan Generating Station v. Illinois Environmental Protection Agency, PCB 12-121.

the condition of that variance that requires Midwest Generation to comply with the system-wide annual SO<sub>2</sub> emission rates at Section 225.295(b), which is the subject of this Petition for variance. The variance requested herein is needed due to additional circumstances that have arisen since the Waukegan variance was granted.

13. In the Waukegan variance proceeding, Midwest Generation had stated that one factor in support of its request was the alignment of deadlines for work on both Waukegan units for internal decision-making on capital investments, workforce planning, and efficiency of project management and construction. However, Midwest Generation does not envision the simultaneous outage of both Waukegan units for an extended period in the fall of 2014. In its current financial condition with its urgent need to conserve cash and defer capital expense out of 2013-2014, Midwest Generation can best mitigate its financial hardship by doing the Waukegan Unit 7 retrofit work as late as practicable in 2014, recognizing that it must complete the project by the end of 2014 to comply with the CPS rule. As Midwest Generation now begins detailed planning for execution of the pollution control work at Waukegan, Midwest Generation believes it would be both a financial hardship and physical challenge to complete the pollution control work on both Waukegan units simultaneously by the end of 2014.

14. Circumstances have changed since the Waukegan variance petition was filed in April 2012. Financial circumstances have deteriorated. EME, Midwest Generation's indirect parent company, has begun negotiations with advisors to its noteholders on financial restructuring and has indicated that such restructuring could be implemented by a filing for Chapter 11 protection under the U.S. Bankruptcy Code, as discussed in more detail elsewhere in this Petition and in the Affidavit of William M. Petmecky III, attached hereto as Exhibit 4. A \$97 million interest payment on unsecured EME bonds due November 15, 2012, was not made

-18-

by EME. The need for financial restructuring and the current market outlook for energy prices place an urgent premium on conserving cash in the 2013-2014 timeframe, the time during which Midwest Generation would have to expend funds to accomplish the installation of FGD equipment on both Waukegan Units 7 and 8 in order to comply with the CPS. This Petition recognizes that Midwest Generation must meet its deadlines to comply with the CPS requirements by December 31, 2014, at Waukegan Unit 7, as established in the Waukegan Order, but requests an additional five months to complete the FGD equipment installation deadline for Waukegan Unit 8.

15. Demand for emission control services is increasing. Midwest Generation's equipment suppliers are beginning to see that the market for large storage silos, ESP plates, and high frequency transformer rectifier ("TR") sets, *see* footnote 17 below, is tightening up. There are a limited number of suppliers in this space, and Midwest Generation is not the only coal-fired generator seeking to expedite retrofits to meet regulatory deadlines. Although it was known that the MATS would drive much demand for these products and services, there is evidence that the remand of the CSAPR is prompting some level of demand for projects in the near term for units that otherwise might have been retired by 2014.

16. Midwest Generation intends to comply with the Waukegan Order and will satisfy CPS control requirements for Waukegan Unit 7 by the end of 2014. Moving back that work is not an option due to the CPS, but accelerating it only exacerbates the financial hardship that Midwest Generation is trying to mitigate. Midwest Generation can begin work on Waukegan Unit 8 in 2014 and still derive most of the benefits that it identified in the Waukegan variance petition, approved by the Board in August 2012, with respect to procurement of labor and materials, workforce planning, and project management. Midwest Generation commits not to

-19-

operate Waukegan Unit 8 after December 31, 2014, until the work is completed in order to ensure there is no environmental impact from extending the Waukegan Unit 8 equipment deadline. Consistent with these issues and commitments, Midwest Generation requests that the Board grant it a variance until May 31, 2015, from the December 31, 2014, deadline set forth in Section 225.296(a)(2) to install and have operational FGD equipment at Waukegan Unit 8.

#### III. <u>REGULATORY BACKGROUND</u> (§ 104.204(a))

17. On March 14, 2006, the Agency submitted a proposed rulemaking to the Board, "In the Matter Of: Proposed New 35 Ill. Adm. Code 225 Control of Emissions from Large Combustion Sources," docketed at R06-25 (the "Mercury Rule"). The Board adopted this rule on December 21, 2006, and it was effective as of that same date. The Mercury Rule includes some provisions in Subpart A of Part 225 and all of Subpart B of Part 225.

18. On May 22, 2006, the Agency submitted a proposed rulemaking to the Board, "In the Matter of: Proposed New CAIR SO<sub>2</sub>, CAIR NOx Annual and CAIR NOx Ozone Season Trading Programs, 35 Ill. Adm. Code 225, Control of Emissions from Large Combustion Sources, Subparts A, C, D, and E," docketed at R06-26 ("CAIR"<sup>13</sup>). On January 5, 2007, the Agency and Midwest Generation filed a joint comment in this rulemaking describing an approach for control of mercury and certain other emissions in a new Subpart F to Part 225 ("Subpart F"). R06-26, PC # 9.<sup>14</sup> Subsequently, on January 10, 2007, the Agency and Midwest Generation filed a joint comment providing the regulatory language for Subpart F, including amendments to that language. R06-26, PC # 11. On April 19, 2007, the Board proceeded to

<sup>&</sup>lt;sup>13</sup> Clean Air Interstate Rule.

<sup>&</sup>lt;sup>14</sup> Note that the Board's website docket does not include substantive, regulatory language for Subpart F at PC # 9.

First Notice on the CAIR, including Subpart F. On June 25, 2007, Midwest Generation submitted comments on the First Notice CAIR, including requested revisions to Subpart F. R06-26, PC # 14. On July 26, 2007, the Board ordered the rule to Second Notice, including Subpart F with minor amendments. R06-26, Board Order (July 26, 2007). These rules became effective August 31, 2007. Subsequently, in Docket R09-10, effective June 26, 2009, the Board moved the CPS from Subpart F of Part 225 to Subpart B of Part 225, Sections 225.291 through 225.299.

19. Pursuant to Section 225.292, Midwest Generation opted-in to the CPS on

December 27, 2007, identifying Joliet Units 6, 7 and 8, Powerton Units 5 and 6, Waukegan Units

7 and 8, and Will County Units 3 and 4, among others,<sup>15</sup> as EGUs to be included as part of the

Midwest Generation CPS Group. These units currently comprise the Midwest Generation

system that is subject to the CPS provisions from which Midwest Generation seeks relief.

20. The CPS provisions from which Midwest Generation seeks relief are as follows:

#### Section 225.295 Combined Pollutant Standard: Emissions Standards for NOx and SO<sub>2</sub>

b) Emissions Standards for SO<sub>2</sub>. Beginning in calendar year 2013 and continuing in each calendar year thereafter, the CPS group must comply with the applicable CPS group average annual SO<sub>2</sub> emissions rate listed as follows:

Year lbs/mmBtu \* \* \*

<sup>&</sup>lt;sup>15</sup> Midwest Generation also included Fisk Unit 19 and Crawford Units 7 and 8 in its initial identification of units subject to the CPS to be included in the Midwest Generation CPS Group. However, as discussed elsewhere in this Petition, the Board ordered Midwest Generation to shut down Fisk Unit 19 by the end of 2012 and Crawford Units 7 and 8 by the end of 2014 in the Waukegan Order. As of those dates, those units will no longer be considered part of the Midwest Generation CPS Group. Moreover, since Midwest Generation ceased operation of those units by the end of August 2012, the zero emissions from those units cannot be included in the calculation of Midwest Generation's system-wide SO<sub>2</sub> emission rate. Until Midwest Generation withdraws the current permits for Crawford Station, however, Midwest Generation is authorized to operate Crawford Station as part of the Midwest Generation CPS Group. As discussed in this Petition, Midwest Generation commits to not operate Crawford Units 7 and 8 in 2013 and 2014 as a condition of the requested variance.

2015	0.28
2016	0.195
* * *	

#### Section 225.296 Combined Pollutant Standard: Control Technology Requirements for NOx, SO<sub>2</sub>, and PM Emissions

- a) Control Technology Requirements for NOx and SO<sub>2</sub>.
  - 2) On or before December 31, 2014, the owner or operator must either permanently shut down or install and have operational FGD equipment on Waukegan 8;

35 Ill. Adm. Code §§ 225.295(b) (in part) and 225.296(a)(2).

#### IV. <u>RELIEF REQUESTED</u>

#### ( 104.204(c), (e), (f), (k) )

21. Midwest Generation seeks targeted, narrow relief from the CPS in order to avoid arbitrary and unreasonable hardship. Specifically, Midwest Generation seeks relief from the CPS requirements that it comply with the system-wide SO<sub>2</sub> annual emissions standards of 0.28 lb/mmBtu and 0.195 lb/mmBtu in 2015 and 2016, respectively. During each of those years, Midwest Generation proposes to comply with a system-wide SO<sub>2</sub> annual emission rate of 0.38 lb/mmBtu. Additionally, Midwest Generation commits to achieving mass SO<sub>2</sub> emission levels no greater than 39,000 and 37,000 tons per year in 2015 and 2016, respectively. Midwest Generation commits to not operating the Crawford coal-fired units in 2013 and 2014, the two years prior to the date ordered by the Board in the Waukegan Order, *i.e.*, December 31, 2014. Midwest Generation also commits to emitting no more than 57,000 tons of SO<sub>2</sub> in 2013 and to no more than 54,000 tons of SO<sub>2</sub> in 2014. As discussed in Fred McCluskey's Affidavit, attached hereto as Exhibit 5, these commitments would yield early SO<sub>2</sub> emission reductions and cumulative net reductions in mass SO<sub>2</sub> emissions of 3,181 tons through the end of the four-year

(2013-2016) period. See, McCluskey Aff., Exh. 5, Table 5.1. Emissions of other pollutants would be significantly reduced as well during this period. Midwest Generation will comply with the CPS system-wide SO<sub>2</sub> annual emission rate of 0.15 lb/mmBtu in 2017, as set forth in Section 225.295(b).<sup>16</sup> Midwest Generation also requests that the Board grant it a variance from or an adjustment to Condition 1(a) in the Waukegan Order consistent with this petition for variance relative to the system-wide SO<sub>2</sub> emission rate.

22. Midwest Generation also seeks relief from the requirement at Section 225.296(a)(2) that it install and have operational FGD equipment on Waukegan Unit 8 by December 31, 2014, or that it permanently shut down that unit by that date. Because of its current financial situation, Midwest Generation needs additional time to complete installation of the FGD equipment on Waukegan Unit 8 and to coordinate the necessary outage with the outage necessary for Waukegan Unit 7. Therefore, Midwest Generation will begin the Waukegan Unit 8 project in 2014 but seeks five months' delay in the requirement to complete equipment installation, to May 31, 2015. Midwest Generation commits to not operate Waukegan Unit 8 after December 31, 2014, until installation of the FGD equipment is complete.

23. Midwest Generation essentially seeks a brief "pause" in the pace of the decline in system-wide SO<sub>2</sub> emission rates for 2015 and 2016 and the requirement to install FGD equipment on Waukegan Unit 8 by December 31, 2014. This "pause" would be accompanied by

<sup>&</sup>lt;sup>16</sup> In the alternative, Midwest Generation requests that the variance period be two years and one month, January 1, 2015, through January 31, 2017. If the Board believes it is necessary for Midwest Generation to explicitly meet the rates set forth in the CPS, rather than recognizing that they are subsumed by the more stringent rate, Midwest Generation offers this alternative compliance strategy, set forth in more detail in footnote 36, below, extending the requested variance period for a month. However, the Board recently granted relief similar to the requested relief in this Petition in Order, Ameren Order, p. 64 (Board conflated the requirement to comply with the 2015-2016 rate of 0.25 lb/mmBtu with the final MPS 2017 rate of 0.23 lb/mmBtu as of January 1, 2020, the end of the variance period).

commitments that would avoid any adverse environmental impact and, indeed, would result in a net environmental benefit.

24. Midwest Generation seeks this variance two years in advance of the 2015 compliance date because of the long lead time necessary for planning and then implementing its current strategy that includes installation of Trona injection systems and related upgrades to ESPs at two units in 2013 and 2014 while bringing its system into compliance with the 2017  $SO_2$ emission rate and ensuring that it can meet the mass emission levels it commits to in 2013 through 2016.

25. As discussed in the McCluskey Affidavit, Exh. 5, the planned injection of Trona will increase the PM loading to the ESPs. The collection area and efficiency of the ESPs on Joliet Units 7 and 8, Powerton Unit 5,<sup>17</sup> Waukegan Unit 8,<sup>18</sup> and Will County Units 3 and 4 must be enhanced to accommodate the increased PM loading and to maintain current operational levels. To improve the PM removal efficiency of the existing ESPs, Midwest Generation plans to increase the PM collection area, increase the height of the collection plates in the ESPs, increase the distance between each plate, add fields of collection plates, and make other improvements. Such extensive work in the ESPs requires extended outages for each unit.

<sup>&</sup>lt;sup>17</sup> Powerton Unit 6 already has a larger ESP and requires only certain improvements, namely the addition of high frequency TR sets. TR sets are components of the ESP related to providing the electrical power that charges PM particles, allowing them to be collected on the ESP plates. TR sets receive input power and transform the power from low voltage and high current to high voltage and low current, rectify the alternating current (AC) output of the transformer to form direct current (DC), and provide feedback signals to the automatic voltage controls. High frequency TR sets provide a higher power factor increasing the electrical efficiency of the power supply, improving PM control. The Agency has issued a construction permit for these improvements, *see* Exh. 2, and Midwest Generation is proceeding with them.

<sup>&</sup>lt;sup>18</sup> The ESP on Waukegan Unit 7 is subject to a CPS requirement to covert from hot-side to coldside.

Midwest Generation must coordinate each outage with PJM<sup>19</sup> to ensure that grid reliability will be maintained.

26. Required advance planning relates not only to designing and installing the needed pollution controls, including for Waukegan Unit 8, but also to the means to fund additional controls in light of current financial constraints and the current challenging electricity and credit markets and regulatory uncertainty. In order to comply with the CPS emission rates for 2015 and 2016 and the FGD equipment requirement for Waukegan Unit 8 (that is, without the requested variance), Midwest Generation would have to move forward—if it can given its current financial constraints—with about \$210 million in additional capital expenditures for SO<sub>2</sub> controls and related PM controls by the second quarter of 2013. *See* McCluskey Aff., Exh. 5, ¶¶ 15-16. Midwest Generation must know by the beginning of April 2013 whether the variance will be granted.

27. Midwest Generation has taken a number of measures, including using ultra-low sulfur coal and opting to install Trona injection systems, the least expensive method for controlling SO<sub>2</sub> emissions while still accomplishing the necessary levels of reduction, in order to control SO<sub>2</sub> emissions and avoid having to seek this variance. Through its emission reduction efforts, Midwest Generation's fleet in 2011 achieved an SO<sub>2</sub> emission rate below the 2013 CPS rate. McCluskey Aff., Exh. 5, ¶ 14. Midwest Generation anticipates that the use of the Trona system at Powerton Unit 6 together with ultra-low sulfur coal throughout its coal-fired units will be sufficient for it to meet the CPS SO<sub>2</sub> system-wide rates in 2013 and 2014. Further emission control would thereafter be provided by the planned FGD at Waukegan Unit 7. However, Trona

<sup>&</sup>lt;sup>19</sup> PJM Interconnection, LLC is the regional transmission system operator that must protect reliability of the grid and review the removal for any extended period of time of any generating units within the scope of PJM's authority and responsibility.

injection and related ESP upgrades are necessary at additional units to achieve the 2015 and 2016 CPS SO<sub>2</sub> rates. External factors arising after the Trona injection and fuel plans were developed, including the impacts of reduced demand and lower electricity prices combined with current debt obligations, as discussed here and in the attached affidavits, materially threaten if not prevent Midwest Generation from being able to fund such controls in 2013 and 2014, and there is no other feasible control option to achieve the 2015 and 2016 CPS rates. Thus, Midwest Generation is forced to seek this variance now. Still, Midwest Generation seeks the least obtrusive path it possibly can through the provisions of this requested variance and is proposing to maintain the original schedule for completing the significant step-down in its fleet-wide  $SO_2$  emission rates in 2017 and thereafter.

#### V. <u>COMPLIANCE ALTERNATIVES</u> (§ 104.204(d))

28. As discussed in more detail in the McCluskey Affidavit, Exh. 5, Midwest Generation has planned to comply with the CPS SO<sub>2</sub> emission system rates through a combination of firing ultra-low sulfur coal throughout its operating coal-fired fleet and Trona. The installation work for the Trona injection system at Powerton Unit 6 is already underway, and that Trona control system plus use of ultra-low sulfur coal should provide for compliance with the 2013 and 2014 CPS SO<sub>2</sub> emission rates. In addition, Midwest Generation currently plans to install a Trona system at Waukegan Unit 7 by December 31, 2014. The Trona and related ESP control work at Powerton Unit 6 and Waukegan Unit 7, together with some continued engineering and procurement of long lead material associated with controls in 2013 and 2014 with respect to other units, is expected to cost around \$230 million or more.

29. Trona installation at several additional units before 2015, likely including Powerton Unit 5, Waukegan Unit 8, and Joliet Unit 7 or 8, however, is needed for Midwest Generation's fleet to comply with the CPS SO<sub>2</sub> emission rates in 2015 and 2016 without curtailing generation at any of its units. That work, together with the related necessary ESP upgrades, is expected to cost approximately \$210 million, and these costs would also need to be incurred in 2013 and 2014 to meet with CPS rates in 2015 and 2016. *See* McCluskey Aff., Exh. 5,  $\P$  15-16. Midwest Generation needs additional time to perform this further control work for the reasons articulated in this Petition.

30. Midwest Generation has considered a number of potential alternative compliance strategies to avoid the need to seek this variance. None, however, is viable.

31. As stated in the McCluskey Affidavit, Exh. 5, ¶ 19, installation of other forms of dry scrubbing, which also require the installation of baghouses, would cost far more than Trona injection systems and would take longer to implement, at least two and a half years to design and install. Wet scrubbers would cost even more, take longer to install, and would not be an appropriate control technology for the type of coal that Midwest Generation has contracted to procure. Therefore, neither wet scrubbers nor an alternative form of dry scrubbing would solve Midwest Generation's financial challenge, nor could they be completed within the timeframe required by the CPS.

32. Midwest Generation also considered the possibility of converting one or more units to natural gas, but such conversions are not feasible or effective for compliance with the CPS system-wide rates. First, such conversions would not be economically viable at any of the units. None of the coal-fired stations, except Crawford and Fisk, has a supply of natural gas sufficient for full load generation and providing such a supply would require significant

-27-

investment. More fundamentally, Midwest Generation expects that none of these units, if converted, would be economically competitive with either natural gas turbines or comparable coal-fired boilers. As such, the units could not survive in the marketplace if they were converted to natural gas. *Generally see* McCluskey Aff., Exh. 5, ¶ 20. Second, in light of the CPS system definition in the CPS rules, it does not appear that any coal-fired unit converted to gas could be included after conversion in the CPS system-wide rate average. *See* Section 225.292(b) ("A specified EGU is a <u>coal-fired</u> EGU listed in Appendix A...." (Emphasis added.)). Thus, a conversion to natural gas likely would not assist with CPS system-wide rate compliance.

33. Finally, Midwest Generation considered whether it would be feasible to comply with the CPS rates in 2015 and 2016 through generation curtailments at the coal-fired units that would not then have Trona injection systems. It would be possible to comply with the CPS  $SO_2$ system rates if Midwest Generation operated only those units with Trona systems installed, but that is because the "system" would include only those two units. To avoid exceeding the 2015 and 2016 CPS  $SO_2$  system-wide rates, generation from the other system units would have to be significantly curtailed in those years, with generation curtailment reaching about 75% in 2016. *See* McCluskey Aff., Exh. 5,  $\P$  22. In turn, at these low levels of generation, the entire fleet and, indeed, Midwest Generation itself, as well as its employees and those who rely on the Stations for taxes and other support, would be at serious risk given the extreme reduction in revenue this would cause. This is not a feasible option. No option is feasible except the relief sought in this Petition.

#### VI. <u>ARBITRARY AND UNREASONABLE HARDSHIP</u> (§ 104.204(e))

34. The need for this variance arises from a combination of circumstances that were not foreseen, and could not have been expected to be foreseen, when the CPS was adopted in 2007. These circumstances include significant recent deterioration in Midwest Generation's cash flow, driven by an unexpected and significant decline in energy prices and capacity markets, exacerbated by higher delivered coal costs. The impact on Midwest Generation of this decline is further exacerbated by the deregulated status of power generators in Illinois and the uneven playing field created by the imposition of stringent Illinois requirements coupled with the deferral of comparable federal requirements that would have helped to level the competitive playing field. Given its current financial condition, Midwest Generation needs to conserve cash in 2013 and 2014 as it works through financial restructuring, which may include Chapter 11 reorganization. A successful restructuring should make additional funds for controls available. Capacity markets are low for 2012 and 2013, but they are somewhat better in 2014, and there is more improvement in 2015. In 2015, some significant new federal regulatory requirements also will become effective, helping then to level the competitive playing field. Denying this Petition, which seeks additional time needed to secure financing for the controls, would create an arbitrary and unreasonable hardship.

#### A. The Uneven Playing Field and Regulatory Uncertainty Contribute to an Arbitrary and Unreasonable Hardship.

35. It is well-recognized that Illinois has adopted emission reduction requirements significantly more stringent than other states, particularly within USEPA Region 5 and compared to other neighboring states. Examples of rules that are more stringent include the Illinois CAIR

-29-

program, with its clean air set-aside that reduces EGUs' NOx allowances by an additional 25% <sup>20</sup> and the Illinois Mercury Rule which established mercury limits when the federal program, the Clean Air Mercury Rule ("CAMR"), provided for an emissions trading program. As discussed above, the federal rules that underlie the Mercury Rule were delayed or vacated, <sup>21</sup> but the Illinois-specific programs remain intact. For example, the mercury reduction requirements of the CPS continued to apply after vacatur of the CAMR, and the NOx, SO<sub>2</sub>, and PM reduction requirements of the CPS and Multi-Pollutant Standard ("MPS"), not necessary for compliance with current NAAQS or other federal requirements, <sup>22</sup> continue to apply in Illinois. Moreover, the CPS and MPS curtail emissions trading that is allowed by the CAIR, thus limiting Illinois companies' access to a revenue stream that they would otherwise have. These Illinois

<sup>21</sup> Although the court found the CAIR to be fatally flawed in *North Carolina v. EPA*, 531 F3d 896, (D.C. Cir. 2008), 550 F3d 1176 (D.C. Cir. 2008) (remanded without vacatur) the federal program, and thus the state implementation plans ("SIPs") effectuating the program, have remained in place.

<sup>22</sup> Illinois relies on portions of the Mercury Rule in its SIP for regional haze, but there was no direction from USEPA or any other federal requirement that the regional haze SIP be approached in this way. In fact, many if not most states relied on the CAIR and then the CSAPR to satisfy their regional haze SIP requirements. 77 Fed.Reg. 39943 (July 6, 2012) (approval of Illinois' BART SIP); 77 Fed.Reg. 40150 (July 6, 2012) (partial approval of the Nebraska BART SIP, partial disapproval of BART SIP relative to certain units, and finalization of a federal implementation plan ("FIP") for BART relying on the Transport Rule [*i.e.*, the CSAPR] relative to those same units); 77 Fed.Reg. 33642 (June 7, 2012) (USEPA found that the CSAPR "achieve[s] greater reasonable progress towards the national goal of achieving natural visibility conditions... than source-specific ... BART... in those states covered by the Transport Rule." USEPA issued limited disapprovals of the BART SIPs for several states, including Indiana, Iowa, Michigan, Missouri, Ohio, because they relied on the CAIR rather than the CSAPR in their BART SIPs and issued FIPs substituting the CSAPR for the CAIR).

<sup>23</sup> For example, there are no mercury rules applicable in Indiana, Iowa, Kentucky, Missouri, and Ohio. The mercury rule applicable to coal-fired EGUs in Wisconsin requires a 90% reduction of mercury emissions by January 1, 2015, or compliance with a multi-pollutant option that includes a 90% mercury reduction by January 1, 2021. Wis. Adm. Code, Department of Natural Resources, NR 446 *et seq*. Coal-fired EGUs in Michigan must reduce mercury by January 1, 2015, or achieve a 75% reduction under a multi-pollutant option. Mich. Adm. Code, Part 15, R336.2501 *et seq*. The three largest electric

<sup>&</sup>lt;sup>20</sup> See Sections 225.425(a) and 225.525(a).

36. In addition, Illinois has a deregulated energy market. In contrast, surrounding states allow generators to recover the costs of capital projects, including those related to environmental mandates, from a consumer base through rates. Although Midwest Generation knew that it was entering a deregulated market when it acquired the current Midwest Generation Stations in 1999, deregulation, nevertheless, places facilities at a competitive disadvantage with facilities located in regulated states and creates a "crippling double whammy," Order, *Ameren v. IEPA*, PCB 12-126 (September 20, 2012) ("Ameren Order"), p. 10, for coal-fired generators in Illinois. That is, Illinois' deregulated electricity generators must install controls generally not required in surrounding states and cannot recover the costs of those "additional" controls through a regulated rate regime and consumer rates. This is exacerbated by the restrictions on emissions trading that do not apply to electricity generators in neighboring states.<sup>24</sup> Instead, Illinois electricity generators are entirely dependent on wholesale prices in the competitive power price market for their revenue stream.

37. Since the Board adopted the Mercury Rule and the CAIR, USEPA proposed and promulgated two major rules: the CSAPR<sup>25</sup> and the MATS.<sup>26</sup> The Mercury Rule was Illinois' program to comply with the CAMR. Additionally, as discussed in this Petition, Illinois adopted

generating plants in Minnesota must reduce mercury emissions by 90% by 2015 and other facilities must reduce mercury emissions 70-90% by 2025. Minn. Stat. § 115A.932 et seq.

<sup>&</sup>lt;sup>24</sup> Midwest Generation acknowledges that it voluntarily opted-in to the CPS, knowing that it contained restrictions on emissions trading. Midwest Generation believed that the CPS offered a more reasonable timeframe for compliance with the very stringent Illinois Mercury Rule. This voluntary opt-in, however, does not obviate the fact that electricity generating companies in other states can trade emissions allowances, while Illinois companies are required to surrender "excess" allowances.

<sup>&</sup>lt;sup>25</sup> Proposed at 75 Fed.Reg. 45210 (August 2, 2010); finalized at 76 Fed.Reg. 48208 (August 8, 2011), effective October 7, 2011.

<sup>&</sup>lt;sup>26</sup> Proposed at 76 Fed.Reg. 24976 (May 3, 2011); finalized at 77 Fed.Reg. 9304 (February 16, 2012), effective April 16, 2012.
a CAIR program more stringent than federally required. Subsequently, the D.C. Circuit vacated the CAMR and found the CAIR to be fatally flawed.<sup>27</sup> USEPA never implemented the CAMR but did implement the CAIR, which remains the operative transport rule controlling NOx and SO<sub>2</sub>, despite its legal flaws. This creates substantial uncertainty regarding future regulatory requirements that apply to all coal-fired power generators.

38. The CSAPR was adopted to replace the CAIR currently applicable to fossil fuelfired EGUs in the eastern United States in response to the court order in *North Carolina v*.  $EPA.^{28}$  The CSAPR included a number of features that are significantly more stringent than the CAIR, including the addition of assurance provisions or variability limits that establish hard mass emission caps on each subject state's emissions of SO<sub>2</sub> and NOx. It presented an entirely different allowance allocation methodology, with permanent allowances issued by USEPA and no involvement of the states unless they develop SIPs in the future. The CSAPR also presents an entirely new SO<sub>2</sub> allowance trading program.

39. The CSAPR was timely appealed by a number of entities at *EME Homer City LLC v. EPA*, No. 11-132 (D.C. Cir. filed August 23, 2011). On December 30, 2011, the court stayed the effectiveness of the CSAPR and continued the implementation of the CAIR during the appeal. On August 21, 2012, the court vacated the CSAPR in its entirety and ordered that the CAIR remain the active transport control program while USEPA tries again to develop a

<sup>&</sup>lt;sup>27</sup> The CAMR was vacated at *New Jersey v. EPA*, 517 F.3d 547 (D.C. Cir. 2008). The court found that the CAIR was pervasively flawed and initially vacated the rule. *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 USEPA replaced it with a new rule, which was the CSAPR.

<sup>&</sup>lt;sup>28</sup> The court found that the CAIR was pervasively flawed and initially vacated the rule. 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 USEPA replaced it with a new rule, which was the CSAPR.

program to replace it. *EME Homer City Generation*, *L.P. v. E.P.A.*, 11-1302, 2012 WL 3570721 (D.C. Cir. August 21, 2012). On or before October 5, 2012, however, USEPA and some appellants sought a rehearing *en banc* of the appellate panel's decision. The outcome of that proceeding remains to be seen.

40. Assuming that the CAIR remains in place for the foreseeable future, the stepdown in statewide budgets for SO<sub>2</sub> and NOx emissions, which are passed along to the affected EGUs, will occur in 2015. Although compliance with the CAIR is demonstrated through the relinquishment of Acid Rain Program SO<sub>2</sub> allowances, Midwest Generation projects that it will be able to comply with the step-down with a system-wide rate of 0.38 lb/mmBtu in the CPS if this variance is granted. That is, the number of Acid Rain Program SO<sub>2</sub> allowances allocated to Midwest Generation will be sufficient, with a system-wide rate of 0.38 lb/mmBtu, without Midwest Generation needing to go to the market for additional allowances.

41. The assumption that the CAIR will be the operative transport control program in 2015 may be ambitious. It is possible that the D.C. Circuit Court of Appeals will overturn the recent decision in *Homer City* and reinstate CSAPR. It is also possible that USEPA will develop, promulgate, and implement the second successor to the CAIR by 2015, possibly first in 2015. No one can predict today what that program might entail. Given this circumstance, many of Midwest Generation's competitors that are not subject to the Illinois-specific CPS can await certainty before making some of the capital decisions and expenditures that Midwest Generation has already begun to make. Further, the regulatory ambiguity inherent in knowing that the current program, *i.e.*, the CAIR, is legally insufficient and not knowing what will replace it creates significant uncertainty for funding pollution control work, since sources of financing prefer certainty rather than the risk created by regulatory uncertainty. Therefore, Midwest

-33-

Generation faces clear financial hardship as it continues to execute pollution control work based on the CPS, a hardship that it seeks to mitigate, not by undoing the CPS, but by obtaining modest relief to the  $SO_2$  emission rate requirements for only two years and a modest extension of just five months to the deadline for completing retrofit work at Waukegan Unit 8.

42. Moreover, regardless of the fate of the CAIR or the CSAPR, the Illinois Mercury Rule containing the CPS is a state rule that will continue to require NOx and SO<sub>2</sub> reductions when surrounding states are not subject to such limitations. This places Midwest Generation at a competitive disadvantage in the power marketplace.

43. The MATS codifies the Maximum Achievable Control Technology (MACT) requirement applicable to coal- and oil-fired EGUs pursuant to Section 112 of the Clean Air Act. At the time that the Mercury Rule was adopted in Illinois, CAMR was the federal program, and no one knew with any certainty that it would not survive legal challenge; no one could have foreseen the requirements and timing of the subsequently developed and promulgated MATS. The CAMR included an emissions trading program; the MATS does not. The CAMR addressed emissions of only mercury; the MATS requires reductions of emissions of mercury, non-mercury hazardous ("HAP") metals, and hydrogen chloride ("HCl"). USEPA has established in the MATS the option of monitoring and controlling filterable PM emissions as a surrogate for the non-mercury HAP metals. Even if a source does not choose to utilize the PM surrogate, the technology to control non-mercury HAP metals is the same as to control PM: ESPs or baghouses. Likewise, USEPA offers the option to comply with an SO<sub>2</sub> emission limit as a surrogate to complying with the HCl limit. As with PM and non-mercury HAP metals, USEPA has found that controlling SO<sub>2</sub> effectively controls HCl. The MATS requires compliance within

-34-

three years, *i.e.*, by April 16, 2015, with the strong possibility that upon a certain showing, sources can be granted a fourth year by their states.

44. Midwest Generation complies with the mercury emission limitations applicable under the Illinois Mercury Rule<sup>29</sup> and will comply, at the same time, with the less-stringent mercury emissions limitations in the MATS. Midwest Generation will comply with the MATS' filterable PM emissions limitation with its improved ESPs, improvements necessary for it to comply with the CPS SO<sub>2</sub> limit because the company is using injection of Trona, which increases PM loading, to control SO<sub>2</sub> emissions. A system-wide annual SO<sub>2</sub> emission rate of 0.38 lb/mmBtu in 2015 and 2016 will not interfere with Midwest Generation's ability to comply with the MATS' HCl limit because Midwest Generation is not relying on SO<sub>2</sub> as a surrogate; rather, Midwest Generation will monitor HCl emissions as set forth in the MATS. In fact, Midwest Generation already complies with the HCl limit.

45. The MATS was appealed by a number of parties at *White Stallion Energy Center* v. U.S. EPA, D.C. Cir., No. 12-1272. The uncertainties inherent in an appeal, including what changes in the relevant requirements might arise as a result of the appeal, make planning more difficult for the company and suggest the need for control plan flexibility.

46. Midwest Generation's current operational plans are to comply with the  $SO_2$ emission rates contained in the CPS through the use of ultra-low sulfur coal and injection of the dry sorbent, Trona, and to ensure continuing compliance with PM emissions limits through improvements to the ESPs on each unit. This control plan will also enable Midwest Generation to be compliant with the MATS and the CAIR. Based on what is known to be required at this

<sup>&</sup>lt;sup>29</sup> Midwest Generation complies with the ACI injection requirements of the CPS. In addition, however, Midwest Generation has notified the Agency that Powerton Units 5 and 6, Joliet Units 6, 7, and 8, Will County Unit 4, and Waukegan Unit 8 will comply early with the mercury emissions limitation set forth at Section 225.294(c), that is, prior to the compliance date of January 1, 2015.

time, Midwest Generation's strategy is reasonable, yet regulatory compliance goals seem to be a moving target. The status of emissions transport control and the MATS continues to be uncertain. This regulatory uncertainty creates an uneven competitive playing field for Illinois sources, which, combined with the unforeseen changes in the electricity marketplace and Midwest Generation's financial condition, discussed in detail below, creates arbitrary and unreasonable hardship for Midwest Generation if it must comply with the CPS SO<sub>2</sub> rates in 2015 and 2016 and with the FGD installation requirement for Waukegan Unit 8 by the end of 2014. A two-year "pause" in the CPS SO<sub>2</sub> rate, essentially a two-year slowdown in the pace at which emission rate limits are ratcheted down, should allow Midwest Generation to gain some level of certainty and provide a reasonable timeframe for creating a more level competitive playing field.

#### B. Unrecoverable Costs of Compliance Coupled with Midwest Generation's Current Financial Condition Contribute to an Arbitrary and Unreasonable Hardship.

47. As noted above, Midwest Generation has already expended considerable resources for CPS compliance. Its fleet of coal-fired units is equipped with controls adequate to comply with the CPS requirements for mercury and NOx, it has switched its fleet to ultra-low sulfur coal, and it has commenced Trona injection system installation work at Powerton 6. To date, Midwest Generation has spent more than \$170 million in capital costs for CPS compliance, and it incurs additional significant operating costs on an ongoing basis. McFarlan Aff., Exh. 3, ¶ 12. Midwest Generation also currently plans to install a Trona injection system and to convert the ESP from a hot-side to a cold-side precipitator at Waukegan Unit 7. Midwest Generation expects to incur around \$230 million in costs in 2013 and 2014 for the Trona and ESP work planned for Powerton Unit 6 and Waukegan Unit 7, together with some continued engineering and procurement of long lead material associated with controls for some other units. McCluskey Aff., Exh. 5, ¶ 17.

-36-

48. Additional capital expenditures in 2013 and 2014, however, in the range of \$210 million are necessary to comply with the 2015 and 2016 CPS SO<sub>2</sub> system-wide emission rates and the installation of FGD equipment at Waukegan Unit 8. McCluskey Aff., Exh. 5,  $\P$  15-16. Without relief from the CPS 2015 and 2016 rates and the FGD installation requirement at Waukegan Unit 8, Midwest Generation, its Stations, its employees, and others that rely on the Stations, as well as compliance investments to date, are at risk.

49. Midwest Generation is currently facing significant financial challenges, which are discussed in more detail in the Petmecky Affidavit, Exh. 4. These challenges relate to constriction of revenues, increased costs, and debt at its indirect parent, EME.

50. On the revenue side, Midwest Generation's average realized energy prices (dollars per megawatt hour) have fallen every year since 2008 due to weak demand and unprecedented exploration and production of shale gas that have caused steep reductions in the price of natural gas, which energy prices track. A comparison of energy prices between 2008 and 2012 shows a dramatic, roughly 45% reduction in market energy prices, which in turn have driven down Midwest Generation's revenues. Petmecky Aff, Exh. 4, ¶ 10. Because of the impact of lower average energy prices, Midwest Generation also has suffered a decrease in generation, further reducing revenues. Petmecky Aff, Exh. 4, ¶ 11.

51. In addition, Midwest Generation has recently experienced lower capacity prices and revenues. The so-called capacity markets essentially provide payments for contractual commitments by power generators to provide power when called upon to do so. Midwest Generation's capacity prices are set three years in advance and, as with its business in general, are impacted by market cycles. But even accounting for typical market cycling, the capacity prices and corresponding anticipated revenues will fall to strikingly low levels in 2013. Midwest

-37-

Generation experienced much better capacity revenues in prior years. *Generally see* Petmecky Aff., Exh. 4, ¶ 9. In 2008, when Midwest Generation was relatively new to the PJM market, it achieved capacity revenues of \$111 million. Its capacity revenues rose to \$178 million in 2009 and \$263 million in 2010, then declined to \$244 million in 2011. In 2012, the capacity prices dropped substantially and the capacity revenues are projected to reach only \$97 million this year. Capacity prices will drop even more in 2013, when Midwest Generation expects capacity revenues will total only \$35 million, representing a decline of more than 85% – over \$230 million – from the 2010 and 2011 revenues. Petmecky Aff., Exh. 4, ¶ 9. Fortunately, based on increasing capacity prices in 2014 and 2015, Midwest Generation expects capacity revenues to increase in 2014 to \$141 million and to recover further in 2015 to \$193 million. Petmecky Aff., Exh. 4, ¶ 9.

52. On the cost side, Midwest Generation has experienced a recent substantial increase in fuel costs. Earlier this year, a favorable long-term coal rail contract expired, and Midwest Generation entered into a new, higher-priced contract for the transport of low sulfur coal to its fleet. The resultant increase in as-delivered fuel costs is substantial. During the first nine months of 2012, Midwest Generation's as-delivered fuel costs have been approximately 60% higher than during the same period in 2008. Petmecky Aff., Exh. 4, ¶ 12.

53. As a result of the constriction of revenues and increased costs, Midwest Generation has entered a period of negative earnings, which has dealt a significant blow to its ability to secure financing. Whereas Midwest Generation had a net income of \$87 million during the first three quarters of 2011, it suffered a net loss of \$63 million for that same period in 2012. Petmecky Aff., Exh. 4, ¶ 8. Midwest Generation expects that operating losses and deficits likely will continue through 2014. Petmecky Aff., Exh. 4, ¶ 7. It needs financing.

-38-

54. Midwest Generation has been largely dependent on EME to fund its cash flow deficits and environmental retrofits. EME, however, is facing its own financial challenges that throw into question its ability to provide funding to Midwest Generation to install additional controls required to comply with the CPS system-wide rates in 2015 and 2016. As of September 30, 2012, EME had \$3.7 billion of unsecured notes outstanding, \$500 million of which mature in June 2013. EME continues to experience operating losses, including from the financial results of Midwest Generation, and EME expects that it will incur further losses and reductions in cash flow in the current year and for some subsequent years. EME currently expects a continuation of these adverse trends coupled with pending debt maturities and the need to retrofit Midwest Generation's plants to comply with governmental regulations to exhaust its liquidity. Consequently, EME has been considering all options available to it, including potential sale of assets, restructuring, reorganization of its capital structure, and conservation of cash that would be applied otherwise to the payment of obligations.

55. Based on current projections, EME does not expect to have sufficient liquidity to repay a \$500 million debt obligation due in June 2013. EME disclosed on November 15, 2012, that it had elected not to make \$97 million in interest payments due on certain bonds on that date. EME's unsecured bonds generally provide for a 30-day grace period for interest payments before an event of default shall be deemed to have occurred. EME's failure to pay indebtedness under its unsecured bonds will likely result in EME's filing for protection under Chapter 11 of the U.S. Bankruptcy Code, which contemplates that the party filing for bankruptcy will continue to operate through and after the bankruptcy process. EME and its parent, Edison International, continue to engage in discussions with the bondholders' financial and legal advisors regarding potential restructuring transactions of EME. *Generally see* Petmecky Aff., Exb. 4,  $\P$  19.

-39-

56. Midwest Generation had \$1.323 billion of notes receivable from EME as of September 2012, with payments used to meet Midwest Generation's rent obligations under saleleaseback agreements with third parties for the Powerton and Joliet Stations. EME has indicated that it may not be able to make these payments. If Midwest Generation is unable to obtain financial support from EME or other sources, Midwest Generation may need to file for protection under Chapter 11 of the U.S. Bankruptcy Code. Petmecky Aff., Exh. 4, ¶ 14.

57. EME and Midwest Generation have been engaged in negotiations with creditors concerning a potential financial restructuring. It is possible that such negotiations may lead to a successful restructuring prior to or in connection with any Chapter 11 reorganization proceeding. Capacity markets are depressed for 2012 and 2013 but they show an increase in 2014 and 2015. Petmecky Aff., Exh. 4,  $\P$  9. Other federal rules, such as the MATs and CAIR Phase II, are scheduled to go into effect in 2015, helping to level the playing field for Illinois generators like Midwest Generation. Midwest Generation does not seek relief from the 2017 CPS SO<sub>2</sub> systemwide rate. What Midwest Generation needs is time, a two-year pause to work through its financial constraints and operating revenue issues so that it can either borrow or otherwise generate the funds needed for CPS compliance while also satisfying its other obligations.

58. As described in more detail in the Petmecky Affidavit, Exh. 4, Midwest Generation has been unable, to date, to identify any other source of funding for the roughly \$210 million needed in 2013 and 2014 to install additional controls required to achieve the 2015 and 2016 CPS system-wide emission rates. Edison International has publicly stated that, given the challenging market conditions, it will not invest new funds in Midwest Generation. Petmecky Aff., Exh. 4, ¶ 21. Neither EME nor Midwest Generation has a reasonable likelihood of securing

-40-

financing for these additional control costs from an unrelated third party in time to comply with the current CPS schedule. Petmecky Aff., Exh. 4, ¶ 15, 20, 22-24.

59. Financial conditions this challenging were not anticipated at the time the CPS was adopted. In order to comply with the CPS, Midwest Generation has already expended considerable resources to reduce emissions. Midwest Generation also plans to incur in 2013 and 2014 additional costs related to installation of Trona injection systems at Powerton Unit 6 and Waukegan Unit 7, further significant CPS compliance costs. As a result of changed financial circumstances, however, Midwest Generation needs to defer still more control costs that would be required in 2013 and 2014 to achieve the CPS SO<sub>2</sub> rates in 2015 and 2016 and to install the FGD equipment at Waukegan Unit 8. This is not unlike constraints faced by other power generators, such as Ameren, which came before this Board for similar relief earlier this year, or Exelon, which has publicly disclosed that it is deferring significant capital expenditures from 2012 to 2015. Petmecky Aff., Exh. 4, ¶ 5. Specifically as reported in a Bloomberg transcript, Exelon stated in its November 1, 2012 Q3 2012 Earnings Call that it "removed roughly \$2.3 billion of growth capital from 2012 to 2015 capital plans of Exelon Generation ... which meaningfully improves [its] free cash flow over the period. . . . [and] is a matter of better aligning [the company's] growth capital spend with the expected timing of the power market recovery." Petmecky Aff., Exh. 4, § 5. Absent a variance from the CPS 2015 and 2016 rates and the requirement to install FGD equipment on Waukegan Unit 8 by the end of 2014, Midwest Generation would suffer unreasonable and arbitrary hardship.

#### C. The Adverse Consequences of Denial Are Untenable and Must Be Avoided.

60. Denial of this Petition would likely have severe, adverse consequences on Midwest Generation, its employees, and others benefitted by Midwest Generation and its

-41-

employees. In the event of a denial, Midwest Generation would confront two possible compliance scenarios. McFarlan Aff., Exh. 3, ¶ 19; Petmecky Aff., Exh. 4, ¶ 28; McCluskey Aff., Exh. 5, ¶¶ 15-23. First, Midwest Generation could be required to attempt to fund the additional \$210 million in necessary control costs in 2013 and 2014 at the same time that it expects to be funding approximately \$230 million of other CPS control projects, is suffering operating losses, needs to conserve what cash it has, has limited if any access to funds from other parties, and is attempting with EME to effectuate a significant financial restructuring. Under these circumstances, funding would be uncertain at best and such a large additional expenditure could threaten Midwest Generation's viability and that of its Stations.

61. Second, as discussed in the McCluskey Affidavit, Exh. 5, absent a variance or the ability to fund in 2013 and 2014 the additional \$210 million needed for pollution controls to achieve the CPS 2015 and 2016 SO<sub>2</sub> emission rates, Midwest Generation would be forced to substantially curtail its generation. Generation curtailment, however, does not provide a viable compliance option. Absent a variance, Midwest Generation would be forced to significantly curtail generation from several other coal-fired units in the fleet that do not have Trona injection systems installed, up to 75% in 2016. Such extensive curtailments would result in substantial reduction in Midwest Generation's revenues at a critical time and are not sustainable. In addition, such curtailments may result in penalties under Midwest Generation's capacity contracts and may even require regulatory approval in light of grid reliability concerns. The level of generation curtailment required to comply with the CPS, absent this requested variance, would threaten the continued existence of Midwest Generation and the future viability of its Stations.

-42-

62. In summary, absent the requested variance, the future of Midwest Generation and its Stations is at risk. In turn, this threatens employees and others who rely on the operation of the Stations.

63. The Midwest Generation coal-fired fleet is a vibrant part of the communities in which the fleet operates and an important contributor to the economics of the state. As of October 31, 2012, Midwest Generation's plants and supporting operations based in Illinois collectively employed 845<sup>30</sup> men and women, 539, or 64% of whom are represented by Local 15 of the International Brotherhood of Electrical Workers. Large numbers of families rely upon those employees' earnings for support. Reductions in earnings would also impact the income and other taxes those employees pay, as well as the providers of the goods and services they purchase. In calendar year 2011, Midwest Generation provided annual payroll and benefits totaling \$145 million; paid over \$100 million for contracted labor (nearly all skilled building and construction trades members) to perform special project work; spent \$379 million to purchase goods and services from Illinois businesses, to pay for various licenses and regulatory fees, and to support Illinois-based organizations; and paid \$4.7 million in property taxes to local units of government in Will, Tazewell, Lake, and Cook counties. McFarlan Aff., Exh. 3, ¶ 20.

64. Additionally, if Midwest Generation is forced to significantly curtail or even cease generation at some of its units, this would adversely impact state tax revenues. For example, Midwest Generation's purchases of sorbent will fall, depriving the state of various tax revenues and the Agency of revenue to help support the Title V program specifically derived from the use tax on sorbent. *See* 35 ILCS 105/9. Midwest Generation has spent \$36 million on sorbent for its ACI systems in 2012. At a rate of 6.25%, so far in 2012, Midwest Generation has

<sup>&</sup>lt;sup>30</sup> Please note that this total number of employees reflects only eight workers now at Crawford.

paid over \$2.3 million in use tax on sorbent purchases, a portion of which is earmarked to help support the CAAPP at Illinois EPA. *Id.* 

65. The consequences of not being granted the variance are very dire not only to Midwest Generation, but also to its employees, their communities, the state generally, and the Agency in particular.

#### VII. <u>ENVIRONMENTAL IMPACT</u> (§ 104.204(g))

66. Under the CPS, Midwest Generation is required to achieve annually declining system-wide SO<sub>2</sub> emission rates beginning with an average annual rate of 0.44 lb/mmBtu in calendar year 2013 and a rate of 0.41 lb/mmBtu in calendar year 2014. *See* McCluskey Aff., Exh. 5, Table 5.1. Under the terms of the proposed variance, current CPS emission rates limits for 2013 and 2014 would be met, and emission rate limits for 2015 and 2016 would be modified. Under the proposed mass emission limits for the period 2013 through 2016, total actual tons of SO<sub>2</sub> emissions for that period from units legally permitted to operate during those respective years would be less than expected based upon historical average 2008-2011 heat input and the CPS rates. Meeting the proposed mass emission levels over the four-year period (2013-2016) would provide a cumulative net reduction of 3,181 tons of SO<sub>2</sub>. *See* McCluskey Aff., Exh. 5, Table 5.1. In addition, total emissions in 2013 and 2014 would be less than expected for those years, by about 15,000 tons, providing early emission reductions.

67. Additionally, Midwest Generation ceased operation of the coal-fired boiler at Fisk Station four months earlier than required by the Waukegan Order. The last day the Fisk coal-fired boiler operated was August 30, 2012. This early shutdown resulted in approximately 734 tons less SO<sub>2</sub> emissions in 2012. McCluskey Aff., Exh. 5, ¶ 26. The Waukegan Order required

-44-

Midwest Generation to shut down the Crawford Station by December 31, 2014. However, Midwest Generation ceased operation of Crawford Station on August 28, 2012, which created an early reduction of SO<sub>2</sub> emissions of approximately 1,249 tons in 2012. McCluskey Aff., Exh. 5, ¶ 26. Midwest Generation is proposing to commit to no further operation of the coal-fired units at Crawford.<sup>31</sup>

68. Emissions of other pollutants would be reduced as well under this requested variance. As a result of the SO<sub>2</sub> emission commitments proposed, for the period 2013-2016, Midwest Generation anticipates that NOx would be reduced by approximately 8,503 tons, PM by approximately 3,169 tons, mercury by approximately 135 pounds, and CO<sub>2</sub> by approximately 16 million tons. McCluskey Aff., Exh. 5,  $\P$  26. In addition, the early cessation of operation of the coal-fired units at Fisk and Crawford result in an additional reduction of 461 tons of NOx, 299 tons of PM, 3 pounds of mercury, and 904,477 tons of CO<sub>2</sub>. McCluskey Aff., Exh. 5,  $\P$  26. These reductions provide additional emission benefits from the proposed variance compliance plan. These additional reductions are on top of significant CPS controls that have already been implemented for these pollutants.

69. The requested five-month deferral of the deadline for installing FGD equipment or shutting down Waukegan Unit 8 will have no adverse impact on emissions because Midwest Generation commits, if this variance is granted, not to operate that unit during the deferral period. Thus, that unit will have no emissions beginning January 1, 2015, until completion of the FGD installation.

70. Pursuant to the CPS, Midwest Generation's fleet of coal-fired EGUs was among the first in the nation to install mercury control equipment in July 2008. Since 2007, when the

 $<sup>^{31}</sup>$  The tons of SO<sub>2</sub> reduced from not operating Crawford Station in 2013 and 2014 are included in the proposed mass emissions levels to which Midwest Generation commits for those years.

CPS was implemented, system-wide mercury emissions have been reduced from approximately 1,345 pounds per year to approximately 221 pounds per year in 2012. This represents an 84% reduction in system-wide mercury emissions since adoption of the CPS. Moreover, Midwest Generation can now meet the mercury emissions rate set forth at Section 225.294(c) for each of its operating coal-fired units except the two with hot-side precipitators as provided by the regulations and the Waukegan Order. Since fall 2012, Joliet Units 6, 7, and 8, Powerton Units 5 and 6, Waukegan Unit 8, and Will County Unit 4 have been complying on a continuous basis with the 0.0080 lb/GWh gross electrical output limitation of the CPS. McCluskey Aff., Exh. 5, ¶ 4.

71. As described in the McFarlan Affidavit, Exh. 3,  $\P$  13-15, through installation of various control measures and shutting down several units, Midwest Generation has reduced emissions of criteria pollutants and CO<sub>2</sub> significantly fleet-wide since 2000:

a. Midwest Generation has installed SNCRs to control NOx emissions on most of its CPS Group units listed in Appendix A of Part 225, thus significantly reducing such emissions. Since 2000, Midwest Generation has reduced annual system-wide NOx emissions by 83%, a reduction from approximately 72,283 tons in 2000 to approximately 12,526 tons emitted in 2012.<sup>32</sup>

b. Midwest Generation's improvements and other changes with respect to its coal-fired units have reduced PM emissions in 2012 to approximately 5,221 tons, a reduction of 20% from 2000 level of 6,552 tons.

<sup>&</sup>lt;sup>32</sup> Midwest Generation has annualized emissions from January through September, 2012 to obtain the emission levels in 2012 set forth in this portion of the Petition.

c. Emissions of  $CO_2$  have been reduced to approximately 26.9 million tons system-wide in 2012, a 16% reduction from 2000 levels of 31.9 million tons not required by any applicable law or regulation.

d. Emissions of SO<sub>2</sub> have been reduced in 2012 to approximately 56,395 tons
 from 94,195 tons in 2000, a 40% reduction.

72. Assuming the variance requested in this petition is granted, following the twoyear "pause" in the annual system-wide SO<sub>2</sub> emission rates, Midwest Generation will resume compliance with the SO<sub>2</sub> rates set forth in the CPS for 2017, *i.e.*, 0.15 lb/mmBtu. Additionally, Midwest Generation emphasizes that the interim rate it seeks for 2015 and 2016, 0.38 lb/mmBtu, is <u>less than</u> the rate for 2014, which is 0.41 lb/mmBtu. Therefore, the "pause" that Midwest Generation seeks does include a step-down in the emission rate; Midwest Generation will be providing some reduction in the system-wide annual SO<sub>2</sub> emission rate in 2015 and 2016, though not to the extent currently required by the CPS. Midwest Generation can achieve this proposed stepped-down interim emission rate through the use of ultra-low sulfur coal and the planned control upgrades at Powerton Unit 6 and Waukegan Unit 7. Further, any suggestion of net environmental harm that might result if the Board grants the requested variance would be groundless in light of Midwest Generation's commitment to ensure that mass SO<sub>2</sub> emission levels would not exceed the levels proposed herein.

73. System-wide reductions in mercury will not be negatively impacted by this requested variance. Midwest Generation will continue to operate its ACI systems to control mercury emissions and will comply with the mercury emission rates set forth in the CPS by January 1, 2015, or sooner. Therefore, there are no additional health effects that could result from emissions of mercury.

-47-

74. PM emissions are already controlled by the existing ESPs on the EGUs. Therefore, PM emissions will not increase as a result of the requested variance. The improvements to the ESPs that will be delayed if this variance request is granted are to accommodate increased PM loading due to the injection of Trona to control SO<sub>2</sub> emissions. The improvements to the ESPs would allow Midwest Generation to maintain current operational levels with the increased PM loading. Until Trona is injected at a unit, the ESP improvement is not necessary. Additionally, each Station is subject to the state's PM limitations at Section 212.203. These requirements will continue to apply. Each Station is in compliance with these requirements and will remain so.

75. SO<sub>2</sub> emissions contribute to the formation of Acid Rain and fine particulate matter. Midwest Generation complies with the Acid Rain permits issued for each Station. Emissions of fine particulate matter are currently regulated by the CAIR. Acid Rain can contribute to eutrophication of water bodies located far downwind of a source of SO<sub>2</sub>. USEPA has documented various possible health effects, largely respiratory, associated with inhalation of fine particulate matter. Midwest Generation's system is in compliance with these requirements and will remain so during the pendency of the variance, if granted.

76. In a variance proceeding, a petitioner must demonstrate that the hardship resulting from denial would "outweigh any injury to the public or the environment" from granting the relief. *Marathon Oil Co. v. EPA*, 242 Ill. App. 3d 200, 206, 610 N.E.2d 789, 793 (5th Dist. 1993). Midwest Generation satisfies the environment impact element by committing to meet  $SO_2$  emission levels of 57,000 tons and 54,000 tons in 2013 and 2014, respectively, a total of about 15,000 tons less than reasonably anticipated under the CPS (based on average 2008-2011 heat input), with a total reduction in  $SO_2$  emissions of about 3,181 tons over a four-year period

-48-

(2013-2016). See McCluskey Aff., Exh. 5, Table 5.1. During the pendency of the variance, if granted, Midwest Generation will continue to inject powdered activated carbon to control mercury emissions at each EGU in its system. It will continue to operate its ESPs to control particulate emissions. Additionally, by complying with the SO<sub>2</sub> mass emissions levels proposed here for 2013 through 2016, Midwest Generation will reduce emissions of mercury, NOx, CO<sub>2</sub>, and PM during that period, as noted above.

77. Given all of these factors, the hardship to Midwest Generation clearly outweighs any potential impact to human health or the environment. Indeed, the compliance program that Midwest Generation proposes during the pendency of the variance will result in a net benefit to the environment, indicating that the requested variance should be granted. Ameren Order, p. 62 (Board found that net benefit to air quality favors granting the variance). The hardship, therefore, rises to the level of "arbitrary or unreasonable," consistent with Section 35(a) of the Act and Board precedent in variance proceedings. Denial of the variance would force additional major expenditures that may be impossible to fund or substantial curtailments that would threaten the survival of Midwest Generation, as detailed above. McFarlan Aff., Exh. 3, ¶ 19; Petmecky Aff., Exh. 4, ¶ 28; McCluskey Aff., Exh. 5, ¶¶ 15-23. Shuttering the Stations would have devastating impacts on hundreds of workers and their families and would drain hundreds of millions of dollars from the economy.

78. Cross-media impacts are not an issue in this matter. The level of SO<sub>2</sub> emissions in 2015 and 2016 should have no significant impact on water quality.

-49-

#### VIII. CONSISTENCY WITH FEDERAL LAW (§§ 104.204(1) and 104.208(a))

79. The Board may grant this requested variance consistent with federal law. Granting the variance has no impact on Section 110(a) of the Clean Air Act and 40 CFR Part 51. Specifically, Section 110(a)(2)(D) of the Clean Air Act is addressed through the CAIR and perhaps a successor if USEPA is able to develop, promulgate, and successfully implement an emissions transport control rule by 2015 or 2016, the years of the requested variance. Midwest Generation complies with the CAIR and will continue to do so as long as it is applicable. Second, on June 24, 2011, the Agency submitted portions of the CPS, including Sections 225.295(b) and 225.296(a)(2), to USEPA for inclusion in Illinois' SIP addressing BART and Regional Haze. Illinois EPA, selected pages of *Technical Support Document for Best Available Retrofit Technology Under the Regional Haze Rule*, AQPSTR 09-06 (April 29, 2011), attached hereto as Exhibit 6;<sup>33</sup> 77 Fed.Reg. 3966 (Jan. 26, 2012), attached hereto as Exhibit 7. On July 6, 2012, USEPA approved Illinois' submittal as part of Illinois' SIP, including those portions of the CPS that establish the annual system-wide SO<sub>2</sub> emission rates. 77 Fed.Reg. 39943 (July 6, 2012), attached hereto as Exhibit 8.

80. Recognizing a potential concern of the Board regarding consistency with federal law, Midwest Generation points out several factors. First, compliance with the limit reflecting BART is due as expeditiously as possible but no later than five years after SIP approval, or, in Illinois' case, mid-2017, approximately six months after the end of the requested variance period.

<sup>&</sup>lt;sup>33</sup> Exhibit 6 consists of the cover letter, the Technical Support Document ("TSD") cover page, TSD pp. 24-25, 30-31, 33, and Appendix C. These are the pages pertinent to this request for variance; however, Midwest Generation will provide the Board with a copy of the entire TSD or the entire collection of documents included in the SIP submittal if the Board requires.

42 U.S.C. § 7491(g)(4)(e)(1)(iv). Midwest Generation will comply with the CPS 2017 systemwide annual SO<sub>2</sub> limit of 0.15 lb/mmBtu.

81. Second, the BART/Regional Haze SIP is concerned with the SO<sub>2</sub> emission rate. Illinois EPA demonstrated that the system-wide average SO<sub>2</sub> emission rates included in the CPS provide greater reductions than applying the presumptive BART rate to only BART-eligible units by applying the rates to average heat input, and USEPA accepted this analysis. *See* 77 Fed.Reg. at 3973; 77 Fed.Reg. at 39946. The slight increase in emissions attributable to a rate of 0.38 lb/mmBtu still leaves Illinois compliant with presumptive BART levels. *See* Exh. 9.<sup>34</sup> Additionally, the shutdowns of Fisk and Crawford in 2012 would reduce mass emissions of SO<sub>2</sub> and NOx to levels below those included in Illinois' BART submittal that demonstrated that the system-wide CPS rates produced greater reduction than applying the BART presumptive rates to only the BART-eligible units, as illustrated by Exhibit 9. Therefore, there would be no negative impact on the Agency's BART calculations regarding emissions levels.

82. The only issue could be a discrepancy in the interim rates prior to the BART compliance date. As part of its statutory duties, the Agency must submit to USEPA the Board's order granting this requested variance, assuming it is granted, and request that USEPA reflect the variance in the SIP. Thus, Midwest Generation anticipates that if the Board grants the variance, USEPA would approve an amendment to the BART SIP to reflect the change in emission rate. Midwest Generation notes that the mass emissions levels that it proposes here as part of its

<sup>&</sup>lt;sup>34</sup> Exhibit 9 consists of Table 4.7 from the BART TSD, Exhibit 6, with the addition of Midwest Generation's analysis of an SO<sub>2</sub> emission rate of 0.38 in 2015. Midwest Generation used the same heat input data that the Agency used in creating the table, presented in column 3 of TSD Table 4.7. The reductions in 2015 resulting from a rate of 0.38 are less than if Midwest Generation were to meet the 0.28 rate, obviously, but they are still greater than the presumptive BART reductions. Additionally, the reductions that can be expected for 2017, the compliance year, and 2019, the final year of the CPS step-downs in SO<sub>2</sub> emission rates, are significantly greater than the Agency anticipated when it developed the BART SIP because of Midwest Generation's actions to reduce emissions.

compliance plan should not be part of the amendment to the BART SIP, as BART is concerned only with emission rates, and that is the approach that Illinois has followed in its submittals.

#### IX. <u>VARIANCE CONDITIONS AND COMPLIANCE PLAN</u> (§§ 104.204(f) and (j))

83. Midwest Generation requests that the Board grant a variance from the SO<sub>2</sub>

emission rates for 2015 and 2016 set forth in Section 225.295(b) and from the requirement to

install FGD equipment at Waukegan Unit 8 by December 31, 2014, as set forth in Section

225.296(a)(2). Midwest Generation recommends that the variance be stated as follows:

Midwest Generation shall not be subject to the system-wide emission rates of 0.28 lb/mmBtu in 2014 and 0.195 lb/mmBtu in 2015, as set forth in Section 225.295(b).

Midwest Generation shall not be subject to the requirement to install and have operational FGD equipment on Waukegan Unit 8 by December 31, 2014, as set forth in Section 225.296(a)(2).

84. Midwest Generation recommends a compliance plan as a condition of the

variance as follows:

Date	Activity
2013 and 2014	Midwest Generation will not operate the coal-fired boilers at the Crawford Station.
January 1-December 31, 2013	Midwest Generation will limit system-wide <sup>35</sup> emissions of SO <sub>2</sub> to no more than 57,000 tons.
May 1, 2014	Midwest Generation will report to the Agency its system-wide mass SO <sub>2</sub> emissions for 2013 with its Annual Emissions Report.
January 1-December 31, 2014	Midwest Generation will limit system-wide emissions of $SO_2$ to

<sup>&</sup>lt;sup>35</sup> The "system" for purposes of this compliance plan table is comprised of the following coalfired units: Joliet Units 6, 7, and 8, Powerton Units 5 and 6, Waukegan Units 7 and 8, and Will County Units 3 and 4.

Date	Activity
	no more than 54,000 tons.
January 1, 2015, and thereafter until completion of installation of FGD equipment	Midwest Generation will not operate Waukegan Unit 8
May 1, 2015	Midwest Generation will report to the Agency its system-wide mass SO <sub>2</sub> emissions for 2014 with its Annual Emissions Report.
May 31, 2015	Midwest Generation must have completed the installation of and have operational FGD equipment on Waukegan Unit 8 or permanently shut down the unit
2015 and 2016	Midwest Generation will comply with a system-wide annual $SO_2$ emission rate of 0.38 lb/mmBtu.
January 1-December 31, 2015	Midwest Generation will limit its system-wide mass emissions of $SO_2$ to no more than 39,000 tons.
May 1, 2016	Midwest Generation will report to the Agency its system-wide mass SO <sub>2</sub> emissions for 2015 with its Annual Emissions Report.
January 1-December 31, 2016	Midwest Generation will limit its system-wide mass emissions of $SO_2$ to no more than 37,000 tons.
May 1, 2017	Midwest Generation will report to the Agency its system-wide mass SO <sub>2</sub> emissions for 2016 with its Annual Emissions Report.
January 1, 2017	Beginning January 1, 2017, Midwest Generation will comply with the rate set forth in Section 225.295(b) for 2017 of 0.15 lb/mmBtu. <sup>36</sup>
Continuously during the pendency of the variance	<ul> <li>a. Midwest Generation will comply with the CAIR.</li> <li>b. Midwest Generation will comply with the Acid Rain Program at 40 CFR § 72.</li> </ul>

<sup>&</sup>lt;sup>36</sup> In the alternative, if the Board believes that the emission rates for 2015 and 2016 that are set forth in Section 225.295(b) must be in effect for some time period, Midwest Generation will comply with a system-wide annual SO<sub>2</sub> emission rate of 0.38 lb/mmBtu in 2015 and 2016, a rate of 0.28 lb/mmBtu from January 1 through January 15, 2017, a rate of 0.195 lb/mmBtu from January 16 through January 31, 2017, and will comply with a system-wide annual rate of 0.15 lb/mmBtu from February 1 through December 31, 2017. Midwest Generation may demonstrate compliance with these requirements, however, through a rate of 0.15 lb/mmBtu for the period of January 1 through December 31, 2017.

Date	Activity
	c. Midwest Generation will comply with all other applicable requirements.

#### X. <u>HEARING</u>

#### (§ 104.204(n))

85. Midwest Generation hereby requests that the Board schedule a hearing in this matter at its earliest convenience.

#### XI. <u>RCRA</u>

#### (§ 104.206)

86. Section 104.206 of the Board's procedural regulations is not applicable to this request for variance. Section 104.206 specifically addresses requests for variance from the Resource Conservation and Recovery Act (RCRA). Midwest Generation does not seek such relief.

#### XII. CONCLUSION

87. The Board has recently granted variances to petitioners faced with unique regulatory uncertainty where the costs of compliance were also determined to be both substantial and certain and where a variance was necessary due to a change in circumstances that required additional time to fund compliance costs. *ExxonMobil Oil Corp. v. IEPA*, PCB 11-86, PCB 12-46 (December 1, 2011); Ameren Order. Midwest Generation is similarly facing regulatory uncertainty, the costs of compliance are substantial and certain, and Midwest Generation needs to preserve its limited cash flow until it works through its financial restructuring and current challenging revenue and expense circumstances. The recent unforeseen collapse in the energy and capacity markets due to weak demand and the impact of shale gas on energy prices has

driven down Midwest Generation revenues while its costs have substantially increased. The impact of Midwest Generation's increased costs, including complying with the CPS, is exacerbated by the uneven playing field compared to competitors in other states. These conditions have led Midwest Generation to experience substantial net losses during the first three quarters of 2012. Its current financial condition is made worse by the significant debts, including to Midwest Generation, of its indirect parent corporation, EME, upon which Midwest Generation has relied for certain financial contributions. Midwest Generation needs time for the energy market to recover and for EME to effectuate a financial restructuring.

88. Considering those factors together with the lack of impact to the environment from the requested relief from the CPS SO<sub>2</sub> emission rates and the deadline for installing FGD equipment at Waukegan Unit 8, a variance is warranted. This brief "pause" in the pace of SO<sub>2</sub> emission rate reductions and the installation requirement at Waukegan Unit 8 would help avoid financial harm to Midwest Generation, its employees, and others benefited by its operations while avoiding any negative impacts on electricity generation in Illinois. Midwest Generation's commitments to meeting mass SO<sub>2</sub> levels in 2013 through 2016 results in a net reduction in anticipated SO<sub>2</sub> emissions over that period (based on average 2008-2011 heat input) and a reduction in other pollutants, providing a net environmental benefit.

WHEREFORE, for the reasons set forth above, MIDWEST GENERATION, LLC requests that the Board grant it a variance from the system-wide annual SO<sub>2</sub> emission rate of 0.28 lb/mmBtu in 2015 and 0.195 lb/mmBtu in 2016 and from the requirement to install and have operational FGD equipment on or permanently shut down Waukegan Unit 8 by December 31, 2014.

Respectfully submitted,

MIDWEST GENERATION, LLC

by:

One of Its Attorneys

Dated: November 30, 2012

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#### <u>Exhibit List</u>

#### <u>Exhibit</u>

- 1 Illinois Environmental Protection Agency, Appendix A "Air Sampling Network," 40th Annual Air Quality Report (2010), Plus a Map Depicting the Locations of Midwest Generation's Generating Stations vis-à-vis the Ambient Air Monitoring Stations Operated by the Agency
- 2 Table Listing the Air Permits Issued to Midwest Generation
- 3 Affidavit of Douglas McFarlan, President, Midwest Generation, LLC, and Vice-President, Public Affairs, Edison Mission Group
- 4 Affidavit of William M. "Tres" Petmecky, Vice-President and Treasurer, Edison Mission Energy
- 5 Affidavit of Fred McCluskey, Vice President of Technical Services, Midwest Generation EME, LLC and Edison Mission Energy
- 6 Excerpts from the BART SIP TSD: the Cover Letter; the TSD Cover Page; TSD pp. 24-25, 30-31, 33; and Appendix C
- 7 Proposed Federal Approval of the Illinois BART SIP (77 Fed.Reg. 3966 (Jan. 26, 2012))
- 8 Final Federal Approval of the Illinois BART SIP (77 Fed.Reg. 39943 (July 6, 2012))
- 9 Table Comparing Midwest Generation Emissions at the Proposed 2015-2015 Rate to Presumptive BART Levels

# **Exhibit 1**

**Excerpt from** 

Illinois Environmental Protection Agency, Appendix A "Air Sampling Network," 40th Annual Air Quality Report (2010)

Plus

Map Depicting the Locations of Midwest Generation's Generating Stations vis-à-vis the Ambient Air Monitoring Stations Operated by the Agency

#### APPENDIX A AIR SAMPLING NETWORK

#### DESCRIPTION OF THE AIR SAMPLING NETWORK

The Illinois air monitoring network is composed of instrumentation owned and operated by both the Illinois Environmental Protection Agency and by cooperating local agencies. This network has been designed to measure ambient air quality levels in the various Illinois Air Quality Control Regions (AQCR). Historically, each AQCR was classified on the basis of known air pollutant concentrations or, where these were not known, estimated air quality. A map of the AQCR's in Illinois and overlapping into surrounding states can be found at the end of this section.

Many local agencies and volunteers cooperate and support the operation of the Illinois air monitoring network. The network contains both continuous and intermittent instruments. The continuous instruments operate throughout the year, while noncontinuous instruments operate intermittently based on the schedule shown in **Table A1**. This is the official noncontinuous sampling schedule used by the Illinois EPA during 2010. The Illinois network is deployed along the lines described in the Illinois State Implementation Plan. An updated air monitoring plan is submitted to USEPA each year for review. In accordance with USEPA air quality monitoring requirements as set forth in Title 40 of the <u>Code of Federal</u> <u>Regulations</u>, Part 58 (40 CFR 58), five types of monitoring stations are used to collect ambient air data (SLAMS, NAMS, PAMS, SPMS and NCORE). The types of stations are distinguished from one another on the basis of the general monitoring objectives they are designed to meet.

The SLAMS, NAMS, PAMS, SPMS and NCORE designations for the sites operated within the State of Illinois are provided in the Network Plan Annual (epa.state.il.us/air/monitoring/index.html). All of the industrial sites are considered to be Table A2 is a summary of the SPMS. distribution of pollutants through the years along with total number of instruments and total number of sites. The Site Directory is listed in Table A3 and the Monitoring Directory is listed in Table A4.

- 1. State/Local Air Monitoring Station (SLAMS) Network The SLAMS network is designed to meet a minimum of four basis monitoring objectives:
  - a. To determine the highest concentrations expected to occur in the area covered by the network.
  - b. To determine representative concentrations in areas of high population density.
  - c. To determine the air quality impact of significant sources or source categories.
  - d. To determine general background concentration levels.
- National Air Monitoring Station (NAMS) Network The NAMS network is a subset of stations selected from the SLAMS network with emphasis given to urban and multisource areas. The primary objectives of the NAMS network are:
  - a. To measure expected maximum concentrations.

- b. To measure concentrations in areas where poor air quality is combined with high population exposure.
  - c. To provide data useable for the determination of national trends.
  - d. To provide data necessary to allow the development of nationwide control strategies.
- 3. Photochemical Assessment Monitoring Station (PAMS) Network The PAMS network is required in serious, severe, and extreme ozone non-attainment areas to obtain detailed data for ozone, precursors (NOx and VOC), and meteorology. VOC and NOx sampling is required for the period June August each year. Ozone sampling occurs during the ozone season, April October. Network design is based on four monitoring types. In Illinois PAMS are required in the Chicago metropolitan area only.
  - a. Type 1 sites are located upwind of the non-attainment area and are located to measure background levels of ozone and precursors coming into the area
  - b. Type 2 sites are located slightly downwind of the major source areas of ozone precursors.
  - c. Type 3 sites are located at the area of maximum ozone concentrations.
  - d. Type 4 sites are located at the domain edge of the non-attainment area and measure ozone and precursors leaving the area.
- 4. Special Purpose Monitoring Station (SPMS) Network Any monitoring site that is not a designated SLAMS or NAMS is considered a special purpose monitoring station. Some of the SPMS network objectives are as follows:
  - a. To provide data as a supplement to stations used in developing local control strategies, including enforcement actions.
  - b. To verify the maintenance of ambient standards in areas not covered by the SLAMS/NAMS network.
  - c. To provide data on noncriteria pollutants.
- 5. National Core Station (NCore) Network NCore is a multi pollutant network that integrates several advanced measurement systems. It is anticipated that each state operate at least one NCore site by 2011. In Illinois, Northbrook and Bondville will be considered NCore sites. A few of the NCore network objectives are as follows:
  - a. Support for development of emission strategies and accountability of emission strategy progress through tracking long-term trends of pollutants and their precursors.
  - Support of long-term health assessments that contribute to review of National Standards.
  - Support to scientific studies ranging across technological, health and atmospheric process disciplines.
  - d. Support to ecosystem assessments recognizing that national air quality networks benefit ecosystems assessments.

Table A1 2010 Noncontinuous Sampling Schedule

		JA	NUA	RY		
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24	25	26	27	28	29	30
31						

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14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

		M	ARC	H		
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14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

		1	APRI	L		
S	MTW		W	R	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

			JULY			
S	М	T	W	R	F	S
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18	19	20	21	22	23	24
25	26	27	28	29	30	31

		00	TOB	ER		
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17	18	19	20	21	22	23
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31						

			MAY			
S	M	T	W	R	F	S
	<u> </u>					1
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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

		A	UGU	ST	_	
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22	23	24	25	26	27	28
29	30	31				

-		NO	VEM	BER		
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14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

			JUNI	3		
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		-1	2	3	4	5
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13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

		SEP	TEM	BER		
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12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

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			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Every 6 Day Sampling Schedule 22 Every 3 Day Sampling Schedule

	Table 4	A2					
DISTRIBUTION OF AIR MONITORING INSTRUMENTS							
	2010	2009	2008	2007	200		
Particulate Matter (PM <sub>2.5</sub> )	38	38	38	38	38		
PM2.5 Air Quality Index	13	13	13	13	12		
PM2.5 Speciation	5	5	5	6	6		
Particulate Matter (PM <sub>10</sub> )	17	17	17	17	19		
Total Suspended Particulates (TSP)	18	13	13	13	12		
Lead	18	13	13	13	13		
Continuous Mercury	1	1	1	1	1		
Sulfur Dioxide	19	19	20	20	21		
Nitrogen Dioxide	7	7	7	8	8		
Ozone	36	36	36	37	37		
Carbon Dioxide	1	1	1	L	1		
Carbon Monoxide	9	9	9	9	8		
Volatile Organic Compounds/Toxics	2	2	2	4	4		
Wind Systems	18	18	18	19	19		
Solar Radiation	9	9	9	9	9		
Meteorological	3	3	4	4	4		
Total Instruments	214	204	206	212	212		
Total Sites	84	77	77	79	80		

There were a number of changes to the monitoring network from 2009 to 2010. New lead monitoring requirements as well as a new lead National Ambient Air Quality Standard were established in 2010. As a result of these new rules six new lead monitors were established and one lead monitor was discontinued. The six new sites are Chicago -Perez Elementary, Sterling, Rockford, Bartonville, Mapleton and Decatur. The rural Nilwood lead monitor was discontinued. Access was lost to both the Springfield and Champaign ozone sites. Replacement sites were being investigated. USEPA continues to review various criteria pollutant monitoring requirements. It is expected that a number of new monitors will be established in the state in the coming years. Upcoming changes will affect ozone monitoring in 2012 and nitrogen dioxide and sulfur dioxide in 2013.



75 - West Central Illinois Intrastate

11	MANNE.	XCOORD YCOORD AIR	SCODE
0	Aicip Village Gerage	439026.14 4613506.98 170	10001
1	Autora Health Department	3855.72 14 4626779.16 170	190007
3	Briderbord Comm ED Statesame	442015.58 4612496.45 170	112001
4	Carry Grove H.S	39748249 4575110.16 171	1/1011
5	Closve RPA Trailer	437579.20 4612877.22 170	10002
6	Closes Liberty School	437852.27 4634984.05 1705	115006
7	Cer Thines Regional Office Building	Q8543.56 4636797.66 170	114007
	Ogin Lattern Junior H.S.	394651.06 0556017.39 170	60305
ງ ນ	Function Water Burneline Station	394074.74 4656354.53 170	80003
11	Intiest Parching Elementary School	006864.00 4592961.20 1710	17002
12	Jolial Water Plant West	401280,73 4590491.30 1719	20013
13	Lemont IEPA Trailer	417538.46 4515408.08 1708	10940
14	Livie Morton Arboretism	410890.76 4629582.57 1704	BERRIT
15	Lyons Township Village Hall	430077.97 4526086.70 1708	11015
10	Navyorodd 1500 Navorok Drive Platform	431442.48 4635917.25 1708	16009
18	Allowood 4th Ostrict Court Bulleior	431139.07 483591107 17(B	15004
19	Midlothian Bramen H.S.	440352 25 4607283.07 1708	11901
20	Nepervilia City Hall	404209.07 4625007.66 1704	94002
71	Northbrook Winter Plant	G1853.24 4005562.78 1708	14701
22	Schiller Park IEPA Trailer	427390.44 4644283.31 1703	13103
10	Summir Glavis Elementary School	433134.91 4629007.80 1703	13903
-34	THE REAL PROPERTY AND AND ADDRESS OF	THE REAL PROPERTY OF	Citing -
26	Chicago Carver H.S.	50071 05 4511812 47 1708	CORD .
27	Chicago Cermak Pump Station	445450.82 4535656.70 1707	0026
28	Chicago Comm ED	440580.96 4622421.39 1705	0075
29	Chicago Jardine Wester Plant	449520.78 4636088.72 1708	0072
50	Chicago Willis Towar	447259.84 4130533.43 17091	10042
31	Chicago CTA Baltsing	447807.81 0.35344.48 1703	10053
ñ	Chicago South matter Primatory Plant	43470L37 452202204 1701	10052
	Chicago Springfield Plano Station	440003 88 4540954 22 12635	0057
	Chicago Taft H.S	434390.00 4545967.46 17025	1000
36	Oblicage University of Chicago	450011.00 4525726.33 17030	2054
37	Chicago Washington H.S.	455116.70 4615183.90 17080	1022
	Chicago Maytal: Pump Station	477898.32 4645216.44 17031	A052
19	Bandwills Svos Chimiste Stellar	AUNIT.E3 4434458.00 17019	1001
41	Champains Booker T. Weshinston FlameStary School	200236.97 ALC7227.55 12010	0005
42	Decatur (EPA Trailer	335818.04 4414793.00 17115	0013
43	Effinghame Central Junior H.S.	156000.19 4325369.00 17040	1001
44	Houston Baldwin Site 2- IEPA Trailer	265745 53 4229049.50 17157	1000
45	Kalght Provide Township	357489.72 4216177.00 17065	0002
4	Maryville Southwest Cable TV	242401.50 A290595.00 17119	1009
-	Nount Cermai Division Street	432441.00 40560/7/00 57105	0001
-	Milwood IEPA Traile:	2004105 4304698.50 17117	0002
30	Normat (SU Physical Plant	230837 58 A497250.90 17113	2003
51	Oglesby IEPA Trailer	328401.31 4575311.00 17099	DAUCT7
57	Peorle City Office Building	281656.22 4508316.50 17148	0487
-1-	Perkin Fire Statistic 3	275274.81 4452892.00 17179	06234
54	Peoria Commercial Building	279203.50 4505/44.50 17549	2236
38	Peurla Fire Station &	279/0/.48 650/328.50 17148	2284
5	Lowes Park Awale Elementary School	#22129_A1 (620H#1.00 17201	2023
51	Rockford City Hall	327031.72 4681606.50 17201	Int
50	Rockford Winnebago County Health Department	\$27353.16 4681107.00 17200	ers.
60	Springfield Sewage Treatment Plant	278158.03 4408540.50 17167	3008
£1	Springfield Public Health Warehouse	277128.53 4413724.50 17187	3710
82	Saringfield Illinois Agriculture Building	273728.00 4413449.00 17157	1012
63	Springituld Federal Batklins	271312.59 4406912.50 17167	2008
	Swames Village Meintscone Bulling	219082.08 4210828.00 17168	1000
44	Decement Adve Ser	111000.00 4414901.00 17115	2110
57	Mapietos Catepiller Plant	257429.00 4499834.00 171434	210
-	Parez Elementary School	AISMILID 4073980.00 17031	110
67	Rockford J. Rubin and Company	527440.00 4578637.00 17292	<b>110</b>
70	Starling Sault Medical Clinic	279004-00 4628822.00 171554	2130
71	Alton Sill Dentel Clinic	767754.54 4305500.00 17118	4009
72	Alton Gara Garton Geneniary School	747508-00 4508608.00 173350 367218 68 4373641 PA 17141	100
7.8	Schumpfordia RADS Trailar	757101.44 4258007.00 171140	1007
75	Granite City Fire Station 1	744777.63 4287873.00 17318	007
76	Granite City Air Products	747522.48 4286713.50 17115	CLG
77	Back Island Arsanal	707188.75 4598886.00 17161	1002
78	South Rosena Grede School	755353.00 4901896.50 171191	:020
79	Wood Siver Water Treatment Plant	751122.13 4305295.00 171190	1007
-	Jerseyville illini sunior %.S.	783340,00 4883451.50 170630	.001
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n	Quincy John Wood Commany College	THERE & AND	VITA
n 22	Granter City Genevay Medicat	748300.44 4287426.50 17119	10214



# Electronic Filing - Recived, Clerk's Office : 11/30/2012 \* \* \* \* PCB 2013-024 \* \* \* \* \* Table A3 2010 Site Directory

AQS (D	County	City	Address	CBSA / MSA / Area Represented	Latitude Longitude	Owner / Operator
17-001-0007	Adams	Quincy	John Wood Canm. College 1301 South 48th St.	Quincy, IL-MO	+39.91540937 -91.33566832	IL ÉPA
17-010-1001	Champaign	Bondville	State Water Survey Township Rd. 500 E.	Champaign-Urbana, IL	+40.05224171 -88.37254916	IL EPA/SWS
17-019-0004	Champaign	Champalgn	Booker T. Wesh. Elem Sch. 606 E. Grove	Champaign-Urbana, IL	+40.1237982	IL EPA
17-031-0001	Cook	Alsip	Village Garage 4500 W. 123rd St.	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.6709919 -87.7324569	CCDEC
17-031-2001	Cook	Blue Island	Eisenhower High School 12700 Sacramento	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.66210943 -87.69646852	CCDEC
17-031-0060	Cook	Chicago	Carver High School 13100 S. Doty	Chicago-Naperville- Michigan City, IL-IN-	+41.85651758	CCDEC
17-031-0026	Cook	Chicago	Cermak Pump Station 735 W. Harrison	Chicago-Naperville- Michigan City, IL-IN-	+41.87372041	CCDEC
17-031-0076	Cook	Chicago	Com Ed Maintenance Blog. 7801 Lawndale	Chicago-Naperville- Michigan City, 1L-IN-	+41.75139998 -87.71348815	CCDEC
17-031-0063	Cook	Chicago	CTA Building 320 S. Franklin	Chicago-Naperville- Michigan City, IL-IN-	+41.877628 -87.835027	IL EPA
17-031-0072	Cook	Chicago	Jardine Water Plant 1000 E. Ohio	Chicago-Naperville- Michigan City, IL-IN-	+41.89581227 -87.60768329	IL EPA
17-031-0052	Cook	Chicago	Mayfair Pump Station 4850 Wilson Ave.	Chicago-Naperville- Michigan City, 1L-IN-	+41.98548483 -87.74992806	CCDEC
17-031-0110	Cook	Chicago	Perez Elementary School 1241 19th St.	H.G. Kramer	+41.855917 -87.058419	CCDEC
17-031-0050	Cook	Chicago	Southeast Police Station 103rd & Luelia	Chicago-Naparville- Michigan City, IL-IN- Wi	+41.70758959 -87,58857386	CCDEC
17-031-0032	Cook	Chicago	South Water Filtration Plant 3300 E. Cheitenham Pl.	Chicago-Naperville- Mtchigan City, IL-IN- WI	+41.75583241 -87.54534987	CCDEC
17-031-0057	Cook	Chicago	Springfield Pump Station 1745 N. Springfield Ave.	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.91288212 -87.72272345	CCDEC
17-031-1003	Cook	Chicago	Taft High School 8545 W. Huribut St	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.98433233 -87.7920017	CCDEC
17-031-0064	Cook	Chicago	University of Chicago 5720 S. Eille Ave.	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.79078688 -87.60164649	CCDEC
17-031-0022	Cook	Chicago	Washington High School 3535 E. 114th SL	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.88716544 -87.53931548	CCDEC
17-031-0042	Cook	Chicago	Wills Tower Wacker at Adams	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.87898018 -87.63555553	IL EPA
17-031-4002	Cook	Cicero	Cook County Trailer 1820 S. 51st Ave	Chicago-Naperville- Michigan City, IL-IN- Wi	+41,85524313 -87,7524697	CCDEC
17-031-0005	Cook	Cicero	Liberty School 13th St. & 50th Ave.	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.86442642 -87.74890238	CCDEC
17-031-4007	Cook	Des Plaines	Regional Office Building 9511 W. Harrison St	Chicago-Napenville- Michigan City, IL-IN-	+42.08028469 -87.86322543	IL EPA
				7 21		

# Table A3 2010 Site Directory

AQS ID	County	City	Address	CBSA / MSA / Area Represented	Letitude Longitude	Owner / Operator
17-031-7002	Cook	Evanston	Water Pumping Station 531 E. Lincoln	Chicago-Naperville- Michigan City, IL-IN- WI	+42.06185724 -87.67416716	IL EPA
17-031-1601	Cook	Lemont	Cook County Trailer 728 Houston	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.66612034 -87.99056969	CCDEC
17-031-1016	Cook	Lyona Township	Village Hali 50th St & Glencoe	Chicago-Naperville- Michigan City, IL-IN- WI	+41.80118701 -87.8319447	IL EPA
17-031-6003	Cook	Maywood	4th District Court Building 1500 Maybrook Dr.	Chicago-Naperviile- Michigan City, IL-IN- Wi	+41.87220158 -87.8281848	CCDEC
17-031-6008	Cook	Maywood	4th District Court Building 1500 Maybrook Dr.	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.8728972 -87.82587249	CCDEC
17-031-8004	Cook	Maywood	Com Ed Maintanance 1505 S. First Ave	Chicago-Naperviite- Michigan City, IL-IN- Wi	+41.87211684 -87.82908025	CCDEC
17-031-1901	Cook	Midlothlan	Breman High School 15205 Crawford Ave	Chicago-Napervilie- Michigan City, IL-IN- Wi	+41.61503786 -87.71556004	CCDEC
17-031-4201	Cook	Northbrook	Northbrook Water Plant 750 Dundes Rd.	Chicago-Naperville- Michigan City, IL-IN- Wi	+42.13999619 -87.79922692	IL EPA
17-031-3103	Cook	Schiller Park	IEPA Trailer 4743 Mannheim Rd.	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.98519348 -87.87826473	IL EPA
17-031-3301	Cook	Summit	Graves Elementary School 60th St. & 74th Ave.	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.78276801 -87.60537679	CCDEC
17-043-8001	DuPage	Lisla	Morton Arboretum Route 53	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.81304939 -88.0728269	IL EPA
17-043-4002	DuPage	Neperville	City Hall 400 S. Eegle St.	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.77107094 -88 15253365	IL EPA
17-049-1001	Effinghem	Effingham	Central Junior High School Route 45 South	Effingham, IL	+39.06715932 -88.54893401	il epa
17-065-0002	Hamilton	Knight Preirie	Ten Mile Cree DNR Office State Route 14	Mt. Vernon, iL	+38.08215518 -88.6249434	IL EPA
17-077-0004	Jackson	Carbondale	Maintanance Building 607 E. College	Carbondale, IL	+37.72308571 -69.20928881	IL EPA/9IU
17-083-1001	Jerseyville	Jerseyville	illini Junior High School Liberty St. & County Rd.	St. Louis, MO-iL	+39,11053947 -90.32407986	IL EPA
17-089-0007	Kane	Aurona	Health Department 1240 N. Highland	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.78471651 -88.32937361	IL EPA
17-089-0005	Капе	Elgin	Larsen Junior High School 665 Dundee Rd.	Chicago-Naperville- Michigan City, ItIN- WI	+42.04914776 -88.27302029	IL EPA
17-089-0003	Kane	Elgin	McKinley School 258 Loveli St.	Chicago-Naperville- Michigan City, IL-IN- Wi	+42.050403 -88.26001471	IL EPA
17-097-1002	Laike	Waukegan	North Fire Station Golf & Jackson Sts.	Chicago-Naperville- Michigan City, IL-IN- Wi	+42.3867058 -87.84140622	IL EPA
17-097-1007	Lake	Zlon	Camp Logan Itilinois Beach State Park	Chicego-Naperville- Michigan City, iL-IN- Wi	+42.4875733 -87.81004705	il epa
17-099-0007	La Salle	Oglesby	308 Portland Ave.	Ottawa-Streator, IL	+41.29301454 -89.04942498	IL EPA

# 2010 Site Directory

AQ9 ID	County	City	Address	CBSA / MSA / Area Represented	Latitude Longitude	Owner / Operator
17-115-0013	Macon	Decatur	IEPA Trailer 2200 N. 22nd	Decatur, iL	+39.86683389 -88.92559445	IL EPA
17-115-0110	Macon	Decatur	Mueller 1226 E. Garfield	Mueller	+39.862542	il EPA
17-117-0002	Macoupin	Nilwood	IEPA Trailer Heaton & Dubois	St. Louis, MO-IL	+39.39607533	IL EPA
17-119-0008	Madison	Alton	Clara Barton Elementary School 409 Main St.	St. Louis, MO-IL	+38.89018605	IL EPA
17-119-2009	Madison	Alton	SIU Dental Clinic 1700 Annex St.	St. Louis, MO-IL	+38.90308534 -90.14316803	IL EPA
17-119-2007	Madison	Edwardsville	RAPS Trailer Poag Rd.	St. Louis, MO-IL	+38.795235 -90.039756	IL EPA
17-119-0010	Madison	Granite City	Air Products 15th & Madison	St. Louis, MO-IL	+38.69443831 -90.15395426	IL EPA
17-119-1007	Madison	Granite City	Fire Station #1 23rd & Madison	St. Louis, MO-IL	+38.70453426 -90.13987484	IL EPA
17-119-0024	Madison	Granite City	Gateway Medical Center 2100 Madison Ave.	St. Louis, MO-1L	+38.7006315 -90.14476287	IL EPA
17-119-1009	Madison	Maryville	Southwast Cable TV 200 W. Division	St. Louis, MO-IL	+38.72657262 -89.95996251	IL EPA
17-119-1010	Madison	South Roxana	South Roxana Grade School Michigan St.	St. Louis, MO-IL	+38.82830334 -90.05843262	IL EPA
17-119-3007	Madison	Wood River	Water Treatment Plant 54 N. Walcott	St. Louis, MO-IL	+38.68066947	IL EPA
17-111-0001	McHenry	Cary	Cary Grove High School 1st SL & Three Oaks Rd.	Chicago-Naparville- Michigan City, IL-IN- Wi	+42.22144166 -88.24220734	IL EPA
17-113-2003	McLean	Normal	ISU Physical Plant Main & Gregory	Bloomington- Normal, IL	+40.51873537 -88.99689571	IL EPA
17-143-0110	Peorta	Bartonvilla	Pump Station Sanitation Rd.	Keystone Steel & Wire	+40.653703 -89.643375	IL EPA
17-143-0210	Peoria	Mapleton	Residential 9725 W. Wheeler Rd.	Caterpillar-Mapleton Plant	+40.562633 -89.747114	IL EPA
17-143-0037	Peorla	Peoria	City Office Building 613 N.E. Jefferson	Peoria, iL	+40.697007 -89.58473722	IL EPA
17-143-0038	Peorta	Peorla	Commercial Building 1005 N. University	Peorla, IL	+40.70007197 -89.61341375	IL EPA
17-143-0024	Peoria	Peoria	Fire Station #8 MacAnthur & Hurlburt	Peoria, IL	+40.68742038 -89.60694277	IL EPA
17-143-1001	Peorla	Peorta Heights	Peorla Heights High School 508 E. Glen Ave.	Peorta, IL	+40.74550393 -89.58586902	IL EPA
17-157-0001	Randolph	Houston	iEPA Trailer Hickory Grove & Failvlew	Houston, IL	+38.17627761 -89.76845662	IL EPA
17-181-3002	Rock island	Rock Island	Rock Island Areenal 32 Rodman Ave.	Davenport-Moline- Rock island, IA-IL	+41.51472897 -90.51735026	IL EPA
17-167-0012	Sangamon	Springfield	Agricultural Building State Fair Grounds	6pringfield, IL	+39.83192087 -89.64416359	IL EPA
17-167-0013	Sangamon	Springfield	Blandco Bullding 3050 Mayden Rd.	Springfield, IL	+39.645358 -89.597457	IL EPA
17-167-0008	Sengamon	Springfield	Federal Building 6th St. & Monroe	Springfield, IL	+39.7993092 -89.64760789	IL EPA
17-167-0010	Sangamon	Springfield	Public Health Warehouse 2675 N. Dirkson Parkway	Springfield, IL	+39.84412188 -89.60483919	IL EPA
# Table A3 2010 Site Directory

AQS ID	County	City	Address	CBSA / MSA / Area Represented	Latitude Longitude	Owner / Operator
17-167-0008	Sangamon	Springfield	Sewage Treatment Plant 3300 Mechanicsburg Rd.	Springfield, IL	+39.80081377 -89.59122532	IL EPA
17-163-0010	St. Clair	East St. Louis	RAPS Trailer 13th & Tudor	St. Louis, MO-IL	+38.61203448 -90.16047663	IL EPA
17-163-4001	St. Clair	Swansea	Village Maintenance Building 1500 Caseyville Ave.	St. Louis, MO-IL	+38.52963143 -89.99284962	IL EPA
17-179-0004	Tazeweil	Pekin	Fire Station #3 272 Derby	Peorla, IL	+40.55646017 -89.65402807	IL EPA
17-185-0001	Webash	Mount Carmel	Division St.	Gibson County, IN- Mt. Carmel, IL	+38.397276 -87.773631	Indiana
17-185-1001	Wabash	Rural Wabash County	South of State Route 1	Gibson County, IN- Wabash County, IL	+38.369498 -87.834466	Indiana
17-195-0110	Whiteside	Sterling	Sauk Medical Clinic 705 West 3rd St.	Sterting Steal Co	+41.788383 -89.706728	IL EPA
17-197-1011	Will	Braidwood	Com Ed Treining Center 36400 S. Essax Rd.	Chicago-Naperville- Michigan City, 1L-IN- Wi	+41.22153707 -88.19096718	IL EPA
17-197-1002	Will	Joliet	Pershing Elementary School Midland & Campbell Sts.	Chicago-Naperville- Michigan City, IL-IN- Wi	+41.52688509 -88.11647381	IL EPA
17-197-0013	Wil	Joliet	Water Plant West Route 6 & Young Rd.	Chicago-Naperville- Michigan City, IL-IN- Wi	+41,45998344 -88,18201915	IL EPA
17-201-2001	Winnebago	Loves Park	Maple Elementary School 1405 Maple Ave.	Rockford, IL	+42.33498222 -69.0377748	IL EPA
17-201-0011	Winnebago	Rockford	City Hall 425 E. State	Rockford, IL	+42.26767353 -89.08785092	IL EPA
17-201-0013	Winnebago	Rockford	Health Department 201 Division St.	Rockford, IL	+42.26308105 -89.09276716	IL EPA
17-201-0110	Winnebago	Rockford	J. Rubin & Company 305 Peoples Ave.	Gunite Corporation	+42.240867 -89.091467	IL EPA

# Table A4 2010 Monitoring Directory

AQS ID	City	8	CO2	NO2	Ozone	Plil10	PM2.5	PM2.5 AQI	PM2.5 Speclation	\$02	VDC	Toxics	TSP Pb, Motala	Wind System	Bolar	Meteorological
17-001-0007	Quincy															
17-019-0004	Champaign															
17-019-1001	Bondville															
17-031-0001	Alsip				N/C											
17-031-0022	Chicago Washington High School					C										L_
17-031-0026	Chicago Cernet Pump Station															
17-031-0032	Chicago South Weber Fitration															
17-031-0042	Chicago Wills Tower															
17-031-0050	Chicago Southeast Police Station															
17-031-0052	Chicago Mayhiir Pump Station															
17-031-0057	Chicago Springfield Pump Station															
17-031-0060	Chicago Carver High School															
17-031-0083	Chicago CTA Bulking															
17-031-0084	Chicago University of Chicago															
17-031-0072	Chicago															
17-031-0078	Chicago Com Ed Melmance				1.2.1											
17-031-0110	Chicago Great Contentary															
17-031-1003	Chicago Tell High School															
17-031-1016	Lyons Township					c	16 (s) (g)									
17-031-1601	Lemont															
17-031-1901	Midlothlan	-		-		an Sinda An Sinda									 	
17-031-2001	Blue Island	1														
Active Monitor	Site/Montion	500	Mont	of Ren	bavon	C≓ T≔	Contin	level i	PM10 monito	י. ער						

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# Table A4 2010 Monitoring Directory

AQS ID	City	0	02	02	zone	M10	M2.5	2,5 AQI	M2.5 Speciation	02	oc	ortes	SP Pb, Metals	find System	olar	letteorologicat
17-031-3103	Schiller Park	0	0	2	0	<u>م</u>	<b>6</b>	<b>A</b>	0.	Ø	>	L AND	F	5	60	2
17-031-3301	Summit	No. 100				100				-	10.000			AND THE R		_
17-031-4002	Cicero Cooli Courte Trailer												一個人的面包			
17-031-6005	Cicero Liberty School	STREET AND		62,686,771												
17-031-4007	Des Plaines				1997 - 19											
17-031-4201	Northbrock	T								Т						
17-031-6003	Maywood 4 <sup>®</sup> District Court	122.077 #190														
17-031-6004	Maywood Com Ed Metalenance															
17-031-6006	Maywood 4 <sup>th</sup> Disbict Court															
17-031-7002	Evanaton															
17-043-4002	Naperville						di									
17-043-6001	Lisle															
17-049-1001	Effinghem				ار ار محر در									Concert At All	-	
17-065-0002	Knight Prairie											<u> </u>				
17-077-0004	Carbondale											 			_	
17-083-1001	Jerseyville															
17-089-0003	Eigin McKininy School						時間									
17-089-0005	Elgin Lamen Jr. High School										ĺ		ļ			
17-089-0007	Aurona															
17-097-1002	Waukegan			-										National And	1972-1070	(Arrow 7
17-007-1007	Zion														設備	( and a
17-099-0007	Ogiesby					C	Harrison An Indiana An Indiana									
Active Monitor	Site/Monitor	C = Continuous PM10 T = Trace level monitor 1 = Northbrook also measures continuous mercury														

# Table A4 2010 Monitoring Directory

AQS ID	City	8	C02	NO2	Ozone	PM10	PLA2.6	PN2.6 AQI	PM2.6 Speciation	802	VOC	Toxics	TSP Pb, Metals	Wind System	Solar	Meteorological
17-111-0001	Cary															
17-113-2003	Normal															
17-115-0013	Decatur IEPA Trater															
17-115-0110	Decalur Mue ar															
17-117-0002	Nilwood									Real		54				
17-119-0008	Alton Clare Barlon Elementary															
17-110-2009	Alton SiU Dentel Clinic															
17-119-0010	Granite City Al Products															
17-119-0024	Granite City Gataway Medical Center	1				( Section 1) ( Section 1)										
17-119-1007	Granite City Fire Station #1	1				c										
17-119-1009	Maryville														_	
17-119-1010	South Roxana															
17-110-2007	Edwardsville													Contraction of the second		
17-119-3007	Wood River	-														
17-143-0024	Péoria Fire Stallon #3															
17-143-0036	Peorta Commercial Building												_			
17-143-0037	Peoria City Office Building												1 4			
17-143-0110	Bortonville															
17-143-0210	Mapleton						*									
17-143-1001	Peoria Heights															
17-157-0001	Houston															
17-161-3002	Rock Island															
Active Monitor	Site/Monitor	San	Monika	Rem	owed	C = T = '	Contin Trace	uous F level n	PM10							

# Table A4 2010 Monitoring Directory

AQS ID	City	CO	C02	NO2	Ozone	Physics	PM2.6	PM2.5 ACI	PIM2.6 Speciation	S02	VOC	Toxics	TSP Pb, Metals	Wind System	Solar	Meteorological
17-163-0010	East St. Louis					$\frac{1}{2}$										
17-163-4001	Swansea															
17-167-0006	Springfield Sewege Treatment Plant								ĺ							
17-167-0008	Springfield Federal Building															
17-167-0010	Springfield Public matt															
17-167-0012	Springfield Agricultural Building															
17-187-0013	Springteld galactic science															
17-179-0004	Pekin															
17-185-0001	Mount Carmel									49						
17-185-1001	Rural Wabash County									的波波						
17-195-0110	Sterling															
17-197-0013	Jollet Water Plant West															
17-197-1002	Joliet Penting Elementary															
17-107-1011	Braldwood															
17-201-0011	Rockford City Hell															
17-201-0013	Rockford Health Department						N.									
17-201-0110	Rockford Bitter & Camping													an attantant		
17-201-2001	Loves Park															
Active Monitor	Site/Monitor	SILA	Monit	or Rem	Deve	C= T≖	Contin	level n	PM10 nonito	r						

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Ð	NAME	XCOORD YCOORD AIRS CODE
0	Alsip Vilage Garage	439028.14 4613506.98 120310001
z	Size taland Eisenhower H.S.	442015.58 4612496.03 170312001
э	Braidwood Comm ED Maintenance	400273.37 4554033.85 171971011
4	Carry Grove H.S.	397480.49 4675110.16 171110001
6	Cicero Liberty School	437553.22 483377.22 170314002
7	Des Plaines Regional Office Building	428543.56 4656797.86 170314007
8	Eigh Lacsen Junior H 5.	394651.06 4856017 29 170890005
9 20	Eight Water Pumping Science	294074.74 4656154.53 17059002 444223.82 4656657.88 170317002
11	Joliet Pershing Bementary School	406854.40 4597853.20 171971002
12	folier Water Plant West	401290.73 4590491.30 171970013
13	Lemant / EPA Trailer	417535-45 4613403-03 170311601 410890.26 4629582 92 170436001
15	Leons Township Village Hall	430677.97 4528036.70 170811016
16	Mayarazzi 1500 Maybruck Drive Platform	431442.48 4635917.35 170316003
17	Mayerood Conus EO Maintenance	431466.96.4635994.08.120316004
19	Midlothian Brenaet H.S.	440382.95 4607283.07 170311901
20	Naperville City Hall	404209.07 4625007.66 170434002
24	Northbrook Weler Plant	433953.24 4665668.78 170314201
13	Summit Graves Elementary School	433134.91 4626002.30 170313301
14	Waukingan North Fire Station	430740.20 4693056.11 170971002
25	Zion Camp Logan	433408.66 4702013.37 170971007
26	Chicago Carver H S. Chicago Cermak Puzzo Station	45650.82 4635956.70 170310026
Ш	Chicago Comm ED	440680.96 4622421.39 170310075 MERCE
29	Chicago Jardine Water Plant	449590.78 4638386.72 170310072
30	Chicago Wittis Tower	447259.34 4636653.43 170310042
31	Chicago South Water Filtration Plant	454702.37 4522802.04 170910032
B	Chicago Southeast Police Station	452696.62 4617485.15 170310050 High Dealers WA
м	Chicago Springlield Pump Station	440063.88 4640354.22 170310057
55 36	Chicago Latvertity of Chicago	45459011.00 4626726.33 17031003
27	Chicago Washington H.S.	455116.70 4615183.98 170310022 DACIDON
38	Chicago Mayfair Pump Station	437859.32 4546216.44 17091005Z
39 40	Sondyille SWS Climite Station	392977.61 4434458.00 170197002 205228.88 4177389.00 120720004
41	Champaign Booker T. Washington Elementary School	395236.97 4442222.50 170190004 schu
42	Decatur JEPA Trailer	335319.94 4414769.00 171150013 ADAMS
	Ethogham Central Junior H.S.	36600.29 432369.00 170491001
45	Knight Pairle Township	357489.72 4216177.00 170650002
46	Maryville Southwest Cable TV	242682.59 4290695.00 171191009
9	Mount Cannel Division Street	432443.06 4250177.00 171850001
43	Nilwood IEPA Trailer	258043.88 436498.50 171170002
50	Normal ISU Physical Plant	330837.55 4487250.50 171132009
51	Oglesby ISPA Trailer	328401.31 4573311.00 170990007
54	Pedra City Onice Soliting	(D1010124 - 303330 30 17 ALAVAN)
	Pekin Fire SLEGOR 5	275278.31 4492892.00 171790004 CAU
54	Peorle Commercial Building	275274.31 4492992.00 171750004 CAUL 279205.56 4508748.50 171490036
54 55	Peorie Commercial Building Peorie Fire Scaton 8	275278.31.4492492.00.171790004 CAUE 279205.56 4508748.50 171430036 279707.38 4507329.50 171430024
54 55 56	Peorie Consumercial Building Peorie Consumercial Building Peorie Fine Scattor & Peorie Heights H S Insue Serie Menie Stewa etwo School	275278.31 4492492.00 171790004 CANTR 279205.56 4508748.50 171430036 279507.38 4507329.50 171430024 281679.94 4513723.50 171430024 33723.44 4669810.00 12007003
55 55 57 58	Petity vice surport & Peorie Commercial Building Peorie Fire Station & Peorie Heights H S Larves Park Maple Elementary School Activitat City Nati	275274.31 4492(92:00 171790004 Califs 275205.50 4500748.50 17146005 2757073 84 073275.50 171430024 281679.54 4513723.50 171430024 322729.173 4666981.00 172070201 322729.173 4666981.00 172070201
55 55 57 58 59	Petity Hie Station 3 Peoria Consumeratal Building Peoria Heights H S Loves Park Maple Elementary School Rockford City Hall Rockford Winnebago County Health Department	275174.31 4492(992.00 171790004 Califs 2790035 90 4500748.50 171460005 27907035 80 4507325.50 171430024 281679.94 4513723.50 171431001 3227251.72 46616505 60 177012003 327391.72 46616505 60 172010011 327392.16 4681107.00 172010013
555555550	Petrin Fire Suttoon 3 Peoria Consumeratal Building Peoria Fire Scation 8 Peoria Heights H S Loves Park Maple Elementary School Rockford Winnebago County Health Department Springlis (Ssewage Treatment Plant County Health Number Plant	275274.31 4492(992.00 171790004 Califie 275070.38 495735:50 17430024 281679.94 4513723.50 171430024 2821679.94 4513723.50 171430024 322731.72 466186106 50 172070003 322731.72 4661807.00 172070003 273932.16 4681107.00 172070003 273935.16 44058405 00 171670006 373955.64 44028405 00 171670006
55 55 57 55 59 60 44 62	Presin vice statuon a Peorie Commercial Building Peorie Fire Station # Peorie Heights H S izves Park Maple Elementany School Rockford Winnebago County Health Department SpringBiels Sewage Treatment Plant SpringBiels Dublic Health Warehouse SpringBiels Vublic Health Warehouse SpringBiels Vublic Health Warehouse	275274.31 4492492.00 171790004 CANT 275005.50 4500748.50 171430005 275707.38 4507323.50 171430004 321679.34 4513723.50 171431001 322731.172 466180.00 172012003 32731.172 466180.00 1720710013 327325.16 4408940.50 171670101 2773156.01 4408940.50 171670102 277375.00 44137459.00 173670102
5555755966468	Pretin Fire Suttoon 3 Peorie Commercial Building Peorie Fire Station 8 Peorie Heights H S Inves Park Maple Elementary School Rockford City Heil Rochford Winnebago County Heilth Department Springlied Sevager Treatment Plant Springlied Sevager Treatment Plant Springlied Fedical Building Springlied Hilling School The Suiding	275274.31 4492492.00 171790004 CANT 279007.38 4507423.50 171430005 279707.38 4507423.50 171430024 321679.34 4513723.50 171431001 322725.14 4661981.00 172071003 327351.51.03 4406840.50 1720710013 273155.63 4415724.50 171570006 277156.53 4415724.50 171570010 27312.50 4415724.50 171570010
55555556646666	Prein vice statuon 3 Peorie Commercial Building Peorie Fire Station 8 Peorie Fire Station 8 Peorie Heights H 5 (areas Park Maple Elementary School Rockfand City Heil Rockfand City Heil Rockfand City Heil Rockfand Dity Heilth Department Springlied Sewager Treatment Plant Springlied Public Health Warehouse Springlied Public Health Warehouse Springlied Public Health Warehouse Springlied Firefan Building Swarse a Village Maintenance Building	275274.31 4492492.00 172790004 CANT 279205.50 450742.50 172430026 279707.38 450742.50 172430024 281679.94 4513723.50 172430024 281679.94 4513723.50 172431001 322724.24 4668160,00 1727010011 327392.26 46610700 172670006 277126.53 4415724.50 171670010 278126.00 4415724.50 171670010 278126.00 4415724.50 171670010 27932.54 4406810.00 172670028 239022.06 456812600 172670028
545555555560440864666	Pretry File Station 3 Peorie Conuncetal Building Peorie File Station 8 Peorie File Station 8 Peorie Heights H 5 Loves Park Maple Elementary School Rockfand City Heil Rockfand City Heil Rockfand City Heil Rockfand Sewage Treatment Heat Springlield Sewage Treatment Building Springlield Public Heatth Warehouse Springlield Federal Building Swamse a Village Mainteanance Building Battornille Fung Station	275274.31 4492492.00 171790004 Colina 27200550 45007250 171790004 Colina 27200550 450072550 17430004 2816570,594 4512723.50 17430004 2816570,594 4512723.50 17430004 2816570,594 4512723.50 17207003 282781.172 4681505 60 17207003 282781.172 4681505 60 172070013 282781.52 4681507 60 172070016 2777156.53 4413724.50 171870012 282728.00 4412445 n0 171870012 282728.00 441245 n0 171870012 282728.00 441578.00 171870012 282728.00 441578.00 171870012 282728.00 441578.00 171870012 282728.00 441578.00 171870012 282728.00 441578.00 171870012 282728.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 4415788.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 441578.00 171870012 282788.00 441578.00 171878.00 441578.00 171878.00 441578.00 171878.00 440788.00 4415788.00 44157
5 5 5 5 5 5 5 5 6 0 0 0 0 0 0 0 0 0 0 0	Pretry vice statuon 3 Peorie Commercial Building Peorie Fire Station 6 Peorie Heights H 5 izrees Park Maple Elementary School Rockford City Hall Rockford City Hall Springlield Severage Treatment Plant Springlield Federal Building Saurse Village Mainteanance Building Bartonville Pump Station Decator Mueller Magieron Citagellar Plant	275274.31 4492492.00 171790004 Control 272005.50 450074350 17146005 272005.50 450074350 17146005 275707.58 450723.50 171430024 281579.94 4513723.50 171430024 281579.94 4513723.50 171430024 281579.94 4513723.50 171671003 272791.26 4681107.00 172010013 272791.26 4681107.00 172010013 277156.54 4681407.00 172010013 277156.54 4681407.00 172010013 277156.54 4681407.00 172010013 277156.54 4681407.00 172010013 277156.54 4681407.00 172010013 27312.59 4408840.50 171570012 27332.59 4408840.50 171570012 27332.59 4408842.50 17267008 233288.00 44343400 17150110 233288.00 4434303.00 17150110 233288.00 4434303.00 17150100 25172.50 172460210 245174.50 171460210 25172.50 25172.50 17440210 25172.50 25172.50 17440210 25172.50 25172.50 25172.50 17440210 25172.50 251752.50 251752.50 251752.50 251752.50 251752.50 251752.50 251752.50 251752.50 251752.50 251752.
94 55 57 58 59 60 AL 62 63 64 66 67 68	PRUP His Station 3 Peoria Commercial Building Peoria Heights H S Ignes Park Maple Elementary School Rockford City Hall Rockford City Hall Springlield Public Halth Warehouse Springlield Public Halth Warehouse Springlield Federal Building Bartonville Pump Station Decatur Maeller Magketon Categoliar Plant Perce Elementary School	275274.31 4492(99.20) 171790004 CAN 279003.50 4500748.50 171450004 2790703.80 4507325.50 171430024 281679.94 4513723.50 171430024 2827351.72 4661956 50 17207001 3227351.72 4661956 50 17207001 327352.16 4681107.00 172010013 277356.01 440284050 171670016 277372653 440284050 171670010 275328.00 4412449.00 171670010 275328.00 4412449.00 171670012 275328.00 4412449.00 171670012 275328.00 4412449.00 171670012 275328.00 4412449.00 171670012 275328.00 4412449.00 171670012 275328.00 4412449.00 171670012 275328.00 4412449.00 171670012 276515.00 4529674.00 171430110 333888.00 444308.00 171150110 257423.00 443308.00 171430210
34 55 57 55 59 60 44 63 65 66 66 67 58 69 7	Pretin File Station 3 Peorie Commercial Building Peorie Fire Station 8 Peorie Heights H S Surves Park Maple Elementany School Rockford Winnebago County Health Department Springlield Sewage Treatment Plant Springlield Sewage Treatment Plant Springlield Sewage Treatment Plant Springlield Sewage Treatment Plant Springlield Federal Building Swarsse Village Maintenance Building Statoroville Pump Station Decatur Mueller Mapleton Categoliar Plant Peric Demenstry School Rockford J Aukin and Company	275274.31 4492492.00 171790004 CAN 279003.50 4500748.50 171430004 281679.94 4513723.50 171430004 281679.94 4513723.50 171430004 2827811.72 466196.50 172071001 2827811.72 466196.50 172071001 282781.72 466196.50 172071001 27712653 46619700 17201001 27712653 44058405 171570106 27712653 44058405 171570106 279125500 44028405 10 171670012 276915.00 4509674.00 171430110 235982.00 4443854.00 17150710 25742.00 4453854.00 171430110 25742.00 4453854.00 171450110 25742.00 4453850.00 171450110 25742.00 4453850.00 171450110
34 55 55 55 55 56 66 60 66 66 66 66 66 66 70 70 70	Pretin Fire Suttion 3 Peorie Commercial Building Peorie Fire Station 8 Peorie Fire Station 8 Peorie Heights H S Grees Park Maple Elementary School Rockford Winnebago County Health Department Springlield Sewage Treatment Plant Springlield Sewage Treatment Plant Springlield Sewage Treatment Plant Springlield Hillinois Agriculture Building Springlield Hillinois Agriculture Building Bartonville Fung Station Decator Maxiler Mapleson Categoliar Plant Perce Demensary School Rockford J Austin and Company Sterling Sauk Middiad Ulmic	275274.31 4492492.00 171790004 CAN 272005.50 4500748.50 171430004 27210707.38 4957325.50 171430024 281679.94 4513723.50 171430024 2821679.94 4513723.50 171430024 2827811.72 46816806.50 1720710013 272781.72 46816981.00 1720710013 273728.00 4408849.50 171670010 277126.53 4413724.50 171670010 277126.53 4413724.50 171670010 273728.00 4412449.00 171670010 273902.06 4412449.00 171670010 239082.06 4412449.00 171670010 239082.06 4412409.00 171670010 239082.06 4412409.00 17167010 239082.06 4412409.00 17140110 239082.00 4413409.00 17140110 257425.00 4453954.00 17140110 257426.00 4653882.00 171110110 275084.00 4653882.00 171110110 275084.00 4653882.00 171110110 275084.00 465382.00 171110110
355575550000000000000000000000000000000	Pretin Yes Suttoon 3 Peorie Commercial Building Peorie Fire Suttoon 8 Peorie Heights H 5 iures Park Maple Elementary School Rockfard City Hell Rochford Winnebago County Health Department Springlied Sevager Treatment Plant Springlied Federal Building Springlied Federal Building Springlied Federal Building Bartonville Pung Station Decator Mueller Mapleson Categoliar Plant Periz Dementary School Rockford J Audin and Company Sterling Schut Muelcal	275274.31 4492492.00 173790004 CANT 2750707.38 45074850 174430024 2251679.34 4513723.50 174430024 2251679.34 4513723.50 171430024 2251679.34 4513723.50 171430024 232781.172 4661840.00 1720710013 22781.50.01 44681840.00 1720710013 278156.00 44083405 00 1716700100 277156.53 4413724.50 171670010 279732.00 44134745 00 171670010 239082.06 42648278.00 171670010 239082.06 42648278.00 171670010 239082.06 444303.00 171670010 239188.00 444303.00 171150110 239188.00 444303.00 171150110 239188.00 444303.00 171150110 237461.00 4574837.00 17061011 27734.00 4574837.00 171670110 27734.00 4574837.00 17150110 27734.00 4574837.00 171501010 27734.00 4574837.00 17150010 27734.00 4574837.00 1715000 27734.00 4574837.00 1715000 27734.00 45748.00 17119000 27734.00 45748.00 17
9 \$5 \$5 \$7 \$5 \$6 GA GA GA GA GA GA GA DA	Presin Fire Station 3 Peorie Commercial Building Peorie Fire Station 8 Peorie Hights H 5 Isrvis Park Maple Elementary School Rockfard City Hell Rockford Winnebago County Health Department Springlield Sevager Treatment Plant Springlield Public Health Warehouse Springlield Public Health Warehouse Building Statemailer Maintenance Building Bactornality Maintenance Building Bactornality Fung Station Decastur Maufier Mapleson Categolitar Plant Perce Dementary School Bacticol J. Aution and Company Sterling Saut Nikoldal Clinic Alton Cara Bacton Rementary School Last St. Louis AAPS Troller	275274.31 4492492.00 171790004 Control 27202550 450073550 171840005 27202550 450074850 171840005 27207073 8407732550 171430004 2816979.94 4512732 50 171430004 2816979.94 4512732 50 171870013 227311.74 466981.00 172071001 327392.16 4661050 50 172070006 277118653 4413724.50 171870012 277318.25 4400824.25 171870012 277318.25 4400824.25 171870012 277318.25 4400824.25 171870012 277318.25 4400824.25 171870012 277318.25 4400824.25 171870012 277318.25 4400824.25 171870012 277318.25 440084.05 00 171870012 277318.25 4400824.25 17267008 230820 4453050 171870012 275040.0 4453050 171870012 257420, 0453050 171870010 257420, 0453050 17087010 1257420, 0453050 17087010 12574000 4533080.00 4453050 00 171810110 2574000 4530802.00 171810110 2574000 4530802.00 171810110 275064.00 4453080 00 171810110 275064.00 4453080 00 171810110 275064.00 4453080 00 171810110 275064.00 4453080 00 17181010 1274304.40 00 0000 774336.45 400900,00 171192009 747386.45 400900,00 171192009 747386.45 477551.00 17180010 20000 20000 20000 20000 2000000
355575500000000000000000000000000000000	Pretin File Station 3 Peorie Commercial Building Peorie Fire Station 8 Peorie Fire Station 8 Peorie Heights H 5 inves Park Maple Elementary School Rockfard City Heil Rockfard City Heil Rockfard City Heil Rockfard Winnehago County Heilih Department Springlied Public Health Warehouse Springlied Public Health Warehouse Statemed Public Health Mapleton Categoliar Plant Perce Dementary School Bat St, Louis RAPS Trailer Edwardsythe RAPS Trailer Edwardsythe RAPS Trailer	2753274.31 4492492.00 171750004 Control 27200550 450073250 174430024 27200550 4500742550 174430024 2730572350 174430024 2731572450 4513723.50 174530024 2731572451 46681605 00 172010013 2727552.60 4681607.00 172010013 27712653 4681607.00 172010013 27712653 4681607.00 172010013 27712653 4681607.00 172010013 27712653 4681607.00 172010013 27712653 4681607.00 171670012 277331.59 4400840.50 171670012 277331.59 4400840.50 171670012 277331.59 4400840.50 171670012 277331.59 4400840.50 171670012 277331.59 4400840.50 171670012 277331.59 4400840.50 171670012 277331.59 4400840.50 171670012 277331.59 4400840.50 171670012 277311.59 4400840.50 171670012 277311.59 4400840.50 171670101 27740104 57638200 00 171191010 277450140 4539820.00 171190101 275064.00 4539820.00 171190010 777351.50 44298020.00 171190008 747238.46 3407480.00 171190008 747238.46 34278210.00 171191007 747551.00 171182007
355575550000000000000000000000000000000	Prein Fire Station 3 Peorie Commercial Building Peorie Fire Station 8 Peorie Fire Station 8 Peorie Heights H 5 Loves Park Maple Elementary School Rockfand City Hall Rockfand City Hall Rockfand Sewage Treatment Plant Springlield Sewage Treatment Plant Springlield Public Health Warehouse Springlield Public Health Warehouse Springlield Federal Building Satamelle Fung Station Decatur Multer Mapleron Categoliat Plant Period Dementory School Rockford J. Audin and Company Stering Stub Medical Clinic Alton Care Bacton Rementary School East 5: Louis RAPS Trailer Edwardsville RAPS Trailer Edwardsville RAPS Trailer Edwardsville RAPS Trailer Edwardsville RAPS Trailer	275274.31 4492492.00 172190004 CAN 272005.50 4500748.50 17245005 2757073.84 05723.50 17430024 281579.94 4513723.50 171430024 281579.94 4513723.50 171430024 282351.72 4661656.50 172071001 322352.14 4661656.50 172071001 327352.16 4681107.00 172010013 277356.00 4432449.10 171670016 277325.00 4432449.10 171670010 295728.00 4432449.10 171670010 295728.00 4432449.10 171670010 295728.00 4432449.10 171670010 295728.00 4432449.10 171670010 295728.00 4432449.10 171670010 295728.00 4432449.10 171480210 455448.00 463398.00 171480210 455448.00 463398.00 17195010 177554.00 452982.00 17195010 177554.00 425782.00 17195000 74738.65 430948.00 17190000 75710.14 429607.00 17119007 74672.75 428 428773.00 17119007 747552.00 4268713.00 17119007
34\$5\$57\$55664886666668887777776777	PREIN York Statuon 3 Peorie Commercial Building Peorie Fire Station 8 Peorie Hingston 8 Peorie Meights H S Grees Park Maple Elementany School Rockford Uly Health Department Springlieid Sewage Treatment Plant Springlieid Sewage Treatment Plant Springlieid Sewage Treatment Plant Springlieid Hilling's Agriculture Building Springlieid Pederat Building Swamse Village Maintenance Building Satomotie Pump Station Decatur Mueller Mapleton Categoliar Plant Period Sauk Medical Clinic Alton StU Dental Clinic Bast St. Louis RAPS Trailer Edwardwille RAPS Trailer Edwardwille RAPS Trailer Scanlie Chy Alte Student 1 Granite Chy Alte Folducas Rock Head Arsend	275274.31 4492492.00 171790004 CAN 272005.50 4500748.50 171450004 2720707.38 49728.50 171430004 281679.94 4513723.50 171430004 282781.72 466898.100 17201001 322739.2.16 4681050 50 17201001 32739.2.16 468107.00 172010013 27739.563 446849.50 171670016 277325.20 4412449.00 171670010 275328.00 4412449.00 171670010 295728.00 4432450.00 171430110 2957428.00 445398.00 171150110 2759450.0 4559821.00 1795001 70734.54 409900.00 171192009 74738.46 4457551.00 171192009 74735.46 4477551.00 171192007 748727.54 4457813.00 171192007 748727.54 4457813.00 171192007 747728.46 4457813.00 171192007 747728.46 458713.00 171192007
34\$5\$57\$556644886666668887127776777	Pretin Fire Station 3 Peorie Commercial Building Peorie Fire Station 8 Peorie Fire Station 8 Peorie Fire Station 8 Peorie Hights H S Surves Park Maple Elementany School Rockford Winnebago County Health Department Springlield Sewage Treatment Plant Springlield Sewage Treatment Plant Springlield Hillinois Agriculture Building Springlield Hillinois Agriculture Building Springlield Pump Station Decator Maeller Mapleson Categoliar Plant Period Demonstraty School Rockford J Austin and Company Sterling Sauk Medical Ulmic Alton SU Demat Clinic Alton SU Demat Clinic Alton Clara Barton Riementary School Barts Choule Affe Trailer Edwardwille RAFS Trailer Edwardwille RAFS Trailer Station 1 Grantle Chy Alf Products Rock Lind Arsennil South Rockana Grade Arsenni South Rockana Grade School	275274.31 4492492.00 171790004 CAN 272005.50 4500748.50 171430004 27205707.38 49728.50 171430004 281679.94 4513723.50 171430004 2821679.94 4513723.50 171430004 2821679.14668481.00 17201001 2822381.72 4668481.00 17201001 277312653 46681506 50 17207001 277312653 44058405 01 171670010 277312653 44058405 01 71670010 279512600 44028495100 171670010 239082.00 44038495100 171670010 239082.00 44038495100 171670010 239082.00 44038495100 171670010 257615.00 4553674.00 171430110 25742500 44538514.00 171430110 25742500 44538514.00 17115010 27734545 4309900.00 171157010 17734545 4309900.00 171157009 74738456 4309900.00 171157009 74738456 4309900.00 171157009 74738456 4309940.00 171150001 757101.44 439807.00 171150001 757251.00 4453713.50 171150010 757251.80 445713.50 171150010 757251.80 45713.50 171150010 757251.80 457713.50 171150010 75725
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# Exhibit 2

Table Listing the Air Permits Issued to Midwest Generation

#### Relevant Permits Issued to Midwest Generation

In addition to the permits listed below, each station has various state operating and/or construction permits for ancillary operations, including coal handling, coal processing, ash handling, and so forth. Additionally, Midwest Generation submitted applications to revise the CAAPP permits for each station to reflect the CAIR and other regulatory programs that have become applicable since the CAAPP permits were issued in September 2005.

<u>Type of</u> <u>Permit</u>	<u>Permit /</u> <u>Application</u> Number	Date of Issuance	Description of the Permit	Date of Appeal	<u>PCB</u> <u>Docket</u> Number	Status of Stay of Effectiveness
				]		
Crawford			I.D. No. 0316	500AIN		
operating	7030806	October 15, 2001	State operating permit for Unit 7			
operating	7030808	October 16, 2001	State operating permit for Unit 8			
CAAPP	95090076	September 29, 2005	CAAPP operating permit	November 2, 2005	06-056	Granted a full stay February 16, 2006; current decision deadline: February 21, 2013
construction	07050008	July 18, 2007	Permit to install a dry sorbent injection system to control mercury emissions	August 27, 2007	08-019	Granted a partial stay September 20, 2007; current decision deadline: February 21, 2013
construction	10040023	April 29, 2010	Permit to install SNCR on both units			
Acid Rain		March 18, 2005			2-21	
					1000	
Joliet			ID No. 19780	09AAO		
operating	73030837	June 27, 2001	State operating permit for Unit 6			
operating	73030838	January 2, 2001	State operating permit for Unit 7			
operating	73030839	October 10, 2001	State operating permit for Unit 8			

#### Relevant Permits Issued to Midwest Generation

<u>Type of</u> <u>Permit</u>	Permit / Application Number	Date of Issuance	Description of the Permit	Date of Appeal	<u>PCB</u> <u>Docket</u> <u>Number</u>	<u>Status of Stay of</u> <u>Effectiveness</u>
CAAPP	95090046	September 29, 2005	CAAPP operating permit	November 2, 2005	06-058	Granted a full stay February 16, 2006; current decision deadline: February 21, 2013
construction	07060013	August 8, 2007	Permit to install a dry sorbent injection system to control mercury emissions	September 6, 2007	08-024	Granted a partial stay October 4, 2007; current decision deadline: February 21, 2013
construction	09110025	January 28, 2010	Permit to install SNCR – Unit 6			
construction	10030062	March 31, 2010	Permit to install SNCR – Units 7 and 8			
Acid Rain		March 21, 2005				
		N				
Powerton			I.D. No. 1798	DIAAA		
operating	76080033	September 4, 2001	State operating permit for Unit 5		-	
operating	82120068	September 10, 1993	State operating permit for Unit 6			
CAAPP	95090074	September 29, 2005	CAAPP operating permit	November 2, 2005	06-059	Granted a full stay February 16, 2006; current decision deadline: February 21, 2013
construction	06120004	March 5, 2007	Permit to construct new air pollution control equipment for the coal bunkers	April 9, 2007	07-101	Granted a partial stay December 6, 2007; current decision deadline: February 21, 2013
construction	07060012	August 8, 2007	Permit to install a dry sorbent injection system to control mercury emissions	September 6, 2007	08-023	Granted a partial stay October 4, 2007; current decision deadline: February 21, 2013

#### Relevant Permits Issued to Midwest Generation

<u>Type of</u> <u>Permit</u>	<u>Permit /</u> Application <u>Number</u>	Date of Issuance	Description of the Permit	Date of Appeal	<u>PCB</u> Docket Number	<u>Status of Stay of</u> <u>Effectiveness</u>
construction	10030003	March 1, 2010	Permit to install SNCR on both units			
construction	10120020	February 16, 2011	Permit to install Trona injection			
	10120021	extension; February 6, 2012	system and upgrades on the ESP on Unit 5			
construction	10120021	February 16, 2011	Permit to install Trona injection			
		extension: February 6, 2012	system and upgrades on the ESP on Unit 6			
Acid Rain		March 21, 2005	B			
				····		•
Waukegan			I.D. No. 0971	190AAC		
operating	75030155	November 8, 1999	State operating permit for Unit 7			
operating	73030831	October 11, 2000	State operation permit for Unit 8			
СААРР	95090047	February 7, 2006	CAAPP operating permit	February 13, 2006	06-146	Granted a full stay March 13, 2006; current decision deadline: February 21, 2013
construction	07050007	July 19, 2007	Permit to install a dry sorbent injection system to control mercury emissions	August 27, 2007	08-020	Granted a partial stay September 20, 2007; current decision deadline: February 21, 2013
construction	10090034	November 19, 2010	Permit to install Trona injection			
1 1 1 1		extensions: March 28, 2012 September 28, 2012	hot-side to cold-side for Unit 7			
Acid Rain		March 21, 2005				
	1	·				

#### Relevant Permits Issued to Midwest Generation

<u>Type of</u> <u>Permit</u>	<u>Permit /</u> <u>Application</u> <u>Number</u>	Date of Issuance	Description of the Permit	Date of Appeal	<u>PCB</u> <u>Docket</u> <u>Number</u>	<u>Status of Stay of</u> <u>Effectiveness</u>
Will County			I.D. No. 1978	10AAK	1	<b>1</b>
operating	73030972	March 8, 2002	State operating permit for Unit 3			
operating	73030973	January 23, 2001	State operating permit for Unit 4			
CAAPP	95090080	September 29, 2005	CAAPP operating permit	November 2, 2005	06-060	Granted a full stay February 16, 2006; current decision deadline: February 21, 2013
construction	06020009	March 3, 2006	Permit to construct new air pollution control equipment for the coal bunkers	April 7, 2006	06-156	Granted a partial stay July 20, 2006; current decision deadline: February 21, 2013
construction	07030069	June 15, 2007	Permit to install soda ash dispensing equipment; soda ash helps to reduce PM emissions	July 20, 2007	08-009	Granted a partial stay August 23, 2007; current decision deadline: February 21, 2013
construction	07060011	August 8, 2007	Permit to install a dry sorbent injection system to control mercury emissions	September 6, 2007	08-022	Granted a partial stay October 4, 2007; current decision deadline: February 21, 2013
construction	10030034	April 16, 2010	Permit to install an above-ground gasoline tank for fueling station vehicles	May 19, 2010	10-098	Granted a partial stay June 17, 2010; current decision deadline: February 21, 2013
construction	10040022	April 29, 2010	Permit to install SNCR on both units			
Acid Rain	· · · ·	March 21, 2005				
<u> </u>	1		· · · · · · · · · · · · · · · · · · ·	·		•

# Exhibit 3

# **Affidavit of Douglas McFarlan**

President, Midwest Generation, LLC Senior Vice-President, Public Affairs, Edison Mission Group

#### **BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

MIDWEST GENERATION, LLC,	)
Petitioner,	)
v.	) PCB 13
	) (Variance – Air)
ILLINOIS ENVIRONMENTAL	)
PROTECTION AGENCY,	)
	)
Respondent.	j j

#### AFFIDAVIT OF DOUGLAS MCFARLAN

I, DOUGLAS McFARLAN, having first been duly sworn upon oath, depose and state as follows:

1. I am President of Midwest Generation, LLC. I am also Senior Vice President, Public Affairs, for Edison Mission Energy ("EME"), the indirect parent company of Midwest Generation. In that role, I am responsible for state and local government relations, environmental policy and compliance, media and community relations, executive and employee communications, and corporate contributions. I joined Midwest Generation in 1999 and became President of Midwest Generation in 2011. I am also a member of the Executive Managing Committee of EME.

2. My duties and responsibilities at Midwest Generation include supervision of the Environmental Compliance group and oversight of environmental activities, such as the preparation of variance petitions with respect environmental rules.

3. I submit this affidavit in support of Midwest Generation's request for a variance from the Illinois Combined Pollutant Standard ("CPS") sulfur dioxide ("SO<sub>2</sub>") system-wide emission rate requirements in 2015 and 2016 and the CPS requirement to install and have

operational flue gas desulfurization ("FGD") equipment at Waukegan Unit 8 by December 31, 2014 (the "Variance Petition"). I participated in the development of the Variance Petition.

4. Midwest Generation has demonstrated continuous improvement in the environmental performance of its coal-fired stations since it acquired them in December 1999 from ComEd (the "Stations"). Those efforts continue today and have resulted in a dramatic reduction of emissions at significant capital investment and increased ongoing operations and maintenance expense.

5. Midwest Generation's emission control efforts started shortly after it acquired control of the Stations. During the period 2000 through 2004, Midwest Generation installed low nitrogen oxide ("NOx") burners and/or over-fired air to reduce NOx emissions at Powerton Unit 5, Waukegan Units 6 and 7, Fisk Unit 19, Will County Units 1, 2 and 3, Crawford Units 7 and 8 and Joliet Units 6, 7 and 8 and completed installation of such controls started by the prior owner at Waukegan Unit 8, Powerton Unit 6 and Will County Unit 4.

6. After acquisition of the Stations Midwest Generation also used progressively lower sulfur coal to reduce  $SO_2$  emissions. This voluntary practice started shortly after acquisition and has continued through the present. The result of this practice is that within two years of acquiring the Stations, the company had reduced its rate of sulfur dioxide emissions by 35%, from 0.776 to 0.507 lb/mmBtu even though it was under no regulatory requirement to do so. By 2012 the SO<sub>2</sub> emission rate had been reduced by a total of 45% since acquisition to 0.426 lb/mmBtu.

7. In December 2007 Midwest Generation entered its coal-fired units into the CPS program, and its already significant emission control efforts increased. Midwest Generation's

CPS emission control efforts are described in more detail in Fred McCluskey's affidavit, but I mention some highlights below.

8. Midwest Generation has installed Activated Carbon Injection ("ACI") systems at each of its operating coal-fired units and obtained strong mercury emission reduction results. In fact, the company helped pioneer the development of this technology with pilot projects at its Will County and Crawford Stations that were funded by U.S. Department of Energy grants in 2006 and 2007. All of Midwest Generation's operating coal-fired generating units have met CPS ACI injections standards, and all of the operating units except Waukegan 7 and Will County Unit 3, which have hot side Electrostatic Precipitators ("ESPs"), are currently meeting the CPS emission rate for mercury and the emission rate in the federal Mercury and Air Toxics Standards even though neither of these rules would require compliance with such rates until 2015. Midwest Generation, however, has opted its Powerton Units 5 and 6, Will County Unit 4, Joliet Units 6, 7 and 8, and Waukegan Unit 8 into the CPS mercury emission rate program, more than two years prior to the time that the CPS mercury emission rate otherwise would have become applicable.

9. Midwest Generation installed selective non catalytic reduction ("SNCR") systems on most of its operating coal-fired units in 2011, including the two units at the Crawford Station where generation ceased in August of 2012, in order to meet Illinois-specific CPS limits on NOx emissions that took effect January 1, 2012. As a result, year-to-date through October 31, 2012, Midwest Generation has achieved a system-wide NOx emission rate of 0.099 lb/mmBtu, which is 10% better than the 2012 CPS limit of 0.11 lb/mmBtu.

10. Midwest Generation has permitted and commenced physical on-site work for ESP upgrades and the Trona injection system installation at Powerton Unit 6. That work will allow

3

Midwest Generation to significantly reduce SO<sub>2</sub> emissions in order to meet system-wide CPS emission rate limits for SO<sub>2</sub> in 2013 and 2014, while also controlling particulate matter ("PM") emissions that would otherwise increase as a result of the new Trona SO<sub>2</sub> emission control system on the Powerton Unit 6. In addition, Midwest Generation currently plans to install a Trona injection system and ESP enhancements at Waukegan Unit 7 by December 31, 2014. This emission control work at Powerton Unit 6 and Waukegan Unit 7, together with some engineering and procurement of long lead material associated with controls related to other units, is expected to require capital expenditures of about \$230 million in 2013 and 2014. Midwest Generation is planning this work regardless of this variance request, further demonstrating its commitment to compliance with the CPS.

11. Finally, Midwest Generation has ceased operation of several older, less efficient units. Midwest Generation shut down its Will County Units 1 and 2 in 2010 and its Waukegan Unit 6 before the end of 2007, a total of 410 net megawatts that have been retired pursuant to requirements of the CPS. As an economic decision, Midwest Generation also ceased operation of the Fisk and Crawford coal-fired units, another 868 net megawatts, by August, 31, 2012, prior to the deadlines imposed by the recent Board order on Midwest Generation's prior variance petition related to the Waukegan 7 coal-fired unit.

12. Midwest Generation has expended considerable resources on environmental performance. Midwest Generation has made more than \$170 million in capital expenditures on emission controls required to achieve CPS compliance. Prior to the CPS, Midwest Generation incurred more than \$160 million in capital expenditures on other environmental improvement and compliance projects, including the early NOx control projects described above. Midwest Generation also incurs substantial operating costs in connection with its reduction of NOx and

mercury emissions for CPS compliance. Midwest Generation estimates that it will spend about \$58 million for urea (SNCR NOx control) and ACI (mercury control) in 2012. Since 2008, the use of ACI has increased the company's operations and maintenance costs by \$32 million to dispose of ash that can no longer be sold for beneficial re-use. Similarly, the use of urea has increased disposal costs by \$3.2 million in 2012.

13. As a result of the significant and costly emission control efforts and shutdown decisions mentioned above, Midwest Generation has substantially reduced emissions since acquiring the Stations.

14. In the calendar year 2000, Midwest Generation's fleet of coal-fired units at the Stations emitted about 94,195 tons of SO<sub>2</sub>, 72,283 tons of NOx, 6,552 tons of PM and 31.9 million tons of CO<sub>2</sub>. Calendar year 2012 emissions, annualized from emissions that occurred from January through September, 2012, are expected to be about 56,395 tons of SO<sub>2</sub>, 12,526 tons of NOx, 5,221 tons of PM and 26.9 million tons of CO<sub>2</sub>. This equates to a 40% SO<sub>2</sub> emission reduction, an 83% NOx emission reduction, a 20% PM emission reduction and a 16% CO<sub>2</sub> reduction over this period of slightly more than a decade. Significantly more SO<sub>2</sub> emission reductions will occur through the end of 2019 under the CPS, and total SO<sub>2</sub> reductions through 2019 will exceed projections when the CPS was adopted, even with approval of this variance.

15. Midwest Generation's reduction of mercury emissions has been equally impressive. Mercury emissions have been reduced from 2,039 pounds in 2000 to 221 pounds in 2012 (projected year-end based on actual emissions through September 30, 2012), an 89% reduction.

16. Midwest Generation designed its CPS compliance plan to provide a cost-effective means to satisfy CPS requirements in careful coordination with the company's strategy to

5

comply with other recently promulgated or expected regulatory requirements that would also demand reductions with respect to the same types of emissions. In fact, a Memorandum of Understanding entered into with the Illinois EPA that resulted in the CPS rule states that "in developing rules, regulations or state implementation plans, designed to comply with current NAAQS, Illinois EPA, taking into account all emission reduction efforts and other appropriate factors, will use best efforts to seek SO2 and NOx . . . reductions from other sources before seeking additional reductions from Midwest Generation." At the time the CPS was adopted, these other requirements included the federal Clean Air Interstate Rule ("CAIR") that demanded significant SO<sub>2</sub> and NOx emission reductions through a cap-and trade program. Midwest Generation has also considered in connection with its CPS compliance plans the need to address other federal and state requirements, such as the federal Clean Air Mercury Rule ("CAMR"), visibility ("BART") requirements and new National Ambient Air Quality Standards ("NAAQS") for SO<sub>2</sub> emissions. Some of these federal requirements have been a moving target. The CAIR was remanded and replaced by the federal Cross State Air Pollution Rule ("CSAPR"), but the CSAPR, which imposed NOx and SO<sub>2</sub> emission requirements that would drive coal-fired power generating sources closer to the emissions levels required by the CPS, was then vacated by a court decision on August 21, 2012, which is subject to a rehearing petition. That court decision may or may not stand. The CAMR was vacated, only to be replaced with the new Utility Maximum Achievable Control Technology rule, now commonly referred to as the Mercury and Air Toxics Standards ("MATs"). The MATs rule will drive mercury and other Hazardous Air Pollutant emission reductions from coal-fired power plants starting in April of 2015, assuming the MATs survives a pending court challenge.

17. The uncertainty created by the constantly changing federal requirements has made planning much more difficult, and we have been required to constantly monitor such changes and revise our plans as necessary. Flexibility is an important element in our plans to comply with the CPS in light of the evolving and uncertain federal requirements.

18. The changes in the federal requirements have resulted in the delay of federallymandated mercury emission reductions and additional SO<sub>2</sub> and NOx emission reductions, including in states that border Illinois and in the thirteen states across the Pennsylvania-Jersey-Maryland ("PJM") Interconnection system in which Midwest Generation competes to sells its power. As a result, state rules, such as the CPS, that drive emission reductions only from Illinois source operators, impose costs on Illinois companies like Midwest Generation that are not imposed on power generators in most other states. The result is an uneven playing field between power generators in Illinois and our competitors in other states. That competitive disadvantage is exacerbated by the fact that Illinois is a deregulated state, and thus Midwest Generation is not able to recover its emission control costs through regulated rates. Instead, it must compete in the electricity market against those who are not required to comply with Illinois' rules. The federal requirements, subject to pending court challenges related to the MATs and the CSPAR, may be catching up with Illinois requirements. Until they do, however, the competitive disadvantage will continue.

19. Despite its best efforts, and as described further in the Affidavit of William Petmecky, in light of its current financial condition and ongoing financial restructuring efforts of its indirect parent, EME, Midwest Generation needs additional time to perform about \$210 in additional Trona injection and related control work that would be needed in 2013 and 2014 to meet the CPS 2015 and 2016 SO2 system-wide rates and satisfy the CPS Waukegan Unit 8 FGD

7

requirement. Absent the requested variance relief, Midwest Generation would confront two possible compliance scenarios. First, Midwest Generation could be required to attempt to fund that additional \$210 million at the same time that it expects to be funding over \$230 million of control work, including for Powerton Unit 6 and Waukegan Unit 7, is suffering operating losses, needs to conserve cash, has limited if any access to funds from other parties and is attempting with EME to effectuate a significant financing restructuring. Second, as explained further by Fred McCluskey in his Affidavit, if that additional funding could not be obtained and absent the requested variance, very substantial and unsustainable generation curtailments would be required in 2015 and 2016 from several of Midwest Generation's coal-fired units. Either scenario would threaten the future of Midwest Generation and the Stations.

20. The Midwest Generation fleet makes significant economic contributions to the state of Illinois and to the communities in which the fleet operates. As of October 31, 2012, Midwest Generation's plants and supporting operations based in Illinois collectively employed 845 men and women, of which 539, or 64 percent, are represented by Local 15 of the International Brotherhood of Electrical Workers. In calendar year 2011, the company provided for annual payroll and benefits totaling \$145 million; paid over \$100 million for contracted labor (nearly all skilled building and construction trades members) to perform special project work; spent \$379 million to purchase goods and services from Illinois businesses, pay for various licenses and regulatory fees and support numerous Illinois-based organizations; and paid \$4.7 million in property taxes to local units of government in Will, Tazewell, Lake and Cook Counties. In addition, if Midwest Generation must curtail generation from some of its units because it cannot otherwise comply with the CPS 2015 and 2016 emission rates, its purchases of sorbent for mercury control will fall. In turn, this will deprive the state of sales tax and the

Agency of revenue to help support the Title V program specifically derived from the use tax on sorbent. 35 ILCS 105/9. Reduced generation would also affect Retailers Occupation Taxes and Use Taxes paid on coal.

21. To summarize, Midwest Generation has a strong track record of operating its Illinois Stations with a priority placed on environmental responsibility and compliance. Our record is one of continuous improvement and national leadership among existing coal-fired generating stations in achieving significant emission reductions. Especially noteworthy are the development and deployment of mercury emission control technology well ahead of national standards and investments to meet state-specific NOx limits that took effect in 2012. The 2011 investment in NOx controls at our Crawford Station, only to cease operation of the station by the end of August 2012, provides clear evidence of the unforeseen economic circumstances now facing the company. This request for a variance is an option of last resort that is intended to enable the company to manage through exceptionally difficult and unforeseen economic circumstances and financial hardship. We have already complied with and are exceeding CPS requirements for both mercury and NOx emissions. We do not seek an extension of the CPS program for reducing SO<sub>2</sub> emissions in 2013 or 2014, or in 2017 or thereafter, but, rather, propose a "pause" in the decline of SO2 emission rates in the middle of the program (2015-2016), accompanied by enforceable commitments to ensure that total SO<sub>2</sub> tons of emissions are less than projected under the CPS from 2013 through the period of the variance. By returning to the original CPS schedule in 2017, we also have ensured that the variance will not hamper Illinois' ability to comply with the BART rule for regional haze or the new, pending one-hour NAAQS for SO<sub>2</sub>.

22. I have read the Variance Petition, and based upon my personal knowledge and belief the facts stated therein are true and correct.

FURTHER AFFIANT SAYETH NOT.

Douglas McFarlan

Subscribed and sworn to before me this 30 day of November, 2012.

a berglund <u>Julie</u> Notary Public



# Exhibit 4

# Affidavit of William M. Petmecky III

Vice President and Treasurer Edison Mission Energy

#### BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

MIDWEST GENERATION, LLC -	)
WAUKEGAN GENERATING STATION,	)
	)
Petitioner,	)
	)
٧.	) PCB 13
	) (Variance – Air)
ILLINOIS ENVIRONMENTAL	)
PROTECTION AGENCY,	)
	)
Respondent.	)

#### AFFIDAVIT OF WILLIAM M. PETMECKY III

I, William M. Petmecky III, having first been duly sworn upon oath, depose and state as follows:

#### I. BACKGROUND AND QUALIFICATIONS

1. My name is William M. "Tres" Petmecky III, and I am employed by Edison Mission Energy ("EME") as Vice President and Treasurer. I am responsible for treasury activities including corporate and project financing, financial planning and analysis, and cash management and treasury operations. EME is the indirect parent corporation of Midwest Generation, LLC ("Midwest Generation").

2. I earned Bachelor of Arts degrees in physics and economics from Southern Methodist University and a Master of Business Administration degree from the University of Southern California. I began my career twenty years ago as a consultant in the Public Utility Services Group of the firm then known as Pricewaterhouse. Subsequently, beginning in 1995, I have served in a variety of positions at Edison International, the parent company of EME, and Southern California Edison, which is another subsidiary of Edison International. I rose to the

level of Director of Strategic Planning, Analysis & Corporate Finance at Edison International and, most recently, the Director of Risk Control at Southern California Edison, before assuming my current position.

3. Midwest Generation has expended considerable resources to date in order to comply with the Combined Pollutant Standard ("CPS"), which is set forth at 35 III. Adm. Code §§ 225.291 through 225.299, and has achieved early compliance with several requirements. Midwest Generation's actions, achievements, and the resources it has expended are explained in the Affidavit of Fred McCluskey.

4. As of September 30, 2012, Midwest Generation estimated that the future cost of retrofitting all of its coal-fired generating units to comply with the CPS would be approximately \$854 million. Midwest Generation is currently in the process of installing a Trona injection system for sulfur dioxide (SO<sub>2</sub>) emission control at Powerton Unit 6 and plans to install a Trona injection system and electrostatic precipitator ("ESP") enhancements at Waukegan Unit 7 by December 31, 2014. That control work is needed to assure compliance with the system-wide CPS SO<sub>2</sub> emission rate for 2013, to attain compliance with the 2014 CPS SO<sub>2</sub> rate, and to satisfy specific control requirements for Waukegan Unit 7. That work and continued engineering and procurement of long lead material associated with controls at additional units is expected to cost about \$230 million in 2013 and 2014. However, Midwest Generation needs additional time to perform about \$210 million in additional Trona injection and related control work that would be needed in 2013 and 2014 to meet the CPS 2015 and 2016 SO<sub>2</sub> system-wide rates and satisfy the CPS Waukegan Unit 8 flue gas desulfurization ("FGD") equipment requirement. As described in the Affidavit of Fred McCluskey, Midwest Generation would need to have funding for those additional controls no later than April 2013.

5. EME has publicly disclosed that it is in formal negotiations with advisors to its bondholders regarding its financial condition since, based on current projections, EME is not expected to have sufficient liquidity to repay \$500 million in debt that is due in June 2013. In light of the pending maturity, 2013 is an especially critical year. The financial conditions of Midwest Generation and its indirect parent EME have declined precipitously over the last year. Consequently, Midwest Generation is not currently able to identify a viable source of funding for this additional control work in 2013 and 2014, and Midwest Generation needs time to work through the financial issues. (This is not unlike constraints faced by other power generators, such as Ameren, which came before this Board earlier this year, or Exelon, which on its November 1, 2012, Q3 2012 Earnings Call (as reported in a Bloomberg transcript) stated that it "removed roughly \$2.3 billion of growth capital from 2012 to 2015 capital plans of Exelon Generation ... which meaningfully improves [its] free cash flow over the period. ... [and] is a matter of better aligning [the company's] growth capital spend with the expected timing of the power market recovery.")

6. The purpose of my testimony is to explain Midwest Generation's current financial challenges, how those challenges have impacted Midwest Generation's ability to fund some of the control work needed in 2013 and 2014 to comply with the CPS SO<sub>2</sub> rates currently scheduled to go into effect in 2015 and 2016 and to satisfy the CPS Waukegan 8 FGD requirement, and how the requested variance would assist with securing funding to satisfy the Waukegan 8 FGD requirement by May 31, 2015, and install all the necessary controls to comply with CPS SO<sub>2</sub> rates in 2017 and thereafter and improve Midwest Generation's future prospects.

#### II. MIDWEST GENERATION LACKS THE OPERATING REVENUE TO INSTALL CONTROLS TO COMPLY WITH THE CPS SO<sub>2</sub> RATES IN 2015 AND 2016

7. Midwest Generation has been experiencing operating losses due to low realized energy and capacity prices, high fuel costs and low generation at plants. Forward market prices indicate that these trends are expected to continue in 2013 and 2014. As a result, Midwest Generation expects that it likely will incur an operating cash flow deficit and operating losses in those years. Forward energy prices and known capacity prices, however, indicate signs of a market recovery that could support a financial restructuring and increased capital investment beyond 2014. Consequently, this petition proposes a "pause" in the rate of capital spending increases due to the CPS in 2013 and 2014, and a catch-up thereafter that returns emission rates to the original CPS schedule beginning in 2017 and ends the program on schedule in 2019.

8. Whereas Midwest Generation had a net income of \$87 million during the first three quarters of 2011, its income has declined by \$150 million to a net loss of \$63 million during the first three quarters of 2012. The decrease in earnings in 2012 as compared to the first three quarters of 2011 was primarily attributable to lower capacity and average realized energy prices, reduced generation and higher fuel prices.

9. Midwest Generation has recently experienced lower capacity prices and revenues. Midwest Generation's capacity prices are set three years in advance and, as with its business in general, are impacted by market cycles. But even accounting for typical market cycling, the capacity prices and corresponding anticipated revenues will fall to strikingly low levels in 2013. Midwest Generation experienced much better capacity revenues in prior years. In 2008, when Midwest Generation was relatively new to the PJM market, it achieved capacity revenues of \$111 million. Its capacity revenues rose to \$178 million in 2009 and \$263 million in 2010, then declined to \$244 million in 2011. In 2012, the capacity prices dropped substantially and the

capacity revenues are projected to reach only \$97 million. The capacity prices drop even more in 2013, when Midwest Generation expects capacity revenues will total only \$35 million, representing a decline of more than 85%—over \$200 million—from the 2010 and 2011 revenues. Fortunately, based on known increasing capacity prices beginning in June 2014 and continuing through May 2016 (the latest set capacity prices), Midwest Generation expects capacity revenues to increase in 2014 to \$141 million and to recover further in 2015 to \$193 million.

10. Midwest Generation has also experienced reduced average realized energy prices. Midwest Generation's average realized energy prices (dollars per megawatt hour) have fallen every year since 2008 due to weak demand and unprecedented exploration and production of shale gas that has caused steep reductions in the price of natural gas, which energy prices generally track. Market energy prices for the first nine months of 2012 were roughly 45% lower than for the first nine months of 2008. Reduced prices drive down Midwest Generation's revenues.

11. Because of the impact of lower average energy prices, Midwest Generation also has suffered a decrease in generation, further reducing revenues. Midwest Generation's reduced generation primarily resulted from lower economic dispatch. The abundance of low-priced natural gas has continued to result in increased competition from natural gas-fired generating units in the markets in which Midwest Generation operates, and generation has been correspondingly affected.

12. In addition to the decrease in Midwest Generation's revenues, Midwest Generation has also experienced a recent increase in fuel costs. Midwest Generation's largest operating expense is its fuel cost, and a significant component of the fuel cost is the cost to

-5-

transport coal to Midwest Generation's stations. Those costs significantly increased beginning January I, 2012, when a favorable long-term rail contract expired and was replaced by a higher priced contract. All told, Midwest Generation's average delivered fuel cost (dollars per megawatt hour) has been approximately 60% higher during the first nine months of 2012 than during the same period in 2008.

13. The impact Midwest Generation has already suffered from the decreased revenue and increased expenses is starkly seen in Midwest Generation's cash holdings. As of September 30, 2012, Midwest Generation had cash and cash equivalents of \$142 million. This balance represented a \$71 million reduction from the \$213 million it had just nine months earlier.

14. Midwest Generation plans to continue to fund operating cash flow deficits through a combination of cash on hand, management of fuel inventories, deferral of operations and maintenance expenses that are not essential to maintain safe operations, receipt of interest and principal repayment on notes receivable from EME, and equity contributions from EME. Midwest Generation is largely dependent on EME to fund cash flow deficits and environmental retrofits. EME, however, has no obligation to make capital contributions to Midwest Generation and may be unable to do so. Midwest Generation had \$1.323 billion of notes receivable from EME as of September 30, 2012, with payments used to meet Midwest Generation's rent obligations under sale-leaseback agreements for Midwest Generation's Powerton and Joliet Stations. If Midwest Generation is unable to obtain financial support from EME or other sources, Midwest Generation may need to file for protection under Chapter 11 of the U.S. Bankruptcy Code, which contemplates that the party filing for bankruptcy will continue to operate through and after the bankruptcy process.

15. In order to install controls in 2013 and 2014 to comply with the CPS SO<sub>2</sub> rates in 2015 and 2016, Midwest Generation would need to overcome its current revenue and expense challenges and receive additional contributions from other sources. Under current financial conditions, funding all environmental control work needed in 2013 and 2014 to comply with the current CPS Waukegan Unit 8 FGD deadline and the current CPS SO<sub>2</sub> rates in 2015 and 2016 would be very difficult, if not impossible.

#### III. OTHER FUNDING SOURCES

#### EME

16. Midwest Generation is largely dependent on EME to fund cash flow deficits and environmental retrofits. EME, however, is facing its own financial challenges that throw into question its ability to provide funding to Midwest Generation, including funding to install controls to comply with the CPS SO<sub>2</sub> rates in 2015 and 2016 and the Waukegan Unit 8 FGD deadline.

17. As of September 30, 2012, EME had \$3.7 billion of unsecured notes outstanding, \$500 million of which mature in June 2013. EME continues to experience operating losses, including the results of Midwest Generation, and EME expects that it will incur further losses and reductions in cash flow in the current year and for some subsequent years. A continuation of these adverse trends coupled with pending debt maturities and the need to retrofit Midwest Generation's plants to comply with governmental regulations is currently expected to exhaust EME's liquidity. Consequently, EME has been considering all options available to it, including potential sale of assets, restructuring, reorganization of its capital structure, or conservation of cash that would be applied otherwise to the payment of obligations.

18. In June 2012, EME entered into non-disclosure and engagement agreements with advisors representing holders of a majority in principal amount of its unsecured bonds for the purpose of engaging in discussions with such advisors and Edison International regarding EME's financial condition. In October 2012, EME and Edison International entered into non-disclosure agreements with certain of the clients of such advisors to facilitate further discussions. Discussions with the bondholders' advisors have been ongoing. In addition, EME and Midwest Generation have entered into a non-disclosure agreement with an advisor representing a majority in principal amount of Midwest Generation's senior lease obligation bonds.

19. Based on current projections, EME is not expected to have sufficient liquidity to repay the \$500 million debt obligation due in June 2013. On November 15, 2012, \$97 million in interest payments was due on unsecured EME bonds maturing in 2017, 2019 and 2027. As disclosed in an 8-K filing with the Securities and Exchange Commission, EME elected not to make that payment at this time. EME's unsecured bonds generally provide for a 30-day grace period for interest payments. EME has stated that failure to pay indebtedness under its unsecured bonds will likely result in EME's filing for protection under Chapter 11 of the U.S. Bankruptcy Code, which would trigger cross defaults under EME's guarantee of the lease obligations of Midwest Generation, as well as Midwest Generation's own obligations under the lease and under instruments governing the senior lease obligation bonds.

20. Accordingly, EME is unlikely to be able to provide funding to Midwest Generation to install in a timely basis the controls necessary to comply with the current CPS Waukegan Unit 8 FGD deadline and the current CPS SO<sub>2</sub> rates in 2015 and 2016.

#### Edison International

21. Edison International currently is not a potential source of funding for these controls. On May 2, 2012, Edison International's Chairman and Chief Executive Officer delivered his first quarter 2012 financial teleconference. During that teleconference, he stated, "I reaffirm our commitment that we will not invest new funds into [Edison Mission Group] given the challenging market conditions." Midwest Generation is part of the Edison Mission Group.

#### Third-Party Lenders

22. Neither EME nor Midwest Generation currently has a line of credit available to finance the controls. EME previously had a line of credit that did not require cash as collateral; however, EME terminated that credit facility shortly before its expiration date. Prior to terminating the facility, EME determined that the facility was effectively not able to be utilized. Currently, EME has a \$100 million cash-backed letter of credit facility. EME is required to post cash collateral in excess of the face amount of any letter of credit issued under this facility. This facility is only for the purpose of issuing letters of credit. It does not provide for cash borrowings and is not a potential funding source for the controls.

23. Each company's ability to borrow money from third-party lenders is affected by its credit ratings. The attached chart (Table 4.1) summarizes EME's and Midwest Generation's corporate credit ratings and outlooks from S&P, Moody's and Fitch for the years 2008 through 2012. Each of these agencies that rated EME or Midwest Generation as of 2012 assigned them a non-investment grade "junk" status and identified the outlook, if any, as negative. Underscoring the companies' credit challenges, after the November interest payment was not made Fitch downgraded its Long-term Issuer Default rating and senior unsecured debt rating of each company to "C"—the lowest rating assigned to debt instruments in Fitch's rating scale.

24. Unless and until EME reaches a resolution with its creditors to restructure its finances, or existing debts are addressed through a Chapter 11 bankruptcy process, it is extremely unlikely that any lender will provide the additional financing needed for the roughly \$210 million in additional controls required to fully comply with the CPS SO<sub>2</sub> rates in 2015 and 2016 and install the Waukegan 8 FGD by December 31, 2014. It is certainly possible that if EME effectuates a financial restructuring, such as through a Chapter 11 bankruptcy protection filing, upon emergence, Midwest Generation could obtain funding from a third-party lender to install the controls. However, time is needed to work either of these processes through to a successful conclusion. In short, Midwest Generation does not anticipate any reasonable prospect of securing a loan from a third-party to install the additional controls for a year or longer. As described in the Affidavit of Fred McCluskey, such funding would be needed no later than April 2013 in order for Midwest Generation to begin procurement work for the additional controls in time to comply with the CPS SO<sub>2</sub> rates for 2015 and 2016.

#### IV. THE CURRENT FINANCIAL SITUTATION WAS NOT FORESEEN WHEN MIDWEST GENERATION OPTED INTO THE CPS AND MIDWEST GENERATION NEEDS TIME TO SECURE ADEQUATE FUNDING

25. Midwest Generation did not foresee the financial challenges it now faces when it opted into the CPS.

26. Midwest Generation is a merchant power generator. As such, it competes with other power generators, including those in other states and utilizing other fuel sources, and its revenues are dictated by the marketplace. Its profitability is reliant upon market prices for power, the demand for power, and its capital costs and operating expenses. Midwest Generation reasonably did not expect the tsunami of challenges it currently faces—weak demand and depressed market prices reflected in capacity revenues in 2013 that are expected to fall at least

85% from the capacity revenues in 2010 and 2011, and average market energy prices during the first three quarters of 2012 that are approximately 45% lower than during the same period in 2008—just after Midwest Generation opted its coal-fired units into the CPS. On top of these setbacks, Midwest Generation's average as-delivered fuel costs have increased approximately 60% from the first 3 quarters of 2008 to the same period in 2012. These challenges and others are presented in more detail above.

27. In summary, Midwest Generation's revenues have dramatically decreased while its costs have substantially increased, negatively impacting its ability to fund additional controls through cash flow. Midwest Generation's indirect parent, EME, is suffering from financial hardship that threatens its ability to repay debt owed to Midwest Generation, let alone to provide any additional funding for the installation of environmental controls. Midwest Generation's ultimate parent, Edison International, has committed not to invest additional funds in Midwest Generation as a result of market conditions. In addition, until debts owed by EME to creditors are addressed, either through an agreed restructuring and/or through a bankruptcy process, Midwest Generation does not reasonably anticipate obtaining funding from third-party lenders for these controls. These conditions combine to create a much different economic reality than Midwest Generation anticipated when it opted these stations into the CPS in 2007 and cause Midwest Generation to seek more time to install additional controls required to comply with the CPS.

28. If the requested variance is not granted, as discussed further in Fred McCluskey's affidavit, Midwest Generation would have only two potentially feasible options. It could hope that sufficient funds were somehow available to install the \$210 million in additional control costs required starting in 2013, and if that did not occur it would be required to reduce power

- 11 -

generation from most of its fleet. As discussed in Doug McFarlan's affidavit, these are not viable business plans and would place undue additional risk on hundreds of Illinois jobs and hundreds of millions of dollars in positive impact in the state of Illinois through payroll and benefits, capital investments, purchases of goods and services, and state and local tax payments.

29. Midwest Generation has not at this time been able to identify a source of funding for an additional \$210 million in control costs starting in 2013 given current cash flow and debt issues. It needs time to work through restructuring issues with its parent company EME and creditors and also provide time for markets to recover. In the interim, it is imperative that Midwest Generation preserve the limited cash it has, to the extent it can in light of ongoing potential operational losses, to meet its obligations and to best situate itself as EME addresses its restructuring issues. Prior to that time, an expenditure of \$210 million for controls (assuming such an expenditure could be made), in addition to the \$230 million Midwest Generation plans to spend in 2013 and 2014 on CPS controls even if the variance is granted, would likely impair Midwest Generation's ability to satisfy its various obligations, restructure finances and obtain additional credit. In turn, that could threaten the future of Midwest Generation and its stations.

30. Similarly, as explained in Fred McCluskey's affidavit, curtailing operations to comply with CPS requirements would result in substantial, unsustainable, curtailments, which could threaten the continued existence of Midwest Generation and the future viability of its stations.

#### V. BENEFITS OF THE VARIANCE

31. A temporary, two-year pause in the pace of the CPS rate step down is needed to allow Midwest Generation to obtain the funds required to install the additional SO<sub>2</sub> controls to comply with the CPS and allow for market recovery.

32. While current market conditions are negative, known capacity prices begin to recover in 2014, and increase further in 2015 and the first half of 2016. In addition, Midwest Generation expects that natural gas prices will not continue at the current unsustainable low prices, thus causing future increases in energy prices. Moreover, additional regulations (including Phase II of the CAIR, as well as the Mercury and Air Toxics Standards) go into effect in 2015, which Midwest Generation anticipates will cause its competitors in other states to incur additional control costs. That, in turn, will help level the playing field for coal-fired power plants in Illinois.

33. EME is currently negotiating a restructuring of its existing debt with its lenders. The discussions will impact Midwest Generation's ability to obtain financing. The two-year "pause" in the CPS step-down, which would impact capital expenses in 2013 and 2014, would allow Midwest Generation needed time to work through these issues and implement any related restructuring, which may include a reorganization bankruptcy. In addition, it would allow more time for the market—and Midwest Generation's revenues—to recover.

34. Accordingly, Midwest Generation believes it is reasonable to plan for improvement in its operating revenues and its ability to secure additional cash and/or credit in time to allow Midwest Generation to fund the additional controls needed for CPS compliance if the variance is granted.

- 13 -
FURTHER AFFIANT SAYETII NOT.

William M. Petinecky III

Subscribed and sworn to before me this

29th day of November, 2012

Elidade Oucourge, Motory Public [Notary block]



#### Table 4.1

Attachment to Affidavit of William M. Petmecky

	2007	2008	2009	2010	2011	2012	
Credit Ratings as of: 1	12/31/2007	12/23/2008	8/3/2009	9/15/2010	1/10/2011	8/10/2012	11/21/2012
Edison Mission Energy							
5&P							
Corporate / Outlook	BB-/Stable	BB-/Negative	B/Negative	B-/Negative	8-/Negative	CCC/Negative	
Mondu's							
		D-7/C+-61-		H2 /Manating	D2 (bloom bing	Co (blogstine	
Corporate / Outlook	Bas/Staple	BB3/Stable	BTATADIE	b2/Negative	BZ/Negative	Ca/Negative	
Fitch							
Corporate / Outlook	BB-/Stable	88-/Stable	<b>BB</b> ./Pating Watch Negative	B/Negative	<b>B</b> /Negative	CC/Negative	C/No Outlook
corporate y outdook	D0-75table	50 / 510 QR	DD fridding frater regarine	the second	e) mgette	and trade that	410 04000
Midwest Generation, LLC							
S&P							
Corporate / Outlook	BB-/Stable	RR./Negative	B/Negative	R-/Negative	B-/Negative	CCC/Negative	
corporate / Outlook	10-7 Scable	DD-314Ggative	DireButive	0-) Hegative	Diffigure	COC, HEBRINE	
Moody's							
a second a start	him <sup>2</sup> /chable		ND /Faabla	10	ND	MD	
Corporate / Outlook	NR /Stable	NHy Stable	NIV3201E	nin.	( <b>M</b> A	NR.	
Fitch							
Concerns / Outlack	DP (Stable	<b>DB</b> /Stable	00 (Pating Watch Meastive	0 (blass still as	Q/Morrativa	CC/Megative	C/No Outlook
Corporate / Outlook	ob/Stable	DB/SCADIE	poynating match Negative	DY INERSOLVE	the last and a second sec	corregative	CARD OUTBOOK

#### Footnote

1. With the exception of the 11/21/2012 ratings, all Credit Ratings are compiled from Edison International Credit Rating Presentations. Dates "as of" are dates of those presentations. On 11/21/2012, Fitch downgraded its ratings of Edison Mission Energy and Midwest Generation, LLC to "C" | am not aware of any changes by the other rating agencies from those ratings reflected in the 8/10/2012 Edison International Credit Rating Presentation.

2. NR = Not Rated

#### **Rating Agency Reference Sheet**

Standard and Poors <sup>1</sup>	Moody's <sup>2</sup>	<u>Fitch<sup>3</sup></u>			
Debt Rating		Debt Rating		Debt Rating	
Extremely strong	AAA	Highest quality	Aaa	Highest Credit quality	AAA
Very strong	AA	High quality	Aa	Very high credit quality	AA
Still strong	А	Upper-medium-grade obligations	Α	High credit quality	A
Adequate protection parameters	688	Medium-grade obligations	Baa	Good credit quality	BBB
Major ongoing uncertainties	88	Speculative Elements, Substantial credit risk	Ba	Speculative	BB
likeliness of impaired capacity to meet obligations	8	Speculative, High credit risk	B	Highly speculative	в
Vulnerable ("CCC") to highly vulnerable ("CCC") to nonpayment	COC, CC	Poor standing ('Caa') to highly speculative ('Ca')	Caa, Ca	High default risk	CCC, CC, C
Bankruptcy petition or similar action has been taken	с	Little propsect for recovery of principal or interest	с	Default <sup>4</sup>	DDD, DD, D
Default	D				

Notes:

1. "+" or "-" may be appended to a rating to denote relative status within a major rating category ('AA' to 'CCC')

2. Moody's applies a 1, 2, or 3 to indicate that the issuer is in the higher end of its letter rating category; (1=High end; 2=Mid range; 3=lower end) Bonds ('Aa' to 'Caa'); Preferred ('aa' to 'b')

3. "+" or "-" may be appended to a rating to denote relative status within a major rating category ('AA' to "CCC' and 'F1')

4. These categories are considered "conditions" and not "ratings." As such, C is the lowest credit rating under Fitch's rating scale.

\* Rating Watch: Ratings are placed on Rating Watch to notify investors that there is a reasonable probability of a rating change and the likely direction of such change. These are designated as "Positive", indicating a potential upgrade, "Negative", for a potential downgrade, or "Evolving", if ratings may be rasied, lowered or maintained.

\*\* Considered Speculative (i.e., non-investment grade) =

# Exhibit 5

## Affidavit of Fred McCluskey

Vice President of Technical Services Midwest Generation EME, LLC and Edison Mission Energy

#### BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

MIDWEST GENERATION, LLC –	)	
WAUKEGAN GENERATING STATION,	j	
	)	
Petitioner,	)	
	)	
v.	)	PCB 13
	)	(Variance – Air)
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

#### AFFIDAVIT OF FRED McCLUSKEY

I, Fred McCluskey, having first been duly sworn upon oath, depose and state as follows:

#### I. BACKGROUND AND QUALIFICATIONS

1. My name is Fred McCluskey, and I am the Vice President of Technical Services for Midwest Generation EME, LLC and Edison Mission Energy ("EME"). I am also a member of the Executive Managing Committee of EME. Both of these entities are indirect parents of Midwest Generation, LLC ("Midwest Generation"). Among other responsibilities, I oversee all major capital project management, engineering and construction activities, such as environmental controls, for EME and Midwest Generation.

2. After earning Bachelor of Arts degrees in Business Management and Economics from Towson University, in Maryland, I began a career in the electric industry that has spanned roughly 30 years. I began my career working within Project Management/Project Controls, first with Bechtel Power and then with California Energy Corp. For the past 23 years, I have worked

for EME and its affiliates and have served in a variety of roles, including Vice President of EME's Business Management Organization, EME's Regional Vice President of Development Americas, and EME's Manager of Operations. Through these positions, I have gained extensive experience in various aspects of the industry, including budgeting, forecasting, capital and long-term strategic planning, business systems implementation, asset development, acquisition, and operations.

3. Midwest Generation has expended considerable resources to date in order to comply with the Combined Pollutant Standard ("CPS"), which is set forth at 35 Ill. Adm. Code §§ 225.291 through 225.299, and has achieved early compliance with several requirements. In this affidavit, I explain Midwest Generation's actions, achievements, and the resources it has expended to comply with the CPS; I outline the company's plans for complying with the CPS in the future; I set forth the company's compliance alternatives if the requested variance is denied; and I highlight the environmental benefits of granting the variance.

#### II. CPS EMISSION REDUCTION EFFORTS TO DATE

4. Since Midwest Generation opted-in to the CPS in December 2007, it has taken significant, costly steps to comply with the CPS. It has achieved compliance with CPS rate requirements for nitrogen oxide ("NOx") emissions. It has also achieved compliance with mercury and sulfur dioxide ("SO<sub>2</sub>") rates more quickly than required by the CPS. It has installed all of the controls it needs to comply with the CPS NOx rate of 0.11 lb/mmBtu. Midwest Generation has complied with the CPS Activated Carbon Injection ("ACI") requirements at all of its units. Moreover, Midwest Generation opted all but two of its units into the CPS mercury rate standard of 0.0080 lb/Gwh in the fall of 2012, more than two years before it was required to do so under the CPS.

5. All of these controls have come at a cost. To date, Midwest Generation has spent more than \$170 million to install equipment to comply with the CPS. In addition to those capital expenditures, Midwest Generation shut down operations of three units (Waukegan Unit 6, in 2007, and Will County Units 1 and 2, in 2010) in order to comply with the CPS. In addition, Midwest Generation has also ceased operating its three coal-fired units at the Fisk and Crawford Stations.

6. As a result of Midwest Generation's CPS compliance efforts and the cessation of operation of the Fisk and Crawford coal-fired units, Midwest Generation has reduced annual emissions in the period since the CPS was adopted—from 2007 to 2012—of NOx by roughly 74%, mercury by roughly 84%, particulate matter ("PM") by roughly 23%, SO<sub>2</sub> by roughly 35%, and carbon dioxide ("CO<sub>2</sub>") by roughly 20%. These reductions have been achieved through a variety of control measures.

7. To achieve the CPS-required fleet-wide NOx emission rate of 0.11 lb/mmBtu, Midwest Generation has installed selective non-catalytic reduction equipment ("SNCRs") at most of its operating units and had also installed SNCRs at Crawford prior to ceasing operations of those coal-fired units. The SNCRs cost Midwest Generation over \$100 million to install. In addition, Midwest Generation has incurred expense to perform combustion optimization at all of its coal-fired units in order to further reduce NOx emissions. As a result of these control measures, Midwest Generation has reduced the system-wide NOx emission rate by 74% from 2007 levels. This year, based on data from January 1<sup>st</sup> through October 31<sup>st</sup>, Midwest Generation has so far achieved a system-wide NOx emission rate of 0.099 lb/mmBtu, which is 10% better than the 2012 CPS limit of 0.11 lb/mmBtu.

8. Midwest Generation has been similarly successful in reducing its mercury emissions. Midwest Generation installed activated carbon injection systems ("ACI") at each of its coal-fired units. The company, in fact, helped pioneer the development of ACI technology with pilot projects at its Will County and Crawford Stations that were funded by U.S. Department of Energy grants in 2006 and 2007. All of Midwest Generation's operating coalfired generating units currently meet CPS standards that took effect starting in 2008, and all of the operating units except Waukegan Unit 7 and Will County Unit 3, which have hot-side electrostatic precipitators ("ESPs"), are currently meeting the CPS emission rate for mercury and the emission rate in the federal Mercury and Air Toxics Standards ("MATS"). Those CPS and federal standards do not take effect until 2015. Nonetheless, Midwest Generation has voluntarily opted-in its Joliet Units 6, 7 and 8, Powerton Units 5 and 6, Waukegan Unit 8 and Will County Unit 4 to the CPS mercury emission rate program more than two years prior to the time the program would otherwise have become applicable to these units. As a result, since 2007, system-wide mercury emissions have been reduced from approximately 1,345 pounds per year to approximately 221 pounds per year in 2012.

9. The CPS specifies PM requirements (Section 225.296) for only the units with hotside ESPs—Waukegan Unit 7 and Will County Unit 3—requiring them to convert to cold-side ESPs. Midwest Generation has been granted a variance from Section 225.296(c)(1) for one year with respect to the conversion of the hot-side precipitator on Waukegan Unit 7. The CPS requires Midwest Generation to convert the hot-side precipitator on Will County Unit 3 or to shut that unit down by December 31, 2015. Midwest Generation has begun engineering work for the hot-to-cold conversions. While the CPS does not specifically require Midwest Generation to reduce PM emissions or install additional PM controls at its other units, Midwest Generation is

investing in additional PM controls in order to avoid PM increases that could otherwise result from CPS related  $SO_2$  controls, as described below, and to ensure compliance with the federal MATS.

10. The CPS sets forth a challenging progression of increasingly stringent  $SO_2$  emission rates, starting with 0.44 lb/mmBtu in 2013 and decreasing in steps to 0.11 lb/mmBtu in 2019. In addition, the CPS requires Midwest Generation to install flue-gas desulfurization ("FGD") equipment at most of its coal-fired units over time. Midwest Generation extensively investigated available pollution control technologies to satisfy these requirements. Ultimately, Midwest Generation selected a program consisting of ultra-low sulfur coal and Trona injection for flue gas desulfurization at its units. This program offered the least expensive, yet effective, method for controlling  $SO_2$  emissions. It also would allow Midwest Generation to stagger its capital investments over time, which was a key consideration in light of the deteriorating electricity market and Midwest Generation's deteriorating financial condition.

11. The first component to Midwest Generation's SO<sub>2</sub> control program is the use of ultra-low sulfur coal. Combusting ultra-low sulfur coal is an effective means of reducing SO<sub>2</sub> emissions. Typically, ultra-low Sulfur coal would be characterized as coal containing less than 0.55 lbs/mmBtu of sulfur. Utilizing ultra-low sulfur coal, Midwest Generation has achieved system-wide SO<sub>2</sub> rates in 2011 and 2012 (to date) below the 0.44 lb/mmBtu CPS standard that goes into effect in 2013. Yet another example of achieving compliance well in advance of CPS deadlines.

12. The second component of Midwest Generation's  $SO_2$  control program is the installation of dry sorbent injection of Trona. Dry sorbent injection is FGD equipment in which Trona, a mineral used in the production of sodium bicarbonate or baking soda, is injected into the

flue gas upstream of a PM control device, such as an ESP. The injected material reacts with and neutralizes acid gases, such as SO<sub>2</sub>, forming a dry powder that may be removed by the PM control device. When the sorbent is delivered to a station, it will be off-loaded into bulk storage silos and subsequently conveyed through a metered system that blows the sorbent through a mill and into the flue gas ductwork using injection lances. Thus, use of dry sorbent injection requires various construction activities at the stations, including installation of storage silos, mills, and injection ports. PM emissions from each coal-fired boiler in the Midwest Generation system are controlled by an ESP. Injection of Trona increases the particulate loading to the ESPs to a sufficient degree that Midwest Generation will need to upgrade its ESPs or undertake other PM control measures on its units in conjunction with installing Trona injection systems. The necessary ESP upgrades vary from unit to unit, but include measures such as increasing the PM collection area, the heights of the collection plates and the distance between plates, installing high-frequency transformer rectifier sets, adding new fields of collection plates, redesigning air baffles and updating computer control systems. Such ESP work requires extended outages and significant capital expenditures. In summary, Midwest Generation anticipates that a typical installation of Trona FGD equipment and necessary ESP upgrades will take 18 to 24 months, with outages lasting 16 to 20 weeks.

13. While a program of utilizing ultra-low sulfur coal and Trona FGD equipment entails lower capital expenditures than some other control options, it still entails significant costs, including the capital cost for the FGD equipment (estimated to average about \$38 million per unit) and ESP upgrades (estimated to average about \$55 million per unit), the operating costs associated with Trona injection, and the comparatively higher as-delivered cost for procuring ultra-low sulfur coal.

#### III. CPS COMPLIANCE PLANS FOR 2015 AND BEYOND

14. As noted above, Midwest Generation has attained SO<sub>2</sub> rates below 0.44 lb/mmBtu (the 2013 CPS SO<sub>2</sub> rate) in 2011 and, to date, in 2012. Midwest Generation has determined that installation of the Trona FGD equipment and ESP upgrades on Powerton Unit 6 will help assure that Midwest Generation will attain a system-wide average below 0.44 lb/mmBtu in 2013 and will allow the company to attain compliance with the 2014 CPS system-wide SO<sub>2</sub> rate. Powerton Unit 6 was selected both because of the SO<sub>2</sub> reductions that could be achieved and because the ESP work is less substantial than the work that will be required at some other units. Midwest Generation has obtained a construction permit and is in the process of installing the Trona FGD equipment and the ESP upgrades at Powerton Unit 6. Midwest Generation expects the ESP work to be completed around June 2013, along with phase 1 of the Trona control work. The completion of the Trona system work is expected by around June 2014. Midwest Generation also currently plans to install Trona FGD equipment and ESP upgrades at Waukegan Unit 7 by the end of 2014, subject to Midwest Generation working through any electricity reliability concerns that may be raised by PJM related to the outage required to complete this work.

15. Midwest Generation would need to spend \$440 million in 2013 and 2014 in order to satisfy the CPS Waukegan Unit 7 and 8 FGD equipment requirements and meet the CPS 2015 and 2016 SO<sub>2</sub> system-wide rates. It would need to spend hundreds of millions of dollars more between 2015-2018 to install controls on its remaining units to attain CPS rates. As described in the Affidavit of William M. Petmecky III, however, Midwest Generation is not currently able to identify a viable source of funding for the full \$440 million needed in 2013-2014. Consequently,

it seeks this variance so that it could defer approximately \$210 million of that \$440 million of work to 2015 or later.

16. The \$210 million of control work that Midwest Generation seeks to defer includes substantial work in connection with the installation of Trona FGD equipment and ESP upgrades on Waukegan Unit 8, Powerton Unit 5, and Joliet Unit 7 or 8. If the variance is denied, Midwest Generation would need to begin work on these additional controls and start incurring substantial related costs no later than April 2013 as a result of requisite lead times. It is, therefore, critically important to Midwest Generation that the Board grant the variance by April 2013, which would allow Midwest Generation to defer the expenditures out of the 2013-2014 period.

17. Midwest Generation anticipates that, if the variance is granted, it would still spend approximately \$230 million in 2013 and 2014 to install controls on Powerton Unit 6 and Waukegan Unit 7 and to continue engineering and procure long lead material associated with controls on additional units. This work is currently on target for the controls to be operational in a timeframe that supports compliance with the CPS.

#### IV. COMPLIANCE ALTERNATIVES

18. Midwest Generation investigated various means to reduce  $SO_2$  emissions to comply with the requirements of the CPS. After careful consideration of both the likelihood that those methods would reliably reduce  $SO_2$  emissions by a sufficient amount and the related monetary costs, Midwest Generation determined that use of ultra-low sulfur coal and Trona injection systems, together with ESP upgrades, was the most efficient approach in terms of  $SO_2$ emission removal and cost. It is neither feasible nor productive for Midwest Generation to change course at this time to adopt another alternative. Indeed, any change in course would likely increase Midwest Generation's costs while likely taking more time to complete than is

available under the current CPS schedule. Before selecting its compliance approach, Midwest Generation considered the other technologies, including wet scrubbers, other types of dry scrubbers, and conversion to natural gas.

19. Installation of wet scrubbers would not be appropriate for the low sulfur coal that Midwest Generation is under contract to procure. Moreover, wet scrubbers would exceed the cost of compliance with Trona injection systems, and would take longer to install. Similarly, the use of other types of dry scrubbers (which must be installed with baghouses) would cost far more than Trona injection systems, on the order of at least three times more. In addition, it would take approximately two and a half years to engineer and install other types of dry scrubbers. As such, neither wet scrubbers nor other forms of dry scrubbing would solve Midwest Generation's financial challenge, nor would they be completed in the time required by the CPS.

20. Conversion to natural gas would reduce SO<sub>2</sub> emissions; however, Midwest Generation believes that none of its coal-fired units would be able to sell sufficient power to remain operational if they were converted. For starters, the only units that have access to sufficient natural gas for full load operation are Fisk Unit 19 and Crawford Units 7 and 8, which have ceased operation. The units at the other plants would require significant investment to access sufficient gas for full load operation. Midwest Generation, through its indirect parent company EME, has extensive experience in the construction and operation of both conventional boiler fired gas plant as well as new combustion turbine gas plants. It also has extensive experience through its affiliated trading company Edison Mission Marketing and Trading, in the economics of natural gas generation versus conventional coal. Based on extensive analysis and industry experience, Midwest Generation has determined that gas conversion is not an

economically viable compliance option for its coal-fired units. The units simply could not survive in the marketplace if they were converted to natural gas.

21. Midwest Generation is already utilizing ultra-low sulfur coal. It has not identified an alternative coal supply that would enable it to meet the 2015 and 2016 CPS  $SO_2$  rates without the installation of Trona FGD equipment on additional units. And burning low sulfur coal, alone, would not satisfy the requirement to install FGD equipment on Waukegan Unit 8.

22. Thus, absent a variance, Midwest Generation would be forced to curtail operation of uncontrolled units. The level of requisite curtailment is difficult to predict with precision at this time; however, Midwest Generation estimates that the curtailment could be roughly 35% in 2015 and 75% in 2016, as compared to the average level of generation from those units over the past five years. Such substantial curtailments would result in an unsustainable level of operation across Midwest Generation's fleet. They would substantially reduce Midwest Generation's revenues at a critical time and would likely result in the temporary or even permanent shutdown of at least some of the curtailed units. In addition, such curtailments may result in penalties under Midwest Generation's capacity contracts and may even require regulatory approval in light of grid reliability concerns.

23. The cumulative impact of the curtailments could threaten the continued existence of Midwest Generation and the future viability of its stations. Shuttering Midwest Generation's plants would have devastating impacts on hundreds of workers and their families, and would drain literally hundreds of millions of dollars from the economy.

#### V. EMISSIONS IMPACTS OF GRANTING THE VARIANCE

24. The brief "pause" in the rate of decline in the CPS  $SO_2$  system-wide emission rates that Midwest Generation seeks includes a step-down in the  $SO_2$  emission rate from the

2014 CPS rate of 0.41 lb/mmBtu to the proposed variance rate in 2015 and 2016 of 0.38 lb/mmBtu. This step down helps mitigate any impact from the variance request.

25. Moreover, granting the variance would have a positive impact on reduction of mass emissions beyond the impact of the step-down in emission rate. Midwest Generation proposes, as part of the variance, to commit to mass  $SO_2$  emission level caps, which would result in lower emissions over the period of 2013-2016 than would be expected based upon the current CPS rates and 2008-2011 heat input. The proposed mass emission levels and a comparison of the emissions benefits with such expected emissions under the CPS are set forth on the attached Table 5.1.

26. The impact of meeting these mass emission levels over the four-year period (2013-2016) is a net reduction of 3,181 tons of SO<sub>2</sub>, as compared with emissions expected based on historic heat input. That is in addition to SO<sub>2</sub> emission reductions in 2012 from the early cessation of operation of the coal-fired units at Fisk and Crawford of 734 tons and 1,249 tons, respectively. These mass emission limitations would also effectively cause a reduction of average annual heat input during the period 2013 through 2016 as compared to the baseline period and, thus, yield an additional reduction of approximately 8,503 tons of NOx, 3,169 tons of PM, 135 pounds of mercury, and 16 million tons of CO<sub>2</sub>. Similarly, the early cessation of operation of the coal-fired units at Fisk and Crawford are yielding an additional reduction in 2012 of 461 tons of NOx, 299 tons of PM, 3 pounds of mercury and 904,477 tons of CO<sub>2</sub>.

FURTHER AFFIANT SAYETH NOT.

Fred McCluskey

Subscribed and sworn to before me this

30<sup>+1</sup>day of November, 2012

Elegabeth Raminey



		2013	2014	2015	2016	Totals
1	CPS emission rates (lb/mmBtu)	0.44	0.41	0.28	0.195	
2	SO <sub>2</sub> emissions (tons)*	65,341	60,886	37,699	26,255	190,181
3	Proposed CPS emission rates (lb/mmBtu)	0.44	0.41	0.38	0.38	
4	SO <sub>2</sub> emissions (tons)**	65,341	60,886	51,163	51,163	
5	Proposed SO <sub>2</sub> mass emission level limits (tons)	57,000	54,000	39,000	37,000	187,000
6	Delta per year comparing proposed mass limits (row 5) with emissions at CPS rates (row 2)	8,341	6,886	<1,301>	<10,745>	
7	Cumulative reduction (based on row 6)	8,341	15,227	13,926	3,181	3,181

 Table 5.1

 (Attachment to Affidavit of Fred McCluskey)

\* Based on average 2008-2011 heat input for the units legally permitted to operate in 2013 – 2016, respectively, and the emission rates indicated in row 1.

\*\* Based on average 2008-2011 heat input for the units legally permitted to operate in 2013 - 2016, respectively, and the emission rates indicated in row 3.

# Exhibit 6

## **Excerpts from the BART SIP TSD:**

The Cover Letter

## The TSD Cover Page

TSD pp. 24-25, 30-31, 33

and

**Appendix C** 



## **ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782 2829 James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR

217/782-5544 217/782-9143 (TDD)

v

June 24, 2011

CERTIFIED MAIL 7009 2820 0001 7492 1699

Ms. Cheryl A. Newton, Director Office of the Air and Radiation Division U. S. Environmental Protection Agency Region V (R-18J) 77 West Jackson Boulevard Chicago, IL 60604-3507

Re: Regional Haze Program Requirements Dear Ms. Dewton:

Pursuant to Section 169A of the Clean Air Act ("CAA") (42 U.S.C. § 7491) and Section 4 of the Illinois Environmental Protection Act (415 ILCS 5/4), the Illinois Environmental Protection Agency submits the enclosed revision to the Illinois State Implementation Plan ("SIP"). This revision has been prepared to satisfy Illinois' obligation under these sections to develop a Regional Haze SIP with measures necessary to make reasonable progress towards remedying visibility impairment in Class I areas. Under 40 CFR § 51.308, the core requirements for the plan include reasonable progress goals, calculations of baseline and natural visibility conditions, a long-term strategy for regional haze, a monitoring strategy, and Best Available Retrofit Technology requirements for regional haze visibility impairment.

In order to assist with your review of this plan submittal, the following documents are enclosed (two hard copies and one electronic copy on disc):

Attachment 1) Regional Haze State Implementation Plan for Illinois, AQPSTR 10-08, May 10, 2011.

- Appendix A, Draft List of Class I Areas Located Within (or Impacted by) Midwest RPO States, June 26, 2007.
- Appendix B, Regional Air Quality Analysis for Ozone, PM<sub>2.5</sub>, and Regional Haze: Final Technical Support Document, April 25, 2008.
- Appendix C, 2012 Site Directory (Illinois Air Monitoring Network).

Printed on Recycled Paper

Attachment	2)	Technical Support Document for Best Available Retrofit Technology
		Under the Regional Haze Rule, AQPSTR 09-06, April 29, 2011.

- Appendix A, Single Source Modeling to Support Regional Haze BART Modeling Protocol, March 21, 2006, Lake Michigan Air Directors Consortium.
- Appendix B, Regional Air Quality Analysis for Ozone, PM<sub>2.5</sub>, and Regional Haze: Final Technical Support Document, April 25, 2008. (See Attachment 1, above)
- Appendix C, Illinois Mercury Rule, 35 Ill. Adm. Code 225.
- Appendix D, BART Analysis for the Kincaid Power Plant, ENSR Corporation, January 2009, Document No. 02285-076-400.
- Appendix E, Consent Decree between the United States of America, et al. and ExxonMobil Corporation, et al.
- Appendix F, Consent Decree between the United States of America, et al. and CITGO Petroleum Corporation, et al.
- Attachment 3) Ameren Energy Resources, Notice of Intent, dated December 27, 2007.
- Attachment 4) Dynegy Midwest Generation, Inc., Notice of Intent, dated November 26, 2007.
- Attachment 5) Midwest Generation, LLC, Notice of Intent, dated December 27, 2007.
- Attachment 6) Notice of Hearing
- Attachment 7) Presentations of Hearing held December 6, 2010
- Attachment 8) Transcript of Hearing held December 6, 2010
- Attachment 9) Responsiveness Summary
- Attachment 10) Kincaid Generation, LLC, Joint Construction and Operating Permit
- Attachment 11) City of Springfield (CWLP) Joint Construction and Operating Permit

In addition, the Regional Haze SIP Checklist is enclosed to assist in your review. If further information is required, please contact Rob Kaleel, Manager, Air Quality Planning Section, Bureau of Air, at 217/785-4140.

Sincerely,

Laurel L. Kroack Chief, Bureau of Air

Attachments

# TECHNICAL SUPPORT DOCUMENT FOR BEST AVAILABLE RETROFIT TECHNOLOGY UNDER THE REGIONAL HAZE RULE

**AQPSTR 09-06** 

April 29, 2011

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY 1021 NORTH GRAND AVENUE EAST P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276

- a multi-pollutant agreement between the Illinois EPA and Dominion Energy Services, as operator, and Kincaid Generation, LLC, as owner, of the Kincaid Generating Station (collectively "Dominion Kincaid"), to achieve BART-control levels; and
- a similar agreement between the Illinois EPA and the City of Springfield, Illinois d/b/a City, Water, Light and Power (CWLP), to achieve BART-control levels and to shut down one of its existing subject-to-BART units.

Pollutant	Boiler Type	Coal Type	Presumptive Limit (lbs/mmBTU)
SO <sub>2</sub>	All units	All coal types	0.15
			(or 95% control)
NOx	Dry-bottom wall-fired	Bituminous	0.39
		Sub-bituminous	0.23
		Lignite	0.29
	Tangential-fired	Bituminous	0.28
		Sub-bituminous	0.15
		Lignite	0.17
	Cell burners	Bituminous	0.40
		Sub-bituminous	0.45
	Dry-turbo-fired	Bituminous	0.32
		Sub-bituminous	0.23
	Wet-bottom tangential- fired	All	0.62
	Cyclone	All	0.10

Table 4.1 Presumptive BART Emission Limits for Coal-Fired EGUs

#### 4.1.1 EGUs under the MPS and CPS

Three electric utilities operating in Illinois, Dynegy, Ameren, and Midwest Generation have committed to comply with the MPS and CPS under the Illinois Mercury Rule, requiring the installation of state-of-the-art pollution controls on many of their electric generating units in

Illinois. These regulations were promulgated to allow coal-fired electric utilities more flexibility in meeting the Illinois Mercury Rule in exchange for significant  $NO_x$  and  $SO_2$  reductions. Appendix C contains the relevant portions of the fully adopted Illinois Mercury Rule, with the requirements for NOx and  $SO_2$  emission reductions highlighted. Illinois intends to submit Appendix C to USEPA, the highlighted portions of which will become part of Illinois' SIP to satisfy BART obligations for affected units at these three utilities. In addition, the MPS and CPS requirements will ultimately be contained in federally enforceable permits.

The MPS and CPS require affected utilities to meet fleet-wide average emission rates, which will require installation of controls on emission units regardless of whether or not they are subject to BART. The agreements between Illinois and the utilities are intended to allow the companies the flexibility to meet the fleet-wide emission limits in the most cost-effective manner. The agreements contain a range of compliance dates, beginning as early as 2012 and as late as 2019. The Illinois EPA recognizes that, in general, the compliance date for BART controls is within 5 years of USEPA's approval of the State's SIP. Assuming USEPA approves Illinois' SIP in 2011 or 2012, the compliance date for BART controls would be in 2016 or 2017. The Illinois EPA's analysis of emission reductions that will result from implementation of the MPS and CPS by the year 2015 demonstrates conclusively 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. Emission reductions occurring after 2015 will improve visibility in Class I areas impacted by sources in Illinois, regardless of USEPA's decision of whether to approve those reductions as meeting BART requirements. The following subsections provide Illinois EPA's analysis of the emission reductions expected from the MPS and CPS and a description of the controls that will most likely be installed as a result of the MPS and CPS.

#### 4.1.1.1 Dynegy

Dynegy operates several electric generating stations in Illinois, all of which are affected by the requirements of the MPS. Only the three coal-fired boilers at Baldwin are subject to BART, however. Units 1 and 2 at Baldwin are cyclone-fired boilers burning sub-bituminous coal, while Unit 3 is a tangentially-fired unit burning sub-bituminous coal. Currently, Units 1 and 2 are controlled by over-fire air ("OFA") and selective catalytic reduction ("SCR") for NO<sub>x</sub>, while

		Base Year		Presumptive BART		MPS 2015*		MPS Finai*		
Plant	Unit	1000 mmBTU	Lba/ mmBTU	Tons	Lbs/ mmBŤU	Tons/Year Reduction	Lbs/ mmBTU	Tons/Year Reduction	Lbs/ mmBTU	Tons/Year Reduction
Coffeen	1	18,570	1.54	14,332	0.15	12,908	0.25	11,978	0.23	12,163
Coffeen	2	37,545	1.49	27,999	0.15	25,15 <b>5</b>	0.25	23,278	0.23	23,653
Duck Creek	1	22,635	0.97	11,026	0.15	9,280	0.25	8,149	0.23	8,375
E D Edwards	1	6,417	3.55	11,399	NA	NA	0.25	10,588	0.23	10,652
E D Edwards	2	17,222	1.7	14,666	0.15	13,347	0.25	12,486	0.23	12,658
E D Edwards	3	15,972	1.21	9,683	0.15	8,465	0.25	7,687	0.23	7,826
Hutsonville	5	3,181	4.53	7,163	NA	NA	0.25	6,785	0.23	8,796
Hutsonville	6	3,443	4.53	7,791	NA	NA	0.25	7,388	0.23	7,402
Joppa	1	13,548	0.51	3,441	NA	NA	0.25	1,761	0.23	1,897
Joppa	2	16,258	0.51	4,139	NA	NA	0.25	2,114	0.23	2,276
Joppa	3	15,396	0.51	3,947	NA	NA	0.25	2,001	0.23	2,155
Joppa	4	13,402	0.52	3,488	NA	NA	0.25	1,809	0.23	1,943
Joppa	5	15,094	0.52	3,932	NA	NA	0.25	2,038	0.23	2,189
Jappe	6	16,063	0.52	4,182	NA	NA	0.25	2,169	0.23	2,329
Meredosia	1	1,134	5.02	2,844	NA	NA	0.25	2,705	0.23	2,718
Maradosia	2	1,337	5.02	3,356	NA	NA	0.25	3,189	0.23	3,202
Meredosia	3	1,069	5.04	2,894	NA	NA	0.25	2,580	0.23	2,571
Meredosla	4	1,406	5	3,518	NA	NA	0.25	3,339	0.23	3,353
Meredosla	5	10,810	2.34	12,639	NA	NA	0.25	11,295	0.23	11,405
Newton	1	40,631	0.45	9,048	NA	NA	0.25	4,063	0.23	4,489
Newton	2	38,533	0.46	8,823	NA	NA	0.25	4,046	0.23	4,431
	_		1 000			49 144		131 387	T	134 484

Table 4.5 SO<sub>2</sub> reductions from Ameren EGUs BART vs. MPS

\*The MPS emission limits are a system-wide average and are not intended to reflect unit-specific emission limits.

#### 4.1.1.3 Midwest Generation

Midwest Generation operates 19 coal-fired EGUs at six separate locations in Illinois. Nine of these units, located at Powerton, Joliet, and Will County, are subject to BART.

#### Powerton

All four units at the Powerton station are subject to BART. All four units are cyclone-type boilers firing sub-bituminous coal and vent to a common stack. Current NO<sub>x</sub> control for all units

consists of low-NO<sub>x</sub> burners and OFA. Midwest Generation is expected to install selective noncatalytic reduction (SNCR) controls on all four units by 2012. The units currently burn lowsulfur coal to control for SO<sub>2</sub>, but Midwest Generation currently plans to install flue gas desulfurization (FGD) equipment by the end of 2013 on all four units.

#### <u>Joliet</u>

Four of the five units (Units 71, 72, 81, and 82) at the Joliet facility are subject to BART. The four units of interest are all tangentially-fired boilers burning sub-bituminous coal. Current  $NO_x$  controls for Boilers 71, 72, 81, and 82 consist of low- $NO_x$  burners and OFA. Midwest Generation is expected to install SNCR controls on these four units by 2012. For SO<sub>2</sub>, Midwest Generation is expected to install FGD equipment on all four BART units at Joliet by 2019.

#### Will County

Of the four units at the Will County plant, only Unit 4 is subject to BART. Unit 4 is tangentially fired and burns sub-bituminous coal.  $NO_x$  emissions from Unit 4 are currently controlled by low- $NO_x$  burners and OFA. Midwest Generation is expected to install an SNCR on this unit by 2012. For SO<sub>2</sub>, Midwest Generation is expected to install FGD equipment by 2019.

It should be noted that under the CPS, Midwest Generation is not required to meet unit specific emission limits for NO<sub>x</sub> or SO<sub>2</sub>, and that the anticipated CPS emission estimates given in Tables 4.6 and 4.7 reflect the fleet-wide average emissions for all units. Tables 4.6 and 4.7 show that the CPS will lead to system-wide reductions of more than 38,000 TPY of NO<sub>x</sub> and more than 35,000 TPY of SO<sub>2</sub> by 2015, which are much greater than the reductions that would be achieved by meeting the presumptive BART emission levels at the subject-to-BART units.

#### 4.1.2 Other Illinois EGUs

The MPS and CPS requirements do not apply to Dominion Kincaid or to CWLP. The Illinois EPA has negotiated separate agreements with these companies to address the BART requirements. Consistent with these agreements, both plants have either installed controls or plan to install controls that will meet or exceed the presumptive BART limits. Unit-specific requirements for these sources are contained in federally-enforceable permits, which are included

1			Base Year			Presumptive BART		CP8 2015*		CPS Final*	
Plant	Unit	1000 mmBTU	Lbs/ mmBTU	Tons	Lbs/ mmBTU	Tons/Year Reduction	Lbs/ mm8TU	Tons/Year Reduction	Lbs/ mmBTU	Tons/Year Reduction	
Crawford	7	11,627	0.54	3,142	NA	NA	0.28	1,512	0.11	2,500	
Crawford	8	17,348	0.51	4,453	NA	NA	0.28	1,995	0.11	3,470	
Fisk	19	14,650	0.52	3,843	NA	NA	0.28	1,758	0.11	3,003	
Jollet 29	71	15,034	0.7	5,276	0.15	4,134	0.28	3,157	0.11	4,435	
Joliet 29	72	13,824	0.7	4,828	0.15	3,802	0.28	2,903	0.11	4,078	
Joliet 29	81	15,585	0.68	5,300	0.15	4,130	0.28	3,117	0.11	4,442	
Joliet 29	62	15,403	0.68	5,260	0.15	4,082	0.28	3,081	0.11	4,390	
Joliet 9	5	14,369	0.63	4,559	NA	NA	0.28	2,515	0.11	3,736	
Powerton	51	20,936	0.42	4,444	0.15	2,825	0.28	1,466	0.11	3,245	
Powerton	52	21,137	0.43	4,497	0.15	2,959	0.28	1,565	0.11	3,382	
Powerton	61	18,293	0.43	3,964	0.15	2,561	0.26	1,372	0.11	2,927	
Powerton	62	18,088	0.43	3,909	0.15	2,532	0.28	t,357	0.11	2,894	
Waukegan	17	7,602	0.44	1,642	NA	NA	0.28	600	0.11	1,238	
Waukegan	7	16,117	0.47	3,754	NA	NA	0.26	1,531	0.11	2,901	
Waukegan	8	21,950	0.49	5,385	NA	NA	0.28	2,308	0.11	4,171	
Will County	1	9,396	0.42	1,969	NA	NA	0.28	66:8	0.11	1,457	
Will County	2	8,293	0.39	1,617	NA	NA	0.28	456	0.11	1,161	
Will County	3	15,559	0.47	3,636	NA	NA	0.28	1,478	0.11	2,801	
Will County	4	27,585	0.47	5,482	0.15	4,414	0.28	2,621	0.11	4,965	
			0.616			31 440		36 448		81.194	

Table 4.7 SO<sub>2</sub> reductions from Midwest Generation EGUs BART vs. MPS

\*The CPS emission limits are a system-wide average and are not intended to reflect unit-specific emission limits.

#### 4.1.2.1 CWLP

The subject-to-BART units at CWLP are Dallman 31, Dallman 32, and Lakeside 8. CWLP shut down the Lakeside unit in 2009. The Dallman 31 and 32 units are cyclone boilers and burn bituminous coal. CWLP currently operates SCRs and scrubbers on both Dallman units. It should be noted that CWLP's generating capacity is less than 750 MW, so the presumptive BART emission limits shown in Table 4.1 do not apply. Rather, the BART rule requires that such units operate SCRs, or equivalent controls, to control NO<sub>x</sub> emissions on an annual basis. For SO<sub>2</sub>, the BART rule requires 95% emissions reduction.

#### Appendix C

#### Illinois Mercury Rule

The Illinois EPA is seeking approval from the United States Environmental Protection Agency of the following bolded provisions of the Illinois Mercury Rule, 35 Ill. Adm. Code Part 225, Subpart B: Control of Mercury Emissions from Coal-Fired Electric Generating Units, under this submission. Please note that the non-bolded provisions are included for context.

#### Section 225.233 Multi-Pollutant Standards (MPS)

- a) General
  - As an alternative to compliance with the emissions standards of Section 225.230(a), the owner of eligible EGUs may elect for those EGUs to demonstrate compliance pursuant to this Section, which establishes control requirements and standards for emissions of NO<sub>x</sub> and SO<sub>2</sub>, as well as for emissions of mercury.
  - 2) For the purpose of this Section, the following requirements apply:
    - A) An eligible EGU is an EGU that is located in Illinois and which commenced commercial operation on or before December 31, 2004; and
    - B) Ownership of an aligible EGU is determined based on direct ownership, by the holding of a majority interest in a company that owns the EGU or EGUs, or by the common ownership of the company that owns the EGU, whether through a parent-subsidiary relationship, as a sister corporation, or as an affiliated corporation with the same parent corporation, provided that the owner has the right or authority to submit a CAAPP application on behalf of the EGU.
  - 3) The owner of one or more EGUs electing to demonstrate compliance with this Subpart B pursuant to this Section must submit an application for a CAAPP permit modification to the Agency, as provided in Section 225.220, that includes the information specified in subsection (b) of this Section and which clearly states the owner's election to demonstrate compliance pursuant to this Section 225.233.
    - A) If the owner of one or more EGUs elects to demonstrate compliance with this Subpart pursuant to this Section, then all EGUs it owns in Illinois as of July 1, 2006, as defined in subsection (a)(2)(B) of this Section, must be thereafter subject to the standards and control

requirements of this Section, except as provided in subsection (a)(3)(B). Such EGUs must be referred to as a Multi-Pollutant Standard (MPS) Group.

- B) Notwithstanding the foregoing, the owner may exclude from an MPS Group any EGU scheduled for permanent shutdown that the owner so designates in its CAAPP application required to be submitted pursuant to subsection (a)(3) of this Section, with compliance for such units to be achieved by means of Section 225.235.
- 4) When an EGU is subject to the requirements of this Section, the requirements apply to all owners or operators of the EGU.
- b) Notice of Intent.

F

The owner of one or more EGUs that intends to comply with this Subpart B by means of this Section must notify the Agency of its intention by December 31, 2007. The following information must accompany the notification:

- The identification of each EGU that will be complying with this Subpart B by means of the multi-pollutant standards contained in this Section, with evidence that the owner has identified all EGUs that it owned in Illinois as of July 1, 2006 and which commenced commercial operation on or before December 31, 2004;
- 2) If an EGU identified in subsection (b)(1) of this Section is also owned or operated by a person different than the owner submitting the notice of intent, a demonstration that the submitter has the right to commit the EGU or authorization from the responsible official for the EGU accepting the application;
- The Base Emission Rates for the EGUs, with copies of supporting data and calculations;
- 4) A summary of the current control devices installed and operating on each EGU and identification of the additional control devices that will likely be needed for the each EGU to comply with emission control requirements of this Section, including identification of each EGU in the MPS group that will be addressed hy subsection (c)(1)(B) of this Section, with information showing that the eligibility criteria for this subsection (b) are satisfied; and
- 5) Identification of each EGU that is scheduled for permanent shut down, as provided by Section 225.235, which will not be part of the MPS Group and which will not be demonstrating compliance with this Subpart B pursuant to this Section.

- Control Technology Requirements for Emissions of Mercury.
  - Requirements for EGUs in an MPS Group.
    - A) For each EGU in an MPS Group other than an EGU that is addressed by subsection (c)(1)(B) of this Section for the period beginning July 1, 2009 (or December 31, 2009 for an EGU for which an SO<sub>2</sub> scrubber or fabric filter is being installed to be in operation by December 31, 2009), and ending on December 31, 2014 (or such earlier date that the EGU is subject to the mercury emission standard in subsection (d)(1) of this Section), the owner or operator of the EGU must install, to the extent not already installed, and properly operate and maintain one of the following emission control devices:
      - A Halogenated Activated Carbon Injection System, complying with the sorbent injection requirements of subsection (c)(2) of this Section, except as may be otherwise provided by subsection (c)(4) of this Section, and followed by a Cold-Side Electrostatic Precipitator or Fabric Filter, or
      - ii) If the boiler fires bituminous coal, a Selective Catalytic Reduction (SCR) System and an SO<sub>2</sub> Scrubber.
    - B) An owner of an EGU in an MPS Group has two options under this subsection (c). For an MPS Group that contains EGUs smaller than 90 gross MW in capacity, the owner may designate any such EGUs to be not subject to subsection (c)(1)(A) of this Section. Or, for an MPS Group that contains EGUs with gross MW capacity of less than 115 MW, the owner may designate any such EGUs to be not subject to subsection (c)(1)(A) of this Section, provided that the aggregate gross MW capacity of the designated EGUs does not exceed 4% of the total gross MW capacity of the MPS Group. For any EGU subject to one of these two options, unless the EGU is subject to the emission standards in subsection (d)(2) of this Section, beginning on January 1, 2013, and continuing until such date that the owner or operator of the EGU commits to comply with the mercury emission standard in subsection (d)(2) of this Section, the owner or operator of the EGU must install and properly operate and maintain a Halogenated Activated Carbon Injection System that complies with the sorbent injection requirements of subsection (c)(2) of this Section, except as may be otherwise provided by subsection (c)(4) of this Section, and followed by either a Cold-Side Electrostatic Precipitator or Fabric Filter. The use of a properly installed, operated, and maintained Halogenated Activated Carbon Injection System that meets the sorbent injection requirements of subsection (c)(2) of this Section is defined as the "principal control technique."

- 2) For each EGU for which injection of halogenated activated carbon is required by subsection (c)(1) of this Section, the owner or operator of the EGU must inject halogenated activated carbon in an optimum manner, which, except as provided in subsection (c)(4) of this Section, is defined as all of the following:
  - A) The use of an injection system designed for effective absorption of mercury, considering the configuration of the EGU and its ductwork;
  - B) The injection of halogenated activated carbon manufactured by Alstom, Norit, or Sorbent Technologies, Calgon Carbon's FLUEPAC CF Plus, or Calgon Carbon's FLUEPAC MC Plus, or the injection of any other halogenated activated carbon or sorbent that the owner or operator of the EGU has demonstrated to have similar or better effectiveness for control of mercury emissions; and
  - C) The injection of sorbent at the following minimum rates, as applicable:
    - For an EGU firing subbituminous coal, 5.0 lbs per million actual cubic feet or, for any cyclone-fired EGU that will install a scrubber and baghouse by December 31, 2012, and which already meets an emission rate of 0.020 lbs mercury/GWh gross electrical output or at least 75 percent reduction of input mercury, 2.5 lbs per million actual cubic feet;
    - For an EGU firing bituminous coal, 10.0 lbs per million actual cubic feet for any cyclone-fired EGU that will install a scrubber and baghouse by December 31, 2012, and which already meets an emission rate of 0.020 lb mercury/GWh gross electrical output or at least 75 percent reduction of input mercury, 5.0 lbs per million actual cubic feet;
    - For an EGU firing a blend of subbituminous and bituminous coal, a rate that is the weighted average of the above rates, based on the blend of coal being fired; or
    - iv) A rate or rates set lower by the Agency, in writing, than the rate specified in any of subsections (c)(2)(C)(i), (c)(2)(C)(ii), or (c)(2)(C)(iii) of this Section on a unit-specific basis, provided that the owner or operator of the EGU has demonstrated that such rate or rates are needed so that carbon injection will not increase particulate matter emissions or opacity so as to threaten noncompliance with applicable requirements for particulate matter or opacity.
  - D) For the purposes of subsection (c)(2)(C) of this Section, the flue gas flow shall be the gas flow rate in the stack for all units except for those

equipped with activated carbon injection prior to a hot-side electrostatic precipitator; for units equipped with activated carbon injection prior to a hot-side electrostatic precipitator, the flue gas flow rate shall be the gas flow rate at the inlet to the hot-side electrostatic precipitator, which shall be determined as the stack flow rate adjusted through the use of Charles' Law for the differences in gas temperatures in the stack and at the inlet to the electrostatic precipitator ( $V_{esp} = V_{stack} \times T_{esp}/T_{stack}$ , where V = gas flow rate in acf and T = gas temperature in Kelvin or Rankine

- 3) The owner or operator of an EGU that seeks to operate an EGU with an activated carbon injection rate or rates that are set on a unit-specific basis pursuant to subsection (c)(2)(C)(iv) of this Section must submit an application to the Agency proposing such rate or rates, and must meet the requirements of subsections (c)(3)(A) and (c)(3)(B) of this Section, subject to the limitations of subsections (c)(3)(C) and (c)(3)(D) of this Section:
  - A) The application must be submitted as an application for a new or revised federally enforceable operating permit for the EGU, and it must include a summary of relevant mercury emission data for the EGU, the unit-specific injection rate or rates that are proposed, and detailed information to support the proposed injection rate or rates; and
  - B) This application must be submitted no later than the date that activated carbon must first be injected. For example, the owner or operator of an EGU that must inject activated carbon pursuant to subsection (c)(1)(A) of this subsection must apply for unit-specific injection rate or rates by July 1, 2009. Thereafter, the owner or operator of the EGU may supplement its application; and
  - C) Any decision of the Agency denying a permit or granting a permit with conditi that set a lower injection rate or rates may be appealed to the Board pursuant tr Section 39 of the Act; and
  - D) The owner or operator of an EGU may operate at the injection rate or rates proposed in its application until a final decision is made on the application, including a final decision on any appeal to the Board.
- 4) During any evaluation of the effectiveness of a listed sorbent, an alternative sorbent, or other technique to control mercury emissions, the owner or operator of an EGU need not comply with the requirements of subsection (c)(2) of this Section for any system needed to carry out the evaluation, as further provided as follows:
  - A) The owner or operator of the EGU must conduct the evaluation in accordance with a formal evaluation program submitted to the Agency at least 30 days prior to commencement of the evaluation;

- B) The duration and scope of the evaluation may not exceed the duration and scope reasonably needed to complete the desired evaluation of the alternative control technique, as initially addressed by the owner or operator in a support document submitted with the evaluation program;
- C) The owner or operator of the EGU must submit a report to the Agency no later than 30 days after the conclusion of the evaluation that describes the evaluation conducted and which provides the results of the evaluation; and
- D) If the evaluation of the alternative control technique shows less effective control of mercury emissions from the EGU than was achieved with the principal control technique, the owner or operator of the EGU must resume use of the principal control technique. If the evaluation of the alternative control technique shows comparable effectiveness to the principal control technique, the owner or operator of the EGU may either continue to use the alternative control technique, or it may resume use of the principal control technique. If the evaluation of the as effective as the principal control technique, or it may resume use of the principal control technique. If the evaluation of the alternative control technique in a manner that is at least as effective as the principal control technique. If the evaluation of the alternative control technique is the alternative control technique of the alternative control technique is the alternative control technique of the technique shows more effective as the principal control technique of the alternative control technique is the alternative control technique of the technique is a manner that is at least as effective as the principal control technique. If the evaluation of the alternative control technique, the owner or operator of the EGU must continue to use the alternative control technique in a manner that is more effective than the principal control technique, so long as it continues to be subject to this subsection (c).
- 5) In addition to complying with the applicable recordkeeping and monitoring requirements in Sections 225.240 through 225.290, the owner or operator of an EGU that elects to comply with this Subpart B by means of this Section must also comply with the following additional requirements:
  - A) For the first 36 months that injection of sorbent is required, it must maintain records of the usage of sorbent, the fluegas flow rate from the EGU (and, if the unit is equipped with activated carbon injection prior to a hot-side electrostatic precipitator, flue gas temperature at the inlet of the hot-side electrostatic precipitator and in the stack), and the sorbent feed rate, in pounds per million actual cubic feet of flue, on a weekly average;
  - B) After the first 36 months that injection of sorbent is required, it must monitor activated sorbent feed rate to the EGU, gas flow rate in the stack, and, if the unit is equipped with activated carbon injection prior to a hotside electrostatic precipitator, flue gas temperature at the inlet of the hotside electrostatic precipitator and in the stack. It must automatically record this data and the sorbent carbon feed rate, in pounds per million actual cubic feet of flue gas, on an hourly average; and

- C) If a blend of bituminous and subbituminous coal is fired in the EGU, it must keep records of the amount of each type of coal burned and the required injection rate for injection of activated carbon, on a weekly basis.
- 6) Until June 30, 2012, as an alternative to the CEMS or excepted monitoring system (sorbent trap system) monitoring, recordkeeping, and reporting requirements in Sections 225.240 through 225.290, the owner or operator of an EGU may elect to comply with the emissions testing, monitoring, recordkeeping, and reporting requirements in Section 225.239(c), (d), (e), (f)(1) and (2), (h)(2), (i)(3) and (4), and (j)(1).
- 7) In addition to complying with the applicable reporting requirements in Sections 225.240 through 225.290, the owner or operator of an EGU that elects to comply with this Subpart B by means of this Section must also submit quarterly reports for the recordkeeping and monitoring conducted pursuant to subsection (c)(5) of this Section.
- d) Emission Standards for Mercury.
  - 1) For each EGU in an MPS Group that is not addressed by subsection (c)(1)(B) of this Section, beginning January 1, 2015 (or such earlier date when the owner or operator of the EGU notifies the Agency that it will comply with these standards) and continuing thereafter, the owner or operator of the EGU must comply with one of the following standards on a rolling 12-month basis:
    - An emission standard of 0.0080 lb mercury/GWh gross electrical output; or
    - B) A minimum 90-percent reduction of input mercury.
  - 2) For each EGU in an MPS Group that has been addressed under subsection (c)(1)(B) of this Section, beginning on the date when the owner or operator of the EGU notifies the Agency that it will comply with these standards and continuing thereafter, the owner or operator of the EGU must comply with one of the following standards on a rolling 12-month basis:
    - An emission standard of 0.0080 lb mercury/GWh gross electrical output; or
    - B) A minimum 90-percent reduction of input mercury.
  - Compliance with the mercury emission standard or reduction requirement of this subsection (d) must be calculated in accordance with Section 225.230(a) or (d), or Section 225.232 until December 31, 2013.

Until June 30, 2012, as an alternative to demonstrating compliance with the emissions standards in this subsection (d), the owner or operator of an EGU may elect to comply with the emissions testing requirements in Section 225.239(a)(4), (b), (c), (d), (e), (f), (g), (h), (i), and (j) of this Subpart.

#### e) Emission Standards for NO<sub>x</sub> and SO<sub>2</sub>.

- 1) NO<sub>1</sub> Emission Standards.
  - A) Beginning in calendar year 2012 and continuing in each calendar thereafter, for the EGUs in each MPS Group, the owner and operator of the EGUs must comply with an overall NOx annual emission rate of no more than 0.11 lb/million Btu or an emission rate equivalent to 52 percent of the Base Annual Rate of NO<sub>x</sub> emissions, whichever is more stringent.
  - B) Beginning in the 2012 ozone season and continuing in each ozone season thereafter, for the EGUs in each MPS Group, the owner and operator of the EGUs must comply with an overall NO<sub>x</sub> seasonal emission rate of no more than 0.11 lb/million Btu or an emission rate equivalent to 80 percent of the Base Seasonal Rate of NO<sub>x</sub> emissions, whichever is more stringent.
- 2) SO<sub>2</sub> Emission Standards.
  - A) Beginning in calendar year 2013 and continuing in calendar year 2014, for the EGUs in each MPS Group, the owner and operator of the EGUs must comply with an overall SO<sub>2</sub> annual emission rate of 0.33 lb/million Btu or a rate equivalent to 44 percent of the Base Rate of SO<sub>2</sub> emissions, whichever is more stringent.
  - B) Beginning in calendar year 2015 and continuing in each calendar year thereafter, for the EGUs in each MPS Grouping, the owner and operator of the EGUs must comply with an overall annual emission rate for SO<sub>2</sub> of 0.25 lbs/million Btu or a rate equivalent to 35 percent of the Base Rate of SO<sub>2</sub> emissions, whichever is more stringent.
- 3) Ameren MPS Group Multi-Pollutant Standard
  - A) Notwithstanding the provisions of subsections (e)(1) and (2) of this Section, this subsection (e)(3) applies to the Ameren MPS Group as described in the notice of intent submitted by Ameren Energy Resources in accordance with subsection (b) of this Section.
  - B) NO, Emission Standards.

- Beginning in the 2010 ozone season and continuing in each ozone season thereafter, for the EGUs in the Ameren MPS Group, the owner and operator of the EGUs must comply with an overall NO<sub>x</sub> seasonal emission rate of no more than 0.11 lb/million Btu.
- ii) Beginning in calendar year 2010 and continuing in calendar year 2011, for the EGUs in the Ameren MPS Group, the owner and operator of the EGUs must comply with an overall NO<sub>x</sub> annual emission rate of no more than 0.14 lb/million Btu.
- iii) Beginning in calendar year 2012 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 NO<sub>2</sub> annual emission rate of no more than 0.11 lb/million Btu.

#### C) SO<sub>2</sub> Emission Standards

- i) Beginning in calendar year 2010 and continuing in each calendar year through 2013, for the EGUs in the Ameren MPS Group, the owner and operator of the EGUs must comply with an overall SO<sub>2</sub> annual emission rate of 0.50 lh/million Btu.
- ii) In calendar year 2014, for the EGUs in the Ameren MPS Group, the owner and operator of the EGUs must comply with an overall SO<sub>2</sub> annual emission rate of 0.43 lb/million Btu.
- iii) Beginning in calendar year 2015 and continuing in calendar year 2016, for the EGUs in the Ameren MPS Group, the owner and operator of the EGUs must comply with an overall SO<sub>2</sub> annual emission rate of 0.25 lb/million Btn.
- 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 SO<sub>2</sub> annual emission rate of 0.23 lb /million Btu.
- 4) Compliance with the NO<sub>x</sub> and SO<sub>2</sub> emission standards must be demonstrated in accordance with Sections 225.310, 225.410, and 225.510. The owner or operator of EGUs must complete the demonstration of compliance before March 1 of the following year for annual standards and before November 1 for seasonal standards, by which date a compliance report must be submitted to the Agency.
  - Requirements for NO<sub>x</sub> and SO<sub>2</sub> Allowances.

9

f)

- 1) The owner or operator of EGUs in an MPS Group must not sell or trade to any person or otherwise exchange with or give to any person NO<sub>x</sub> allowances allocated to the EGUs in the MPS Group for vintage years 2012 and beyond that would otherwise be available for sale, trade, or exchange as a result of actions taken to comply with the standards in subsection (e) of this Section. Such allowances that are not retired for compliance must be surrendered to the Agency on an annual basis, beginning in calendar year 2013. This provision does not apply to the use, sale, exchange, gift, or trade of allowances among the EGUs in an MPS Group.
- 2) The owners or operators of EGUs in an MPS Group must not sell or trade to any person or otherwise exchange with or give to any person SO<sub>2</sub> allowances allocated to the EGUs in the MPS Group for vintage years 2013 and beyond that would otherwise be available for sale or trade as a result of actions taken to comply with the standards in subsection (e) of this Section. Such allowances that are not retired for compliance, or otherwise surrendered pursuant to a consent decree to which the State of Illinois is a party, must be surrendered to the Agency on an annual basis, beginning in calendar year 2014. This provision does not apply to the use, sale, exchange, gift, or trade of allowances among the EGUs in an MPS Group.
- 3) The provisions of this subsection (f) do not restrict or inhibit the sale or trading of allowances that become available from one or more EGUs in a MPS Group as a result of holding allowances that represent over-compliance with the NO<sub>x</sub> or SO<sub>2</sub> standard in subsection (e) of this Section, once such a standard becomes effective, whether such over-compliance results from control equipment, fuel changes, changes in the method of operation, unit shut downs, or other reasons.
- 4) For purposes of this subsection (f), NO<sub>x</sub> and SO<sub>2</sub> allowances mean allowances necessary for compliance with Sections 225.310, 225.410, or 225.510, 40 CFR 72, or Subparts AA and AAAA of 40 CFR 96, or any future federal NO<sub>x</sub> or SO<sub>2</sub> emissions trading programs that modify or replace these programs. This Section does not prohibit the owner or operator of EGUs in an MPS Group from purchasing or otherwise obtaining allowances from other sources as allowed by law for purposes of complying with federal or state requirements, except as specifically set forth in this Section.
- 5) By March 1, 2010, and continuing each year thereafter, the owner or operator of EGUs in an MPS Group must submit a report to the Agency that demonstrates compliance with the requirements of this subsection (f) for the previous calendar year, and which includes identification of any allowances that have been surrendered to the USEPA or to the Agency and any allowances that were sold, gifted, used, exchanged, or traded because they became available due to over-compliance. All allowances that are required to be surrendered must be surrendered by August 31, unless USEPA has not yet deducted the allowances
from the previous year. A final report must be submitted to the Agency by August 31 of each year, verifying that the actions described in the initial report have taken place or, if such actions have not taken place, an explanation of all changes that have occurred and the reasons for such changes. If USEPA has not deducted the allowances from the previous year by August 31, the final report will be due, and all allowances required to be surrendered must be surrendered, within 30 days after such deduction occurs.

g) Notwithstanding 35 III. Adm. Code 201.146(hhh), until an EGU has complied with the applicable emission standards of subsections (d) and (e) of this Section for 12 months, the owner or operator of the EGU must obtain a construction permit for any new or modified air pollution control equipment that it proposes to construct for control of emissions of mercury, NO<sub>2</sub>, or SO<sub>2</sub>.

(Source: Amended at 33 Ill. Reg. 10427, effective June 26, 2009)

Section 225.291 Combined Pollutant Standard: Purpose

The purpose of Sections 225.291 through 225.299 (bereinafter referred to as the Combined Pollutant Standard ("CPS")) is to allow an alternate means of compliance with the emissions standards for mercury in Section 225.230(a) for specified EGUs through permanent sbut-down, installation of ACI, and the application of pollution control technology for  $NO_3$ , PM, and  $SO_2$ emissions that also reduce mercury emissions as a co-benefit and to establish permanent emissions standards for those specified EGUs. Unless otherwise provided for in the CPS, owners and operators of those specified EGUs are not excused from compliance with other applicable requirements of Subparts B, C, D, and E.

(Source: Added at 33 Ill. Reg. 10427, effective June 26, 2009)

Section 225,292 Applicability of the Combined Pollutant Standard

a) As an alternative to compliance with the emissions standards of Section 225.230(a), the owner or operator of specified EGUs in the CPS located at Fisk, Crawford, Joliet, Powerton, Waukegan, and Will County power plants may elect for all of those EGUs as a group to demonstrate compliance pursuant to the CPS, which establishes control requirements and emissions standards for NO<sub>x</sub>, PM, SO<sub>2</sub>, and mercury. For this purpose, ownership of a specified EGU is determined based on direct ownership, by bolding a majority interest in a company that owns the EGU or EGUs, or by the common ownership of the company that owns the EGU, whether through a parent-subsidiary relationship, as a sister corporation, or as an affiliated corporation with the same parent corporation, provided that the owner or operator has the right or authority to submit a CAAPP application on behalf of the EGU.

- b) A specified EGU is a coal-fired EGU listed in Appendix A, irrespective of any subsequent changes in ownership of the EGU or power plant, the operator, anit designation, or name of unit.
- c) The owner or operator of each of the specified EGUs electing to demonstrate compliance with Section 225.230(a) pursuant to the CPS must submit an application for a CAAPP permit modification to the Agency, as provided for in Section 225.220, that includes the information specified in Section 225.293 that clearly states the owner's or operator's election to demonstrate compliance with Section 225.230(a) pursuant to the CPS.
- d) If an owner or operator of one or more specified EGUs elects to demonstrate compliance with Section 225.230(a) pursuant to the CPS, then all specified EGUs owned or operated in Illinois by the owner or operator as of December 31, 2006, as defined in subsection (a) of this Section, are thereafter subject to the standards and control requirements of the CPS. Such EGUs are referred to as a Combined Pollutant Standard (CPS) group.
- e) If an EGU is subject to the requirements of this Section, then the requirements apply to all owners and operators of the EGU.

(Source: Added at 33 Ill. Reg. 10427, effective June 26, 2009)

Section 225.293 Combined Pollutant Standard: Notice of Intent

The owner or operator of one or more specified EGUs that intends to comply with Section 225.230(a) by means of the CPS must notify the Agency of its intention on or before December 31, 2007. The following information must accompany the notification:

- a) The identification of each EGU that will be complying with Section 225.230(a) pursuant to the CPS, with evidence that the owner or operator has identified all specified EGUs that it owned or operated in Illinois as of December 31, 2006, and which commenced commercial operation on or before December 31, 2004;
- b) If an EGU identified in subsection (a) of this Section is also owned or operated by a person different than the owner or operator submitting the notice of intent, a demonstration that the submitter has the right to commit the EGU or authorization from the responsible official for the EGU submitting the application; and
- c) A summary of the current control devices installed and operating on each EGU and identification of the additional control devices that will likely be needed for each EGU to comply with emission control requirements of the CPS.

(Source: Added at 33 Ill. Reg. 10427, effective June 26, 2009)

Section 225,295 Combined Pollutant Standard: Emissions Standards for NO<sub>7</sub> and SO<sub>2</sub>

- a) Emissions Standards for NO<sub>x</sub> and Reporting Requirements.
  - Beginning with calendar year 2012 and continuing in each calendar year thereafter, the CPS group, which includes all specified EGUs that have not been permanently shut down by December 31 before the applicable calendar year, must comply with a CPS group average annual NO<sub>x</sub> emissions rate of no more than 0.11 lbs/mmBtu.
  - 2) Beginning with ozone season control period 2012 and continuing in each ozone season control period (May 1 through September 30) thereafter, the CPS group, which includes all specified EGUs that have not been permanently shut down by December 31 before the applicable ozone season, must comply with a CPS group average ozone season NO<sub>x</sub> emissions rate of no more than 0.11 lbs/mmBtu.
  - 3) The owner or operator of the specified EGUs in the CPS group must file, not later than one year after startup of any selective SNCR on such EGU, a report with the Agency describing the NO<sub>x</sub> emissions reductions that the SNCR has been able to achieve.
- b) Emissions Standards for SO<sub>2</sub>. Beginning in calendar year 2013 and continuing in each calendar year thereafter, the CPS group must comply with the applicable CPS group average annual SO<sub>2</sub> emissions rate listed as follows:

year 2013 2014 2015	lbs/mmBtu					
2013	0.44					
2014	0.41					
2015	0.28					
2016	0.195					
2017	0.15					
2018	0.13					
2019	0.11					

c) Compliance with the NO<sub>x</sub> and SO<sub>2</sub> emissions standards must be demonstrated in accordance with Sections 225.310, 225.410, and 225.510. The owner or operator of the specified EGUs must complete the demonstration of compliance pursuant to Section 225.298(c) before March 1 of the following year for annual standards and before November 30 of the particular year for ozone season control periods (May 1 through September 30) standards, by which date a compliance report must be submitted to the Agency. [NOTE: This subsection is relying on the compliance requirements of the Clean Air Interstate Rule Trading Program under Subparts C, D, and E of Part 225 and will need to be amended accordingly when the Transport Rule is promulgated.]

The CPS group average annual SO<sub>2</sub> emission rate, annual NO<sub>x</sub> emission rate and d) ozone season NO<sub>x</sub> emission rates shall be determined as follows: n

$$ER_{svg} = \Sigma (SO_{2i} \text{ or } NO_{xi} \text{ tons}) \Sigma (HI_i)$$
  
$$= 1$$

Where:

n

ER,	IYR ==	sverage annual or ozone season emission rate in
		lbs/mmBbtu of all EGUs in the CPS group.
EI,		heat input for the annual or ozone control period of each
	-	EGU, in mmBtu.
SO <sub>2</sub>	ы —	actual annual SO <sub>2</sub> tons of each EGU in the CPS group.
NO	ci 🎫	actual annual or ozone season NO <sub>x</sub> tons of each EGU in the
		CPS group.
Ν		number of EGUs that are in the CPS group.
I	=	each EGU in the CPS group.

(Source: Amended at 33 Ill. Reg. 10427, effective June 26, 2009)

Section 225.296 Combined Pollutant Standard: Control Technology Requirements for NOx, SO2, and PM Emissions

- Control Technology Requirements for NO<sub>3</sub> and SO<sub>2</sub>. e)
  - 1) On or before December 31, 2013, the owner or operator must either permanently shut down or install and have operational FGD equipment on Waukegan 7;
  - On or hefore December 31, 2014, the owner or operator must either 2) permanently shut down or install and have operational FGD equipment on Waukegan 8;
  - On or hefore December 31, 2015, the owner or operator must either 3) permanently shut down or install and have operational FGD equipment on Fisk 19;
  - If Crawford 7 will be operated after December 31, 2018, and not 4) permanently shut down by this date, the owner or operator must:
    - On or before December 31, 2015, install and have operational SNCR **A**) or equipment capable of delivering essentially equivalent NO<sub>x</sub> reductions on Crawford 7; and

- B) On or before December 31, 2018, install and have operational FGD equipment on Crawford 7;
- 5) If Crawford 8 will be operated after December 31, 2017 and not permanently shut down by this date, the owner or operator must:
  - A) On or before December 31, 2015, install and have operational SNCR or equipment capable of delivering essentially equivalent NO<sub>x</sub> emissions reductions on Crawford 8; and
  - B) On or before December 31, 2017, install and have operational FGD equipment on Crawford 8.
- b) Other Control Technology Requirements for SO<sub>2</sub>. Owners or operators of specified EGUs must either permanently shut down or install FGD equipment on each specified EGU (except Joliet 5), on or before December 31, 2018, unless an earlier date is specified in subsection (a) of this Section.
- c) Control Technology Requirements for PM. The owner or operator of the two specified EGUs listed in this subsection that are equipped with a hot-side ESP must replace the hot-side ESP with a cold-side ESP, install an appropriately designed fabric filter, or permanently shut down the EGU by the dates specified. Hot-side ESP means an ESP on a cosl-fired boiler that is installed before the boiler's airpreheater where the operating temperature is typically at least 550° F, as distinguished from a cold-side ESP that is installed after the air pre-beater where the operating temperature is typically no more than 350° F.
  - 1) Waukegan 7 on or before December 31, 2013; and
  - 2) Will County 3 on or before December 31, 2015.
- d) Beginning on December 31, 2008, and annually thereafter up to and including December 31, 2015, the owner or operator of the Fisk power plant must submit in writing to the Agency a report on any technology or equipment designed to affect air quality that has been considered or explored for the Fisk power plant in the preceding 12 months. This report will not obligate the owner or operator to install any equipment described in the report.
- e) Notwithstanding 35 Ill. Adm. Code 201.146(hbh), until an EGU has complied with the applicable requirements of subsections 225.296(a), (b), and (c), the owner or operator of the EGU must obtain a construction permit for any new or modified air pollution control equipment that it proposes to construct for control of emissions of mercury, NO<sub>2</sub>, PM, or SO<sub>2</sub>.

(Source: Added at 33 Ill. Reg. 10427, effective June 26, 2009)

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### 225.APPENDIX A Specified EGUs for Purposes of the CPS (Midwest Generation's Coal-Fired Boilers as of July 1, 2006)

Plant	Permit Number	Boiler	Permit designation	CPS Designation
Crawford	031600AIN	7	Unit 7 Boiler BLR1	Crawford 7
		8	Unit 8 Boiler BLR2	Crawford 8
Fisk	031600AMI	19	Unit 19 Boiler BLR19	Fisk 19
Joliet	197809AAO	71	Unit 7 Boiler BLR71	Joliet 7
		72	Unit 7 Boiler BLR72	Joliet 7
		81	Unit 8 Boiler BLR81	Joliet 8
		82	Unit 8 Boiler BLR82	Joliet 8
		5	Unit 6 Boiler BLR5	Joliet 6
Powerton	179801AAA	51	Unit 5 Boiler BLR 51	Powerton 5
		52	Unit 5 Boiler BLR 52	Powerton 5
		61	Unit 6 Boiler BLR 61	Powerton 6
		62	Unit 6 Boiler BLR 62	Powerton 6
Wankegan	097190AAC	17	Unit 6 Boiler BLR17	Waukegan 6
.,		7	Unit 7 Boiler BLR7	Wankegan 7
		8	Unit 8 Boiler BLR8	Waukegan 8
Will County	197810AAK	1	Unit 1 Boiler BLR1	Will County 1
···,		2	Unit 2 Boiler BLR2	Will County 2
		3	Unit 3 Boiler BLR3	Will County 3
		4	Unit 4 Boiler BLR4	Will County 4

(Source: Amended at 33 Ill. Reg. 10427, effective June 26, 2009)

# Exhibit 7

Proposed Federal Approval of the Illinois BART SIP (77 Fed.Reg. 3966 (Jan. 26, 2012))

**3966** 

Federal Register / Vol. 77, No. 17 / Thursday, January 26, 2012 / Proposed Rules

information described in paragraph (b) of this section.

(b) Required information---(1) In general. The information required under paragraph (a) of this section shall include the following information:

(i) The passport applicant's full name and, if applicable, previous name;

 (ii) Address of the passport applicant's regular or principal place of residence within the country of residence and, if different, meiling address;

(iii) The passport applicant's taxpayer identifying number (TIN), if such a number has been issued to the passport applicant. A TIN means the individual's social security number (SSN) issued by the Social Security Administration. A passport applicant who does not have an SSN must enter zeros in the appropriate space on the passport application; and

(iv) The passport applicant's date of birth.

(2) Time for furnishing information. A passport applicant must provide the information required by this section at the time of submitting his or her passport application, whether by personal appearance or mail, to the Department of States (including United States Embassies and Consular posts ahroad).

(c) Penalties-(1) In general. If the information required by paragraph (b)(1) of this section is incomplete or incorrect, or the information is not timely filed, then the passport applicant shall be subject to a penalty equal to \$500 per application. Before assessing a penalty under this section, the IRS will ordinarily provide to the pessport applicant written notice of the potential assessment of the \$500 penalty, requesting the information being sought, and offering the applicant an opportunity to explain why such information was not provided at the time the passport application was submitted. A passport applicant has 60 days (90 days if the notice is addressed to an applicant outside the United States) to respond to the notice. If, after considering all the surrounding circumstances, the passport applicant demonstrates to the satisfaction of the Commissioner or his delegate that the failure is due to reasonable cause and not due to willful neglect, then the IRS will not assess the penalty.

(2) Example. The following example illustrates the provisions of paregraph (c) this section.

Example. C, a citizen of the United States, makes an error in supplying information on his passport application. Based on the nature of the error and C's timely response to correct the error after being contacted by the IRS, and considering all the surrounding circumstances, the Commissioner concludes that the mistake is due to reasonable cause and not due to willful neglect. Accordingly, no penalty is assessed.

(d) Effective/applicability date. The rules of this section apply to passport applications submitted after the date of publication of the Treasury decision adopting these rules as final regulations in the Federal Register.

#### Steven T. Miller,

Deputy Commissioner for Services and Enforcement.

(FR Doc. 2012-1567 Filed 3-25-12; 8:45 am) Billing CODE 4830-01-P

#### ENVIRONMENTAL PROTECTION AGENCY

#### 40 CFR Part 52

[EPA-R09-OAR-2011-0598; FRL-9822-6]

#### Approval and Promulgation of Air Quality Implementation Plana; Illinois; Regional Haze

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing to approve revisions to the Illinois State Implementation Plan (SIP) addressing regional haze for the first implementation peried. Illinois submitted its regional haze plan on June 24, 2011. The Illinois regional haze plan addresses Clean Air Act (CAA) section 169B and Regional Haze Rule requirements for states to remedy any existing and prevent future anthropogenic impairment of visibility at mandatory Class I areas. EPA is also proposing to approve two stete rules and incorporating two permits into the SIP.

DATES: Comments must be received on or before February 27, 2012. ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R05-OAR-2011-0598, by one of the

following methods:

 www.regulations.gov: Follow the on-line instructions for submitting comments.

Emoil: blakley.pamela@epa.gov.
Fax: (312) 892-2450.

4. Mail: Pamela Blakley, Chief, Control Strategies Section, Air Programs Branch (AR-18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604.

5. Hand Delivery: Pamela Blakley, Chief, Control Strategies Section, Air Programs Branch (AR-18]), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604. Such deliveries are only accepted during the Regional Office normal hours of operation, and special arrangements should be made for deliveries of boxed information. The Regional Office official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

Instructions: Direct your comments to Docket ID No. EPA-R05-OAR-2011-0598. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov or email. The www.regulations.gov Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through www.regulations.gov your email address will be automatically captured and included as part of the comment that is placed in the public docket and mede available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional instructions on submitting commenta, go to Section I of this document.

Docket: All documents in the docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy at the Environmental Protection Agency, Region 5, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. This facility is open from 8:30 a.m. to 4:30 p.m., Monday through

Federal Register / Vol. 77, No. 17 / Thursday, January 26, 2012 / Proposed Rules

Friday, excluding Federal holidays. We recommend that you telephone Matt Rau, Environmental Engineer, at (312) 886-6524 before visiting the Region 5 office.

FOR FURTHER INFORMATION CONTACT: Matt Rau, Environmental Engineer, Control Strategies Section, Air Programs Branch (AR-18]), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 886-6524, rau.matthew@epa.gov.

### SUPPLEMENTARY INFORMATION:

Throughout this document whenever "we," 'us," or "our" is used, we mean EPA.

#### Table of Contents

- I. What should I consider as I prepare my comments for EPA?
- II. What is the background for EPA's proposed action?
- III. What are the requirements for regional haze SIPs?
- IV. What is EPA's analysis of Illinois' regional haze plan? V. What action is EPA taking?
- VI. Statutory and Executive Order Reviews

#### I. What should I consider as I prepare my comments for EPA?

When submitting comments, remember to:

1. Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register date and page number).

2. Follow directions-EPA may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.

3. Explain wby you agree or disagree; suggest alternatives and substitute language for your requested changes.

4. Describe any assumptions end provide any technicel information and/ or data that you used.

5. If you estimate potential costs or burdens, explain bow you arrived at your estimate in sufficient detail to allow for it to be reproduced.

6. Provide specific examples to illustrate your concerns, and suggest alternatives.

7. Explain your views as clearly as possible, avoiding the use of profanity or personal threats.

8. Make sure to submit your comments by the comment period deadline identified.

#### II. What is the background for EPA's proposed action?

### A. The Regional Hoze Problem

Regional haze is visibility impairment that is produced by a multitude of sources and activities located across a broad geographic area that emit fine

particles (PM2.5) (e.g., sulfates, nitrates, organic carbon, elemental carbon, and soil dust) and its precursors-sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), and in some cases ammonia (NH3) and volatile organic compound (VOCs). Fine particle precursors react in the atmosphere to form fine particulate matter. Aerosol PM13 impairs visibility by scattering and absorbing light. Visibility impairment reduces the clarity and distance one can see. PM can also cause serious health effects and mortality in humans and contributes to detrimental environmental effects such as acid deposition and eutrophication.

Data from the existing visibility monitoring network, the "Interagency Monitoring of Protected Visual Environments" (IMPROVE) monitoring network, show that visibility impairment caused by air pollution occurs virtually all of the time at most national park and wilderness areas. The average visual range, the distance at which an object is barely discernable, in many Class I areas 1 in the western United States is 100–150 kilometers. That is about one-half to two-thirds of the visual range that would exist without anthropogenic air pollution. In the eastern and midwestern Class I areas of the United States, the average visual range is generally less than 30 kilomaters, or about one-fifth of the visual range that would exist under estimated natural conditions. 64 FR 35715 (July 1, 1999).

#### B. Requirements of the Clean Air Act and EPA's Regional Haze Rule

In section 169A of the 1977 Amendments to the CAA, Congress created a program for protecting visibility in the nation's national parks and wilderness areas. This section of the CAA establishes as a national goal the 'prevention of any future, end the remedying of any existing, impeirment of visibility in mandatory Class I

<sup>1</sup> Areas designated as mandatory Class I Federal areas consist of national parks exceeding 6000 acres, wilderness areas, and national memorial parks exceeding 5000 acres and all international parks exceeding 5000 acres and all informational parks that were in existence on August 7, 1977, 42 U.S.C. 7472(a). In accordance with socion 159A of the CAA, EPA, in consultation with the Department of Interior, promulgated a list of 156 areas where visibility is identified as an important value. 44 FR 69122 (November 30, 1978). The extent of a mandatory Class I area includes subsequent changes in boundary subsequent changes in boundaries, such as park expansions. 42 U.S.C. 7472(a). Although states and tribes may designate as Class I additional areas which they consider to as class I admitmail areas which they consider to have visibility as an important value, the requirements of the visibility program set forth in section 189A of the CAA apply only to "mandatory Class I Federal areas." Each mandatory Class I Federal area is the responsibility of a "Federal Land Manager." 42 U.S.C. 7602(i). When we use the term "Class 1 area," we mean "mandatory Class I Pederal anea."

Federal areas which impeirment results from manmade air pollution." On December 2, 1980, EPA promulgated regulations to address visibility impairment in Class I areas that is "reasonably attributable" to a single source or small group of sources known as, "reasonably attributable visibility impairment" (RAVI). 45 FR 80084. These regulations represented the first phase in addressing visibility impairment. EPA deferred action on regional haze that emanates from a variety of sources until monitoring, modeling, and scientific knowledge about the relationships between pollutants and visibility impairment were improved.

Congress added section 169B to the CAA in 1990 to address regional haze issues. EPA promulgated the Regional Haze Rule (RHR) on July 1, 1999 (64 FR 35713). The RHR revised the existing visibility regulations to integrate into the regulations provisions addressing regional haze impairment and established a comprehensive visibility protection program for Cless I areas. The requirements for regional haze, found at 40 CFR 51.308 and 51.309, are included in EPA's visibility protection regulations at 40 CFR 51.300-309. Some of the main elements of the regional haze requirements are summarized in section III. The requirement to submit a regional haze SIP applies to all 50 states, the District of Columbia, and the Virgin Islands.<sup>2</sup>

#### C. Roles of Agencies in Addressing Regional Haze

Successful implementation of the regional haze program will require longterm regional coordination among states, tribal governments, and Federal agencies. Pollution affecting the air quality in Class I areas can be transported over long distances, even hundreds of kilometers. Therefore, effectively addressing the problem of visibility impairment in Class I areas means that states need to develop coordinated strategies that take inta account the effect of emissions from one jurisdiction on the air quality of enother state

EPA has encouraged the states and tribes to address visibility impairment from a regionel perspective because tha pollutants that lead to regional haze can originate from sources located across broad geographic areas. Five regional planning organizatious (RPOs) were developed to address regional haze and

<sup>&</sup>lt;sup>2</sup> Albuquarque/Bernaillio County, New Mexico must also submit a regional haze SIP to satisfy the section 110(a)(2)(D) requirements of the CAA for the entire state under the New Maxico Air Quality Control Act (section 74-2-4).

Federal Register / Vol. 77, No. 17 / Thursday, January 26, 2012 / Proposed Rules

related issues. The RPOs first evaluated technical information to better understand how their states and tribes impact Class I areas across the country and then pursued the development of regional strategies to reduce  $PM_{2.5}$  emissions and other pollutants leading to regional haze.

The Midwest RPO (MRPO) is a collaborative effort of state governments and various Federal agencies established to initiate and coordinate activities associated with the management of regional haze, visibility, and other eir quality issues in the Midwest. The member states are Illinois, Indiana, Michigan, Ohio, and Wisconsin.

## III. What are the requirements for regional haze SIPs?

Regional haze SIPs must assure reasonable progress toward the national goal of achieving natural visibility conditions in Class I areas. Section 169A of the CAA and EPA's implementing regulations require states to establish long-term strategies for making reasonable progress toward meeting this goal. Plans must also give specific attention to certain stationary sources that were in existence on August 7, 1977, but were not in operation before August 7, 1962, and must require those sources to install emission controls reducing visibility impairment if appropriate. The specific regional haze SIP requirements are discussed in further detail below.

#### A. Determinotian of Baseline, Natural, and Current Visibility Conditions

The RHR establishes the deciview <sup>3</sup> (dv) as the principal metric or unit for expressing visibility impairment. This visibility metric expresses uniform proportional changes in haziness in terms of common increments across the entire range of visibility conditions, from pristine to extremely hazy conditions. Visibility expressed in deciviews is determined by using air quality measurements to estimate light extinction and then transforming the value of light extinction using a logarithm function. The deciview is a more useful measure for tracking progress in improving visibility than light extinction itself because each deciview change is an equal incremental change in visibility perceived by the human eye. Most people can detect a change in visibility at one deciview.

The deciview is used in expressing RPGs, defining baseline, current, and natural conditions, and tracking changes in visibility. The regional haze SIPs must contain measures that ensure "reasonable progress" toward the national goal of preventing and remedying visibility impairment in Class I areas caused by anthropogenic air pollution. The national goal is a return to natural conditions such thet anthropogenic sources of air pollution would no longer impair visibility in Class I areas.

To track changes in visibility over time at each of the 156 Class I areas covered by the visibility program (40 CFR 81.401-437) and as part of the process for determining reasonable progress, states must calculate the degree of existing visibility impairment at each Class I area at the time of each regional haze SIP submission and at the progress review every five years, midway through each 10-year implementation period. The RHR requires states with Class I areas (Class I states) to determine the degree of impairment in deciviews for the average of the 20 percent least impaired (best) and 20 percent most impaired (worst) visibility days over a specified time period at each of its Class I areas. Each state must also develop an estimate of natural visibility conditions for the purpose of comparing progress toward the national goal. Natural visibility is determined by estimating the natural concentrations of pollutants that cause visibility impairment and then calculating total light extinction based on those estimates. EPA has provided guidance to states regarding how to calculate baseline, natural, and current visibility conditions in documents titled, EPA's Guidance for Estimating Notural Visibility Conditions Under the Regional Haze Rule, September 2003, (EPA-454/B-03-005 located at http:// www.epa.gov/ttncaaa1/t1/memoranda/ rh envcurhr\_gd.pdf) (hereinafter referred to as "EPA's 2003 Natural Visibility Guidance") and Guidance for Tracking Progress Under the Regional Haze Rule (EPA-454/B-03-004 September 2003 located at http://www. epa.gov/ttncaaa1/t1/memoranda/rh tpurhr\_gd.pdf) (EPA's 2003 Tracking Progress Guidance).

For the first regional haze SIP, the "baseline visibility conditions" are the starting points for assessing "current" visibility impairment. Baseline visibility conditions represent the degree of visibility impairment for the 20 percent best days and 20 percent worst days for each calendar year from 2000 to 2004. Using monitoring data for 2000 through 2004, states calculate the average degree of visibility impairment for each Class I area, based on the average of annual values over the five-year period. The comparison of initial baseline visibility conditions to natural visibility conditions indicates the amount of improvement necessary to attain natural visibility, while the future comparison of baseline conditions to the then current conditions will indicate the amount of progress made. In general, the 2000 to 2004 baseline period is considered the time from which improvement in visibility is measured.

#### B. Determination of Reasonable Progress Goals (RPGs)

The vehicle for ensuring continuing progress towards achieving the natural visibility goal is the submission of a series of regional haze SIPs from the states that establish two distinct RPGs. one for the best days and one for the worst days for every Class I area for each approximately 10-year implementation period. The RHR does not mandate specific milestones or rates of progres but instead calls for states to establish goals that provide for "reasonable progress" toward achieving natural visibility conditions. In setting RPGs, Class I states must provide for an improvement in visibility for the worst days over the approximately 10-year period of the SIP and ensure no degradation in visibility for the best

days. Class I states have significant discretion in establishing RPGs, but are required to consider the following factors established in section 169A of the CAA and in EPA's RHR at 40 CFR 51.308(d)(1)(i)(A): (1) The costs of compliance; (2) the time necessary for compliance; (3) the energy and nan-air quality environmental impacts of compliance; and, (4) the remaining useful life of any potentially affected sources. The state must demonstrate in its SIP how these factors are considered when selecting the RPGs for the best and worst days for each applicable Class I area. States have considerable flexibility in how they take these factors into consideration, as noted in EPA's Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program, ("EPA's Reasonable Progress Guidance"), July 1, 2007, memorandum from William L. Wehrum, Acting Assistant Administrator for Air and Radiation, to EPA Regional Administrators, EPA Regions 1-10 (pp. 4-2, 5-1). In setting the RPGs, states must also consider the rate of progress needed to reach natural visibility conditions by 2064 ("uniform rate of progress" or "glide path") and the emissions reduction needed to achieve that rate of progress over the approximately 10-year period of the SIP.

<sup>&</sup>lt;sup>3</sup> The preamble to the RHR provides additional details about the deciview. 64 FR 35714, 35725 (July 1, 1999).

Federal Register / Vol. 77, No. 17 / Thursday, January 26, 2012 / Proposed Rules

In setting RPGs, each Class I state must also consult with potentially contributing states, *i.e.* those states that may affect visibility impairment at the Class I state's areas. 40 CFR 51.308(d)(1)(iv).

# C. Best Available Retrofit Technology (BART)

Section 169A of the CAA directs states to evaluate the use of retrofit controls at certain older large stationary sources to address visibility impacts from these sources. Specifically, CAA section 169A(b)(2)(A) requires states to revise their SIPs to contain such measures as may be necessary to make reasonable progress towards the natural visibility goal including a requirement that certain categories of existing major stationary sources built between 1962 and 1977 procure, install, and operate BART as determined by the state. The set of "major stationary sources' potentially subject to BART is listed in CAA section 169A(g)(7). The state can require source-specific BART controls, but it also has the flexibility to adopt an alternative such as a trading program as long as the alternative provides greater progress towards improving visibility than BART.

On July 6, 2005, EPA published the Guidelines for BART Determinations Under the Regional Haze Rule at Appendix Y to 40 CFR Part 51 (BART Guidelines) to assist states in determining which of their sources should be subject to the BART requirements and in determining appropriate emission limits for each applicable source. A state must use the approach in the BART Guidelines in making a BART determination for fossil fuel-fired electric generating units (EGUs) with total generating capacity in excess of 750 megawatts. States are encouraged, but not required, to follow the BART Guidelines in making BART determinations for other source

States must address all visibilityimpairing pollutants emitted by a source in the BART determination process. The most significant visibility impairing pollutants are SO<sub>2</sub>, NO<sub>X</sub>, and PM. EPA has stated that states should use their best judgment in determining whether VOC or NH<sub>3</sub> compounds impair visibility in Class I areas.

States may select an exemption threshold value for their BART modeling under the BART Guidelines, below which a BART-eligible source would not be expected to cause or contribute to visibility impairment in any Class I area. The state must document this exemption threshold value in the SIP and must state the basis for its selection of that value. The exemption threshold set by the state should not be higher than 0.5 dv. Any source with emissions that model above the threshold value would be subject to a BART determination review. The BART Guidelines acknowledge varying circumstances affecting different Class I areas. States should consider the number of emission sources affecting the Class I areas at issue and the magnitude of the individual source's impact.

The state must identify potential BART sources in its SIP, described as "BART-eligible sources" in the RHR, and document its BART control determination analyses. In making BART determinations, section 169A(g)(2) of the CAA requires the state to consider the following factors: (1) The costs of compliance; (2) the energy and non-air quality environmental impacts of compliance; (3) any existing pollution control technology in use at the source; (4) the remaining useful life of the source; and, (5) the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology. A regional haze SIP must include source-specific BART emission limits and compliance schedules for each source subject to BART. The BART controls must be installed and in operation as expeditiously as precticable, but no later than five years after the data of EPA's approval of the state's regional haze SIP. CAA section 169(g)(4); 40 CFR 51.308(e)(1)(iv). In addition to what is required by the RHR, general SIP requirements mandate that the SIP must also include all regulatory requirements related to monitoring, recordkeeping, and reporting for the BART controls on the source.

#### D. Long-Term Strategy

Consistent with the requirement in section 169A(b) of the CAA that states include in their regional haze SIP a 10 to 15 year strategy for making reasonable progress, section 51.308(d)(3) of the RHR requires that states include a long-term strategy (LTS) in their regional baze SIPs. The LTS is the compilation of all control measures a state will use during the implementation period of the specific SIP submittal to meet applicable RPGs. The LTS must include enforceable emissious limitations, compliance achedules, and other measures as necessary to achieve the RPGs for all Class I areas within or affected by emissions from the state. 40 CFR 51.308(d)(3).

When a state's emissions are reasonably anticipated to cause or contribute to visibility impairment in a

Class I area located in another state, the RHR requires the impacted state to coordinate with the contributing states in order to develop coordinated emissions management strategies. 40 CFR 51.308(d)(3)(i). In such cases the contributing state must demonstrate that it has included in its SIP all measures necessary to obtain its share of the emission reductions needed to meet the RPGs for the Class I area. The RPOs have provided forums for significant interstate consultation, but additional consultations between states may be required to address interstate visibility issues sufficiently.

States should consider all types of anthropogenic sources of visibility impairment in developing their LTS, including stationary, minor, mobile, and area sources. At a minimum, states must describe how each of the following seven factors are taken into account in developing their LTS: (1) Emission reductions due to ongoing air pollution control programs, including measures to address RAVI; (2) measures to mitigate the impacts of construction activities; (3) emissions limitations and schedules for compliance to achieve the RPG; (4) source retirement and replacement schedules; (5) smoke management techniques for agricultural and forestry management purposes including plans as currently exist within the state for these purposes; (6) enforceability of emissions limitations and control measures; and, (7) the anticlpated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the LTS, 40 CFR 51.308(d)(3)(v),

#### E. Coordinating Regional Haze and Reasonably Attributable Visibility Impairment Long-Term Strategy

EPA revised 40 CFR 51.306(c) as part of the RHR regarding the LTS for RAVI to require that the RAVI plan must provide for a periodic review and SIP revision not less frequently than every three years until the date of submission of the state's first plan addressing regional haze visibility impairment in accordance with 40 CFR 51.308(b) and (c). The state must revise its plan to provide for review and revision of a coordinated LTS for addressing RAVI and regional haze on or before this date. It must also submit the first such coordinated LTS with its first regional haze SIP. Future coordinated LTSs, and periodic progress reports evaluating progress towards RPGs, must be submitted consistent with the schedule for SIP submission and periodic progress reports set forth in 40 CFR 51.308(f) and 51.308(g), respectively.

Federal Register/Vol. 77, No. 17/Thursday, January 26, 2012/Proposed Rules

The periodic review of a state's LTS must report on both regional haze and RAVI impairment and be submitted to EPA as a SIP revision.

#### F. Monitoring Strategy and Other Implementation Plan Requirements

Section 51.308(d)(4) of the RHR includes the requirement for a monitoring strategy for measuring, characterizing, and reporting of regional haze visibility impairment that is representative of all mandatory Class I Federal areas within the state. The strategy must be coordinated with the monitoring strategy required in section 51.305 for RAVI. Compliance with this requirement may be met through participation in the IMPROVE network, meaning that the state reviews and uses monitoring data from the network. The monitoring strategy must also provide for additional monitoring sites if the **IMPROVE** network is not sufficient to determine whether RPGs will be met. The monitoring strategy is due with the first regional haze SIP and must be reviewed every five years.

The SIP must also provide for the following:

• Procedures for using monitoring data and other information in a state with mandatory Class I areas to determine the contribution of emissions from within the state to regional haze visibility impairment at Class I areas both within and outside of the state;

 Procedures for using monitoring data and other information in a state with no mandatory Class I areas to determine the contribution of emissions from within the state to regional haze visibility impairment at Class I areas in other states.

• Reporting of all visibility monitoring data to the Administrator at least annually for each Class I area in the state, and where possible in electronic format;

• A statewide inventory of emissions of pollutants that are reasonably anticipated to cause or contribute to visibility impairment in any Class I area. The inventory must include emissions for a baseline year, emissions for tha most recent year with available data, and future projected emissions. A state must also make a commitmant to update the inventory periodically; and

 Other elements including reporting, recordkeeping, and other measures necessary to assess and report on visibility;

The RHR requires control strategies to cover an initial implomentation period extending to the year 2018 with a comprehensive reassessment and revision of those strategies, as appropriate, every 10 years thereafter. Periodic SIP revisions must meet the core requirements of section 51.308(d) with the exception of BART. The requirement to evaluate sources for BART applies only to the first regional haze SIP. Facilities subject to BART must continue to comply with the BART provisions of section 51.308(e), as noted above. Periodic SIP revisions will assure that the statutory requirement of reasonable progress will continue to be met.

#### G. Consultation With States and Federal Land Managers

The RHR requires that states consult with Federal Land Managers (FLMs) before adopting and submitting their SIPs. 40 CFR 51.308(i). States must provide FLMs an opportunity for consultation, in person and at least 60 days prior to holding any public hearing on the SIP. This consultation must include the opportunity for the FLMs to discuss their assessment of impairment of visibility in any Class I area and to offer recommendations on the development of the RPGs and on the development and implementation of strategies to address visibility impairment. Further, a state must include in its SIP a description of how it addressed any comments provided by the FLMs. Finally, a SIP must provide procedures for continuing consultation between the stete and FLMs regarding the state's visibility protection program, including development and review of SIP revisions, five-year progress reports, and the implementation of other programs having the potential to contribute to impairment of visibility in Class Lareas.

# IV. What is EPA's analysis of Illinois' regional haze plan?

Illinois submitted its regional haze plan on June 24, 2011, which included revisions to the Illinois SIP to address regional haze.

#### A. Class I Areas

States are required to address regional haze affecting Class I areas within a state and in Class I areas outside the state that may be affected by the state's emissions. 40 CFR 51.308(d). Illinois does not have any Class I areas within the state. Illinois reviewed technical analyses conducted by MRPO to determine what Class I areas outside the state are affected by Illinois emission sources. MRPO conducted both a back trajectory analysis and modeling to determine the affects of its states emissions. The conclusion from the technical analysis is that emissions from Illinois sources affect 19 Class I areas. The affected Class I areas are: Sipsey

Wildemess Area in Alabama; Caney Creek and Upper Buffalo Wilderness Areas in Arkansas; Mammoth Cave in Kentucky; Acadia National Park and Moosehorn Wildemess Area in Maine; Isle Royale National Park and Seney Wilderness Area in Michigan; Boundary Waters Canoe Wilderness Area in Minnesota; Hercules-Glades and Mingo Wilderness Areas in Missouri; Great Gulf Wilderness Area in New Hampshire; Brigantine Wilderness Area in New Jersey; Great Smoky Mountains National Park in North Carolina and Tennessee; Lye Brook Wilderness Area in Vermont; James River Face Wilderness Area and Shenandoah National Park in Virginia; and, Dolly Sods/Otter Creek Wilderness Area in West Virginia.

#### **B. Baseline, Current, and Notural** Conditions

The RHR requires states with Class I areas to calculate the baseline and natural conditions for their Class I areas. Because Illinois does not have any Class I areas, it was not required to address the requirements for calculating baseline and natural conditions.

#### C. Reasonable Progress Goals

Class I states must set RPGs that achieve reasonable progress toward achieving natural visibility conditions. Because Illinois does not have any Class I areas, it is not required to establish RPGs. Illinois consulted with affected Class I states to ensure that it achieves its share of the overall emission reductions necessary to achieve the RPGs of Class I areas that it impacts. Illinois's coordination with affected Cless I states is discussed under Illinois Long Term Stratagy, in Section IV. E. Illinois included the MRPO technical

support document (TSD) in its submission. In Section 5 of the TSD, MRPO assessed the reasonable progress for regional haze. It first assessed potential control measures using the four factors required to be considered by Class I states when selecting the RPGs: the cost of compliance, time needed, energy and non-air impacts, and remaining useful life of any potentially affected sources. The cost of compliance factor includes calculating the average cost effectiveness and can include costs to health and industry vitality as well as considering the different visibility effects of different pollutants. The time necessary for compliance factor considers whether control measures can be implemented by 2018. The third factor, energy and non-air quality impacts, considers additional energy consumed by or because of the control measure as well as effects due to waste

Federal Register / Vol. 77, No. 17 / Thursday, January 26, 2012 / Proposed Rules

generated or water consumption. The final factor, remaining useful life, allows states to consider planned source retirements in calculating costs.

MRPO also assessed the visibility benefits of existing programs. MRPO considered existing on-highway mobile source, off-highway mobile source, area source, power plant, and other point source programs. MRPO also included reductions from the Clean Air Interstate Rule (CAIR) in its analysis, as well from rules adopted by Illinois and included in its regional haze SIP requiring the control of emissions from EGUs.

Illinois has a distinctive situation regarding CAIR, insofar as it has adopted state rules that require EGUs to control NO<sub>x</sub> and SO<sub>2</sub> emissions beyond the control expected from CAIR, even in the absence of CAIR, particularly by 2018 and beyond, Further discussion of these illinois rules is provided below. The RPGs that pertinent Class I states have adopted are predicated on other contributing states achieving the EGU amission reductions anticipated under CAIR. Since Illinois is mandating a greater degree of control than is expected from other states, EPA concludes that Illinois's regional haze plan is expected to provide emission reductions representing an appropriate contribution toward meeting the RPGs for the affected Class I areas, irrespective of the status of CAIR and irrespective of the associated issues regarding the adequacy of other stete's plans. For similar reasons, EPA believes that the approvability of the Illinois plan is also not affected by the status of the Transport Rule, which was promulgated on August 8, 2011 at 76 FR 48208 and stayed on December 30, 2011.

#### D. Best Available Retrofit Technology

States are required to submit an implementation plan containing emission limitations representing BART and schedules for compliance with BART for each BART-eligible source that may reasonably be anticipated to cause or contribute to any impairment in a Class 1 area, unless the State demonstrates that an emissions trading program or other altamative will achieve greater reasonable progress toward natural visibility conditions. 40 CFR 51.308(e).

Using the criteria in the BART Guidance at 40 CFR 51.308(e) and Appendix Y, Illinois first identified all of the BART-eligible sources and assessed whether the BART-eligible sources were subject to BART. Illinois initially identified 26 potentiel BART facilities—11 EGUs, four petroleum refineries, three chemical process

plants, two Portland cement plants, two glass fiber processing plants, one lime plant, and one iron and steel plant. The state further analyzed these facilities to identify those sources subject to BART. Illinois relied on modeling conducted by MRPO using a modeling protocol MRPO developed. MRPO conferred with its states, EPA, and the FLMs in developing its BART modeling protocol. EPA guidance says that, "any threshold that you use for determining whether a source 'contributes' to visibility impairment should not be higher than 0.5 dv." The Guidelines affirm that states are free to use a lower threshold if the location of a large number of BART-aligible sources in proximity of a Class I area justifies this approach. Illinois used a contribution threshold of 0.5 dv for determining which sources warrant being subject to BART. Illinois concluded that the threshold of 0.5 dv was appropriate since its BART-eligible sources are located state-wide and no Class I areas are nearby causing Illinois to correctly conclude that a stricter contribution threshold is not justified. The modeled impact of these facilities indicated that 11 sources have at least 0.5 dv impact (98th percentile) and thus are subject to BART. The 11 sources determined to be subject to BART are nine EGUs and two petroleum refineries. The other 15 potential BART sources were determined not to be subject to BART because the analysis showed impacts well below the 0.5 dv contribution threshold.

The EGUs subject to BART are: • Dynegy Midwest Generating-

Baldwin Boilers 1, 2, and 3.

• Dominion Kincaid Generation----Boilers 1 and 2.

 Ameren Enorgy Generating— Coffeen Boilers CB-1 end CB-2.

• Ameren Energy Generating—E.D. Edwards Boilers 2 and 3.

• Ameren Energy Generating—Duck Creek Boiler 1.

• Midwest Generation—Powerton Boilers 51, 52, 61, and 62.

 Midwest Generation—Joliet Boilers 71, 72, 81, and 82.

• Midwest Generation-Will County Boiler 4.

• City Water, Light, and Power-Dallman Boiler 1 and 2.

• City Water, Light, and Power-Lakeside Boiler 8.

To address mercury emissions from EGUs, Illinois adopted Part 225 of Illinois's air pollution regulations, entitled "Control of Emissions from Large Combustion Sources." In this rule, Illinois offered affected utilities two options, one of which imposes stringent limits on mercury emissions alone and the other of which mandates implementation of specific mercury control technology in conjunction with satisfaction of stringent emission limits for SO2 and NOx. Part 225 includes section 225.233, entitled "Multi-Pollutant Standards," addressing emissions from facilities owned by Ameren and Dynegy, and sections 225.293 to 225.299, collectively referred to as the Combined Pollutant Standards (CPS), addressing emissions from facilities owned by Midwest Generation. In all cases, the utilities have selected the option including mercury control technology and applicability of the SO<sub>z</sub> and NO<sub>X</sub> limits. The emission limits are in the earlier noted sections of the state rules, so these  $SO_2$  and  $NO_X$  limits are now fully enforceable by the state.

The SO<sub>2</sub> and NO<sub>X</sub> emission limits in Part 225 rules reflect substantial averaging across units and across facilities. For example, the collective set of facilities in Illinois owned by Midwest Generation (as listed in the Part 225 rules) are subject to NO<sub>X</sub> and SO<sub>2</sub> limits based on annual average emissions across all facilities. The limit for NO<sub>X</sub> emissions is 0.11 pounds per million British Thermal Units (lb/ MMBTU) starting in 2012 and the limits for SO<sub>2</sub> are 0.15 lb/MMBTU in 2017 and 0.11 lb/MMBTU starting in 2019. The collective set of Ameren facilities in Illinois, under the Multi-Pollutant Standards (MPS), must meet an annual average emission limit for NO<sub>X</sub> of 0.11 lb/MMBTU starting in 2012 and for SO2 of 0.23 lb/MMBTU starting in 2017. Similar limits under the MPS apply to the Dynegy facilities in Illinois.

EPA believes this degree of averaging is acceptable in this context. The limits that Illinois has imposed are sufficiently stringent that the companies have only limited istitude to over control at some facilities in trade for having elevated emissions at other facilities. The facilities owned by each company are sufficiently close to each other, relative to their distances from the nearest Class I areas, that modest shifts in emissions from one facility to another should have minimal impact on the combined impact on regional haze at the Class I areas. Furthermore, regional haze is evaluated across a considerable number of days, e.g., the 20 percent of days with the worst visibility. Therefore, a limit that allows elevated emissions on individual days, so long es other days heve lower emissions, should suffice to address the pertinent measures of regional haze. Illinois's limits should also be adequately enforceable since the sources at issue are required to conduct continuous emission monitoring of hoth SO<sub>2</sub> and NO<sub>x</sub>.

Federal Register/Vol. 77, No. 17/Thursday, January 26, 2012/Proposed Rules

Dynegy has five facilities with 10 units covered by MPS, including the three Dynegy Baldwin units that are subject to BART. Emission reductions required for seven other Dynegy units not subject to BART will allow it meet the MPS reduction requirements. MPS will reduce emissions from all Dynegy facilities by 23,631 tons per year (TPY) of NO<sub>X</sub> and 47,347 TPY of SO<sub>2</sub>, as compared to emissions in the 2002 base year.

Ameren has seven facilities with 21 units covered by MPS. This includes the subject to BART units: Coffeen units 1 and 2, Duck Creek unit 1, and Edwards units 2 and 3. Ameren has installed selective catalytic reduction (SCR) for NOx control and wet scrubbers to limit SO<sub>2</sub> emissions from both Coffeen units. Duck Creek unit 1 is controlled by low NO<sub>x</sub> burners, SCR, and wet scrubbers. Edwards unit 2 will receive an upgraded low NO<sub>X</sub> burner and overfire air (OFA) to reduce NO<sub>X</sub> emissions. Edwards unit 3 is already controlled for NO<sub>X</sub> with low NO<sub>x</sub> burners, OFA, and SCR. Ameren plans to install a new scrubber and fabric filter at Edwards unit 3. Company-wide reductions from Ameren EGUs are projected to be 27,896 TPY NO<sub>x</sub> and 131,367 TPY SO<sub>2</sub> by 2015 and 134,464 TPY of SO2 by 2017.

Midwest Generating operates six facilities with 19 total units that must comply with CPS, including the Midwest Generation units subject to BART: Powerton units 51, 52, 61, and 62; Joliet units 71, 72, 81, and 82; and Will County unit 4. The four Powerton units currently have low NO<sub>X</sub> burners and OFA. Midwest Generation plans to add selective non-catalytic reduction (SNCR) in 2012 to reduce NO<sub>X</sub> emissions and flue gas desulfurization (FGD) in 2013 to cut SO<sub>2</sub> emissions. Both control improvements will bo added to all four units. Midwest Generating's Joliet facility currently has low NO<sub>X</sub> burners and OFA on its four BART units. SNCR is expected to be added in 2012 to all four BART units. Midwest Generating is also planning to add FGD on units 71, 72, 81, and 82 by 2019. Will County unit 4 is currently controlled with low NO<sub>X</sub> burners and OFA. Midwest Generating plans to upgrade the NO<sub>X</sub> control to SNCR in 2012 and to add FGD control by 2019. CPS will reduce NO<sub>x</sub> emissions from all Midwest Generating facilities by 38,155 TPY, while SO<sub>2</sub> emissions will decrease by 35,465 TPY in 2015, increasing to a 61,194 TPY reduction in 2019.

A state may opt to implement an alternate measure rather than requiring each subject to BART unit to install, operate, and maintain BART if it demonstrates that the alternate measure

will achieve greater reasonable progress. The criteria for the assessment if an alternative measure demonstrates greater reasonable progress are provided in 40 CFR 51.308(e)(2). MPS will reduce emissions from both subject to BART and non-BART units at the Ameren and Dynegy facilities. Similarly, CPS will require emission reductions from Midwest Generation's subject to BART and non-BART units. Illinois elected to use MPS and CPS participation as alternative to requiring BART control on each of the Ameron, Dynegy, and Midwest Generation units subject to BART. Illinois stated that implementation of the MPS and CPS emission limits will provide much deeper NO<sub>x</sub> and SO<sub>2</sub> reductions than implementing BART on the subject to BART units and thus the alternate will provide greater reasonable progress. However, Illinois did not provide an analysis comparing BART for each subject unit to the alternative. Illinois compared the emission reductions from MPS and CPS to the presumptive BART emission levels suggested in EPA's guidance. EPA generally requires states to compare the alternative strategy to a fully analyzed set of BART limits for the BART-subject units. However, in this case, the results of such a comparison are clear even without Illinois conducting a full BART analysis for these units. The total NO<sub>X</sub> emission reductions due to MPS on Dynegy EGUs are greater than the base year NO<sub>X</sub> emissions from Dynegy's subject to BART units. Therefore, the emission reductions from MPS are greater than the maximum possible reductions from the BART units. The same is true for SO<sub>2</sub> emissions for the Dynegy EGUs, the NO<sub>X</sub> emissions from the Ameren EGUs, and the SO<sub>2</sub> emissions from the Ameren EGUs. Similarly, the total NO<sub>X</sub> emission reductions from all Midwest Generating are greater than the NO<sub>x</sub> emissions from the BART units and the same for its SO<sub>2</sub> emissions. Therefore, even without a full analysis of the precise emission levels that would constitute BART for the BART-subject units, EPA finds that the Illinois rules, MPS and CPS, are an acceptable BART alternative because the amission reductions are greater than the reductions that could possibly be obtained by only requiring BART at the BART-subject units.

Three other EGUs, owned by two other utilities Dominion Energy and the City of Springfield's City Water, Light, and Power (CWLP), are not covered by MPS and CPS but have units subject to BART. CWLP is a smaller utility with a total generating capacity of less than 750 MW and Dominion Energy has only one

electric generating facility in Illinois such that these utilities do not have the opportunities for multi-plant averaging of emission limits that the larger utilities have. Rather than adopting an alternative program to address the BART requirements for these two utilities, illinois is requiring these utilities to meet the BART requirements for the unite subject to BART and establish enforceable emission limits for SO<sub>2</sub> and NO<sub>X</sub>. CWLP's Dallman and Lakeside plants, along with Dominion's Kincaid plant, have units subject to BART. Both utilities must reduce emissions to meet the BART limits. The emission limits for Dallman units 31 and 32, Lakeside unit 8, and Kincaid units 1 and 2 are contained in Joint Construction and Operating permits. Illinois evaluated potential controls and what control level the current emission controls can achieve in setting the BART emission limits for the CWLP Dallman and Dominion Kincaid units.

CWLP currently has SCRs and FGD on Dallman units 31 and 32. As of 2010, CWLP has been operating the SCRs to achieve an annual average NO<sub>X</sub> emission rate of 0.14 lb/MMBTU on both Dallman units, combined. The annual average NO<sub>X</sub> emission rate will be limited to 0.12 lb/MMBTU by 2015 and then further decreased to 0.11 lb/ MMBTU by 2017 for both units, combined. CWLP will operate the controls to achieve an annual average SO<sub>2</sub> emissions rate on both Dallman units, combined, of 0.29 lb/MMBTU by 2012, then reduced to 0.25 lb/MMBTU by 2015, and finally to 0.23 lb/MMBTU by 2017. Illinois has determined these emission limits satisfy BART for both units. CWLP permanently shut down Lakeside unit 8 in 2009, which is reflected in the permit.

Dominion's Kincaid facility operates SCRs on its units 1 and 2. The permit for the Kincaid facility limits NO<sub>X</sub> emissions to an annual average of 0.07 lb/MMBTU by March 1, 2013, on both units, combined. Illinois determined the appropriate SO<sub>2</sub> control system for Kincaid is a dry sorbent injection system along with using low sulfur coal. Illinois initially gave the Kincaid facility a SO<sub>2</sub> emission limit of 0.20 lb/MMBTU on both units, but found that a stricter limit of 0.15 lb/MMBTU can be achieved with the control system. fillinois thus set the SO<sub>2</sub> emission limits for hoth Kincaid units, combined, at an annual average emission rate of 0.20 lb/ MMBTU by January 1, 2014, and reduced the limit further to an annual average emission rate of 0.15 lb/ MMBTU beginning on January 1, 2017.

Illinois issued the Joint Construction and Operating parmits pursuant to its

3972

Federal Register / Vol. 77, No. 17 / Thursday, January 26, 2012 / Proposed Rules

authority in the SIP and submitted the two permits as part of its Regional Haze plan to be incorporated into the SIP. The permits set Federally enforceable  $NO_X$  and  $SO_2$  limits as necessary to meet the Regional Haze requirements of the CAA and effectively mandate that the utilities to run the SCRs year round and for CWLP to shut down its Lakeside unit 8.

Two petroleum refineries, the CITGO and Exxon Mobil refineries, also have units subject to BART: the CITGO refinery in Lemont, Illinois and the Excon Mobil refinery south of Joliet, Illinois. Both refineries will be required to reduce emissions by a Federal consent decree resolving an enforcement action brought by EPA against a number of refineries. The consent decrees require the CITCO, Exxon Mobil, and the other refineries to operate controls at the Best Available Control Technology level. Illinois evaluated the subject-to-BART units at the CITGO and Exxon Mobil refineries. It found that the NO<sub>X</sub> and SO<sub>2</sub> emission limits on the subject-to-BART units in the consent decrees satisfy BART.

A consent decree between the United States and CITGO Petroleum Corporation was entered in the U.S. District Court for the Southern District of Texas on October 6, 2004 (No. H-04-3883). The consent decree requires the company to operate SCR and a wet scrubbing system at its Fluid Catalytic Cracking Unit (FCCU) that will reduce NO<sub>x</sub> emissions by more than 90 percent and SO<sub>2</sub> emissions by 85 percent. The controls on the FCCU will result in a reduction of NO<sub>X</sub> emissions from 1,065.7 to 106.6 TPY and SO<sub>2</sub> emissions from 10,982.5 to 107.9 TPY by 2013. CITGO has also added a tail gas recovery unit that reduces SO<sub>2</sub> emissions from its sulfur train units from 4340.0 to 91.2 TPY, a 98 percent reduction. The emission controls on all units at CITGO's Lemont refinery will reduce NO<sub>x</sub> emissions by 1,268 TPY and SO<sub>2</sub> emissions by 15,123 TPY.

A consent decree between the United States and Exxon Mobil Corporation was entered in tha U.S. District Court for the Northern District of Illinois on October 11, 2005 (No. O5-C-5809). The consent decree for Exxon Mobil requires SCR operation on its FCCU in addition to maintenance of the existing wet scrubbing system. The controls on the FCCU result in a 1,636.2 TPY decrease in NO<sub>x</sub> emissions from 1.818.0 to 181.8 TPY and a 9,667.7 TPY decrease in SO<sub>2</sub> emissions from 9.865.0 to 197.3 TPY. Exxon Mobil also has added a tail gas recovery unit on its south sulfur recovery unit. That reduces SO<sub>2</sub> emissions by 9,153.8 TPY to 188.8 TPY.

The emission controls at Exxon Mobil's Joliet refinery will reduce 1,695 TPY NO<sub>X</sub> and 18,821 TPY SO<sub>2</sub>.

These two consent decrees are Federally enforceable and also require that the refineries submit permit applications to Illinois to incorporate the required emission limits into Federally enforceable air permits (other than Title V). Therefore, emission limits established by the consent decrees may be relied upon by Illinois for addressing the BART requirement for these facilities.

Based on modeling, MRPO determined that the visibility impact of directly emitted particulate matter from the facilities with subject to BART units is minimal. In particular, MRPO assessed the impact of the directly emitted particulate matter from all facilities potentially subject to BART in the five MRPO states, and found the impact to be less than 0.5 dv at any Class I area as compared to natural background conditions. Illinois therefore concludes that PM emissions from its subset of these BART sources have a negligible visibility impact. Furthermore, these facilities are already subject to federally enforceable PM emission control requirementa mandated by SIP-approved state particulate matter regulations, so that there is minimal potential for further PM emission reductions. Therefore, based particularly on the substantial existing controls on these facilitiesfabric filters, electrostatic precipitators, and cyclones; and the minimal benefits of further control, Illinois concluded that BART did not include further control of PM emissions from these facilities.

EPA is satisfied with the state's BART determinations. The emission limits that Illinois adopted generally will require state-of-the-art emission controls, not just at the units subject to BART requirements but also at numerous units that are not subject to BART. The Illinois facilities subject to BART are a long distance from any Class I area such that, so the geographical redistributions of emissions within Illinois do not significantly affect visibility and the benefits of alternate control strategies may be judged simply by comparing the net emission reductions. The MPS and CPS provide emíssion reduction well in excess of simply implementing BART on subject units. The reduction in NOx emissions from the Ameren, Dynegy and Midwest Generation units 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<sub>X</sub> emission

reductions, which is 56,890 TPY less 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 SO<sub>2</sub> emission, but MPS and CPS will require a 214,179 TPY SO<sub>2</sub> reduction by 2015. Thus, Illinois estimated that its plan will require 96,927 TPY lower SO<sub>2</sub> emissions than simply requiring BART. EPA believes that Illinois has thereby demonstrated the emission limits on the subject to BART units covered by MPS and CPS satisfy the BART requirements.

satisfy the BART requirements. Illinois did not rely on the Clean Air Interstate Rule (CAIR) for its BART determinations. Illinois is in the CAIR region. However, it used its state rules. permits, and consent decrees to achieve emission reductions that satisfy BART. This means that Illinois is not reliant on CAIR and, thus, it has avoided the issues of other CAIR region states that relied on CAIR. For similar reasons, Illinois' satisfaction of regional haze rule requirements is not contingent on the Transport Rule and thus is not effected by the stay of thet rule.

#### E. Long-Term Strategy

Under section 169A(b)(2) of the CAA and 40 CFR 51.308(d), states' regional haze programs must include an LTS for making reasonable progress toward meeting the national visibility goal. Illinois's LTS must address visibility improvement for the Class I areas impacted by Illinois sources. Section 51.308(d)(3) requires that Illinois consult with the affected states in order to develop a coordinated emission management strategy. A contributing state, such as Illinois, must demonstrate that it has included, in its SIP, all measures necessary to obtain its share of the emissions reductions needed to meet the RPGs for the Class I areas affected by Illinois sources. As described in section III.D. of this proposed rule, the LTS is the compilation of all control measures Illinois will use to meet applicable RPGs. The LTS must include enforceable emissions limitations, compliance schedules, and other measures as necessary to achieve the RPGs for all Class I areas affected by Illinois emissions.

Illinois complied with the consulting requirements by participating in meetings and conference cells with affected Class I states and RPOs to discuss the states' assessments of visibility conditions, analyses of culpability, and possible measures that could be taken to meet visibility goals. Illinois engaged in extansive Federal Register/Vol. 77, No. 17/Thursday, January 26, 2012/Proposed Rules

consultations with other MRPO states, including Indiana, Michigan, Ohio, and Wisconsin. Illinois also consulted with Arkansas, Kentucky, Minnesota, Missouri, New Hampshire, New Jersey, and Vermont. As part of the MRPO, Illinois participated in inter-RPO consultation on regional haze. This consultation on regional haze. This consultation is detailed in Chaptar 9 of the state's plan. EPA finds that the state's consultation with Class I states satisfies applicable consultation requirements. Illinois's LTS includes the modeling

Illinois's LTS includes the modeling and monitoring results on which it relied to determine its share of emission reductions necessary to meet the reasonable progress goals of impacted Class I areas. This information is provided in Chapter 9 of the Illinois regional haze plan. Portions of this technical work were provided by MRPO as it worked with other RPOs to provide this information on Class I areas outside the Midwest.

At 40 CFR 51.308(d)(3)(v), the RHR identifies seven factors thet a state must consider in developing its LTS: (A) Emission reductions due to ongoing programs; (B) measures to mitigate impact from construction; (C) emission limits to achieve the RPG; (D) replacement and retirement of sources; (E) smoke management techniques; (F) Federally enforceable emission limits end control measures; and (G) the net effect on visibility due to projected emission changes over the LTS period. Illinois considered the seven factors in developing its LTS. Chapter 8 of the Illinois regional haze plan provides a full analysis of each factor.

Illinois relied on MRPO's modeling and analysis along with its emission information in developing a LTS. Illinois considered the factors set out in 51.308(d)(3)(v) in developing its LTS. Based on these factors and the MRPO's technical analysis, in conjunction with RPGs that were set by the pertinent Class I states in consultation with Illinois and other contributing states, Illinois concludes that existing control programs, together with the BART controls described above, address Illinois's impact on Class I areas. This is because the combination of the existing controls and the BART controls suffice to meet the impacted Class I areas' RPGs by 2018. These existing control programs include Federal motor vehicle emission control program, reformulated gasoline, amission limits for area sources of VOCs, Title IV, the NO<sub>X</sub> SIP Call, NO<sub>X</sub> Reasonable Achievable Control Technology, Maximum Achievable Control Technology standards, and Federal nonroad standards for construction

equipment and vehicles. As discussed in prior sections, implementation of the existing control programs, supplemented by the control measures in the submission that require power plant and petroleum refinery emission reductions, will satisfy the LTS requirements because, for reasons discussed above, the expected emission reductions will meet requirements both to provide for BART and to provide emission reductions in Illinois that, in combination with emission reductions elsewhere, should improve visibility sufficiently for the pertinent Class I areas to meet their RPGs.

Illinois assessed all point sources in the state that emit at least 1,000 TPY of NO<sub>X</sub> and SO<sub>2</sub> combined and are more than 100 km from a Class I area to determine if the sources could potentially affect visibility in a Class I area. The assessment followed EPA guidance in calculating the ratio of emission rate in TPY (Q) to the distance to the nearest Class I area (d). The exclusions also followed guidance. Illinois found 15 facilities with a Q/d ratio equal to and greater than 10, EPA's recommended threshold. The results of the Q/d assessment are found in Table 8.1 in the Illinois TSD. Illinois found that it expects the implementation of existing control measures will result in emission reductions from the 15 facilities. As such, Illinois believes that the expected emission reductions will ensure reasonable progress.

#### F. Monitoring Strategy

Illinois maintains a monitoring network that provides data to analyze air quality problems including regional haze. Illinois's monitoring network includes State and Local Air Monitoring Sites (SLAMS), Special Purpose Monitors (SPM), Photochemical Assessment Monitoring Sites (PAMS), and PM<sub>2.5</sub> speciation sites. Illinois does not operate any sites under the IMPROVE program, but does have a site in Bondville, Illinois that monitors using the IMPROVE procedure method. Illinois is required under 40 CFR 51.308(d)(4) to have procedures for using the monitoring data to determine the contribution of emissions from within the state to affected Class I areas. Illinois developed procedures in conjunction with the MRPO. The procedures are detailed in the MRPO TSD. EPA finds that Illinois's regional haze plan meets the monitoring requirements for the RHR and that Illinois's network of monitoring sites is satisfactory to measure air quality and assess its contribution to regional haze.

#### G. Federal Land Manager Consultation

Illinois was required to consult with the FLMs under 40 CFR 51.308(i). Illinois consulted with the FLMs electronically and by telephone. The FLMs were also included in discussions with Illinois during MRPO conference calls and meetings. A draft regional haze plan was submitted for FLMs comments on August 6, 2009. Illinois then provided the FLMs a revised regional haze plan on October 7, 2010 for review. That provided the FLMs enough time to comment prior to the December 6, 2010, public hearing on the regional haze plan. Illinois has included commants from the FLMs in Attachment 9 to its regional haze plan, a document providing the comments lilinois received and its responses. The state has committed to consulting the FLMs on future SIP revisions and progress reports.

#### H. Comments

Illinois took comments on its proposed regional haze plan. It held a public hearing on December 6, 2010. The public comment period ended on January 5, 2011. Evidence of the public notice end evidence of the public hearing were submitted to EPA.

Illinois's submission includes a document, Attachment 9, which summarized the comments it received from both the FLMs and from the public and provides its responses to the comments. The state revised portions of its plan based on the comments to correct errors end clarify portions that caused confusion. Illinois responded to other comments without revising its plan. EPA concludes that Illinois has satisfied the requirements from 40 CFR Part 51, Appendix V to provide evidence that it gave public notice, took comments, and that it compiled and responded to comments.

#### V. What action is EPA taking?

EPA is proposing to approve revisions to the Illinois SIP, submitted on June 24, 2011, addressing regional haze for the first implementation period. The revisions address CAA and regional haze rule requirements for states to remedy any existing anthropogenic and prevent future impairment of visibility at Class I areas. EPA finds that Illinois has satisfied all the requirements and, thus, is proposing approval of the regional haze plan. EPA is also proposing to approve two state rules, MPS and CPS, and incorporating two permits, issued to City Water, Light, & Power and to Dominion Energy, into the SIP.

Federal Register/Vol. 77, No. 17/Thursday, January 26, 2012/Proposed Rules

#### VI. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

• Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);

• Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);

• Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);

• Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandetes Reform Act of 1995 (Pub. L. 104-4);

 Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);

 Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);

 Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);

• Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and

• Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human bealth or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In eddition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the stata, and EPA notes that it will not impose substantial direct costs on tribel governments or preempt tribal law.

### List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Dated: January 17, 2012. Susan Hedman,

Regional Administrator, Region 5. [FR Doc. 2012-1606 Piled 1-25-12; 8:45 am] BILING CODE 6557-50-P

#### ENVIRONMENTAL PROTECTION AGENCY

#### 40 CFR Part 52

[EPA-R05-OAR-2011-0080; FR1-6622-7]

#### Approval and Promutgation of Air Quality Implementation Plans; Indiana; Regional Haze

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing a limited approval of revisions to the Indiana State Implementation Plan (SIP) addressing regional haze for the first implementation period. Indiana submitted its regional haze plan on January 14, 2011, and supplemented it on March 10, 2011. The Indiana regional haze plan addresses the requirements of the Clean Air Act (CAA or Act) and Regional Haze Rule (RHR) requirements for states to remedy any existing and prevent future anthropogenic impairment of visibility in mandatory Class I areas caused by emissions of air pollutants from numerous sources located over a wide geographic area (also referred to as the "regional haze program"). States are required to assure reasonable progress toward tha national goal of achieving natural visibility conditions in Class I areas. EPA is proposing a limited approval of these SIP revisions to implement the regional haze requirements for Indiana on the basis that the revisions, as a whole, strengthen the Indians SIP. In a separate action, EPA has previously proposed a limited disapproval of the Indiana regional haze SIP because of the deficiencies in Indiana's regional haze SIP submittal arising from the remand by the U.S. Court of Appeals for the District of Columbia (D.C. Circuit) to EPA of the Clean Air Interstete Rule (CAIR). Consequently, we are not proposing to take action in this notice to address the stata's reliance on CAIR to meet certain regional haze requirements.

**DATES:** Comments must be received on or before February 27, 2012.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R05-OAR-2011-0080, by one of the following methods:

1. www.regulations.gov: Follow the on-line instructions for submitting comments.

2. Email: blakley.pamela@epa.gov.

3. Fax: (312) 692-2450.

4. Mail: Pemela Blakley, Chief, Control Strategies Section, Air Programs Branch (AR-18]], U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, illinois 60604.

5. Hand Delivery: Pamela Blakley, Chief, Control Strategies Section, Air Programs Branch (AR-18)), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604. Such deliveries are only accepted during the Regional Office normal hours of operation, and special arrangements should be made for deliveries of boxed information. The Regional Office official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

Instructions: Direct your comments to Docket ID No. EPA-R05-OAR-2011-0080. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov or email. The www.regulations.gov Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through www.regulations.gov your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends thet you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of

# Exhibit 8

Final Federal Approval of the Illinois BART SIP (77 Fed.Reg. 39943 (July 6, 2012))



Federal Register / Vol. 77, No. 130 / Friday, July 6, 2012 / Rules and Regulations

States prior to publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

#### C. Petitions for Judicial Review

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by September 4, 2012. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this actiou for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action pertaining to Maryland's Regional Haze Plan for the first implementation period, through 2018 may not be challenged later in proceedings to enforce its requirements. See section 307(b)(2) of the CAA.

#### List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Dated: June 13, 2012.

#### W.C. Early,

Acting Regional Administrator, Region II. Therefore, 40 CFR part 52 is amended as follows: PART 52-[AMENDED]

 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 st seq.

#### Subpart V—Maryland

 2. In § 52.1070, the table in paragraph
(e) is amended by adding the entry for the Maryland Regional Haze Plan at the end of the table to read as follows:

§52.1070 Identification of plan.

\* \* \* \*

(e) \* \* \*

Name of non-regulatory SIP revision	Applicable geographic area	State submittal date	EPA approval date	Additional explanation			
• •	•	•	· ·	•			
Maryland Regional Haze Plan	Statewide	. 2/13/12	2/13/12 7/6/2012 [Insert page numbe where the document begins].				

(FR Doc. 2012-16417 Filed 7-5-12; 8:45 am) BILLING CODE 6660-50-P

#### ENVIRONMENTAL PROTECTION AGENCY

#### 40 CFR Part 52

[EPA-R05-OAR-2011-0598; FRL-9683-6]

#### Approval and Promutgation of Air Quality Implementation Plans; Illinois; Regional Haze

AGENCY: Environmental Protection Agency (EPA).

### ACTION: Final rule.

SUMMARY: EPA is approving revisions to the Illinois State Implementation Plan, submitted on June 24, 2011, addressing regional haze for the first implementation period. EPA received comments disputing its proposed finding regarding best available retrofit technology, but EPA continues to believe that Illinois' plan limits power plant emissions as well as would be achieved by directly requiring best available retrofit technology. Therefore, EPA finds that the Illinois regional haze plan satisfactorily addresses Clean Air Act section 169A and Regional Haze Rule requirements for states to remedy any existing and prevent future anthropogenic impairment of visibility at mandatury Class I areas, EPA is also approving two state rules and

incorporating two permits into the state implementation plan.

**DATES:** This final rule is offective on August 6, 2012.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA-R05-OAR-2011-0598. All documents in the docket are listed nn the www.regulations.gov web site. Although listed in the index, some information is not publicly available, i.e., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available dncket materials are available either electronically through www.regulations.gov or in hard copy at the Environmental Protection Agency, Region 5, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. This facility is open from 8:30 AM to 4:30 PM, Monday through Friday, excluding Federal holidays. We recommend that you telephone John Summerhays, Environmental Scientist, at (312) 886-6067 before visiting the Region 5 office.

FOR FURTHER INFORMATION CONTACT: John Summerhays, Environmental Scientist, Attainment Planning and Maintenance Section, Air Programs Branch (AR-18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 686–6067, summerhays.jahn@epa.gov.

SUPPLEMENTARY INFORMATION: This supplementary information section is arranged as follows:

I. Synopsis of Proposed Rule

II. Comments and Responses

III. What action is EPA taking?

IV. Statutory and Executive Order Reviews

#### I. Synopsis of Proposed Rule

Illinois submitted a plan on June 24, 2011, to address the requirements of Clean Air Act section 169A and the Regional Haze Rule, as codified in Title 40 Code of Federal Regulations Part 51.308 (40 CFR 51.308).

EPA published a notice of proposed rulemaking evaluating Illinois' submittel on January 26, 2012, at 77 FR 3966. This notice described the nature of the regional haze problem and the statutory and regulatory background for EPA's review of Illinois' regional haze plan. The notice previded a lengthy delineation of the requirements that Illinois intended to meet, including requirements for mandating BART, consultation with other states in establishing goals representing reasonable progress in mitigating anthropogenic visibility impairment. and adoption of limitations as necessary to implement a long-term strategy for reducing visibility impairment.

Of particular interest were EPA's findings regarding BART. States are required to address the BART Federal Register/Vol. 77, No. 130/Friday, July 6, 2012/Rules and Regulations

requirements for sources with significant impacts on visibility, which Illinois defined as having at least 0.5 deciview impact on a Class I area. Using modeling performed by the Lake Michigan Air Directors Consortium (LADCO), Illinols identified 10 power plants and two refineries as having sufficient impact to warrant being subject to a requirement representing BART.<sup>1</sup>

39944

Seven of the power plants that were identified as being subject to the requirement for BART are addressed in one of two sets of provisions of Illinois' rules known respectively as the Combined Pollutant Standards (CPS), 35 Ill. Administrative Code 225.233, and the Multi-Pollutant Standards (MPS), 35 Illinois Administrative Code 225.293-225.299. These provisions are included in Illinois' mercury rules. These rules offer the affected utilities (Midwest Generation, Dynegy, and Ameren) a choice of limitations, either to include 1) specific mercury emission limitations effective in 2015 with no limits on emissions of sulfur dioxide (SO2) or nitrogen oxides (NO<sub>X</sub>) or 2) work practice requirements for instellation of mercury control equipment in conjunction with limits on SO2 and NO<sub>x</sub> emissions. Illinois' submittal includes letters from the affected companies choosing the option that includes SO2 and NOx emission limits, which pursuant to Illinois' rules establishes these limits as enforceable limits. Io the case of Midwest Generation, three of its power plants meet the criteris for being subject to BART, and six plants are governed by the SO<sub>2</sub> and NO<sub>x</sub> limits in the Multi-Pollutant Standards. In the case of Dynegy, one of its power plants meets the criteria for being subject to BART, and four coal-fired power plants are governed by the SO<sub>2</sub> and NO<sub>X</sub> limits in the (CPS). In the case of Ameren, three of its power plants meet the criteria for being subject to BART, and five coalfired plants are governed by the SO<sub>2</sub> and NOx limits in the (CPS). In the notice of proposed rulemaking, EPA proposed to conclude that the emission reductions from the (MPS) and the (CPS) would be greater than the reductions that would occur with unitspecific implementation of BART on the subset of these sources that meet the criteria for being subject to BART. Therefore, EPA proposed to find that the (MPS) and the (CPS) suffice to address

the BART requirement for the power plants of these three utilities.

Illinois also developed source-specific limits to mandate BART for three additional power plants. These limits are adopted into two permits, one for Kincaid Generation's Kincaid Station and one for City Water, Light, and Power's (CWLP) Dallman Station and Lakeside Station. CWLP shutdown Lakeside Station in 2009, and the CWLP permit requires that the Lekeside Station never resume operation. Finally, Illinois found that Federal consent decrees regulating emissions from the two refineries with units subject to BART (facilities owned by ExxonMobil and Citgo) mandate control at the refineries in Illinois at least as much as would be required as BART. EPA proposed to conclude that Illinois satisfied BART requirements for the affected Illinois power plants and refineries.

As stated in the notice of proposed rulemaking, Illinois did not rely on the Clean Air Interstato Rule (CAIR) for its BART determinations. Illinois is in the CAIR region. However, it used its state rules, permits, and consent decrees to achieve emission reductions that satisfy BART. This means that Illinois is not reliant on CAIR and, thus, it has avoided the issues of other CAIR region states that relied on CAIR. For similar reasons, Illinois' satisfaction of regional haze rule requirements is not contingent on the Cross-State Air Pollution Rule (CSAPR) and thus is not affected by the stay of that rule.

#### **II**, Comments and Responses

EPA received comments from three commenters on its proposed rulemaking on the Illinois regional haze plan. These commenters included ExxonMobil, the U.S. Forest Service, and the Environmental Law and Policy Center (ELPC).

ExxonMobil comments that section 169A(b)(2)(A) requires sources to implement BART as determined by the state (emphasis in the original), and agrees with Illinois' and EPA's conclusion that "emission limits established by the consent decrees may be relied upon by Illinois for eddressing the BART requirement for these facilities." While EPA has the responsibility to evaluate whothor it believes that states have made appropriate determinations as to what restrictions constitute BART, EPA appreciates the comment supporting its position, which EPA has no reason to change, that the Federal consent decrees for ExxonMobil and Citgo adoquately mandate BART for the two Illinois rofineries.

The U.S. Forest Service wrote to express its appreciation to Illinois for addressing prior Forest Service comments and to express support for EPA's proposed approval of Illinois' plan.

<sup>\*</sup> ELPC sont extensive comments objecting that control requirements for power plants in Illinois do not suffice to meet the BART requirements and leave Illinois short of meeting reasonable progross requirements. These comments are addressed in detail in the discussion that follows.

Comment: ELPC argues that "the plain language of the Clean Air Act precludes alternatives to BART." Since the Illinois plan establishes limits that govern the collective emissions of multiple power plants owned by pertinent utilities, the plan relies on an alternative to BART as described in 40 CFR 51.308(e)(2) rather than mandating BART on a source-specific basis. ELPC stetes that BART at BART-eligible sources is expressly mandated in Clean Air Act section 169A(b)(2)(A). ELPC acknowledges that the Clean Air Act authorizes limited exemptions from BART, in cases which EPA determines pursuant to section 169A(c)(1) that "the source does not either by itself or in combination with other sources 'emit any air pollutant which may reasonably be anticipated to cause or contribute to a significant impairment of visibility in any mandatory class I federal area. ELPC observes that "[n]owhere in Section 169A did Congress contemplate or sanction swoeping alternative programs" such as Illinois uses to address BART for many of its BART-subject power plants "in lieu of source specific BART.

ELPC acknowledges that EPA promulgated regulations reflecting its interpretation that BART requirements may be satisfied by alternative programs, and ELPC acknowledges that "the DC Circuit Court of Appeals has upheld [these] regulations." Nevertheless, "because these [court rulings] cannot be reconciled with the plan language of the Clean Air Act," ELPC urges that "EPA should not rely on [this interpretation] to exempt fillinois from implementing BART."

Response: In sovoral previous rules, EPA has concluded that Clean Air Act section 169A may reasonably be interpreted to provide that the requirement for BART may be satisfied by an alternative program thet provides greater visibility protection in lieu of limitations that directly mandate BART for individual sources determined to be subject to the BART requirement. See 40 CFR 51.308(e), 64 FR 35741-35743 (July 1, 1999), and 70 FR 39136 (July 6, 2005).

<sup>&</sup>lt;sup>1</sup> The notice of proposed rulemaking lists 10 EGUs as being subject to BART (including two facilities owned by City Water Light and Power (CWLP)) but states that only 9 EGUs are subject to BART. This is because CWLP shut down the Lakestde plant that was subject to BART in 2009.

Federal Register / Vol. 77, No. 130 / Friday, July 6, 2012 / Rules and Regulations

As ELPC acknowledges, the Court of Appeals for the District of Columbia Circuit supports that interpretation, *Center for Energy and Economic Development v. EPA*, 398 F.3d 653, 660 (D.C. Cir. 2005) ("*CEED*") (finding reasonable EPA's interpretation of CAA section 169(a)(2) as requiring BART only as necessary to make reasonable progress), as has the Ninth Circuit, *Central Arizana Water Conservation District v. EPA*, 990 F.2d 1531, 1543 (9th Cir. 1993) Therefore, EPA views Illinois' approach as an acceptable means of addressing the BART requirement in section 169A.

Comment: ELPC comments that "Illinois was required, but failed, to make a BART determination for each source subject to BART in the state.' ELPC lists the elements of a BART analysis that a state "must submit" (emphasis in original) pursuant to 40 CFR 51.308(e)(2), and ELPC states that Illinois has failed to make the BART determination based on source-specific information that EPA's rogulations require. "Rather than make a BART dotermination for each individual source subject to BART that would be covered by Illinois' proposed alternative," ELPC objects that the state "simply compared projected emissions reductions [from the adopted restrictions) to presumptive BART emissions." ELPC comments that "(b)ecause Illinois entirely failed to use source-specific information or undertake a comprehensive five factor analysis to determine BART, its proposed Regional Haze State Implementation Plan (SIP) may not be approved.

Response: The primary requirement, as specified in Cleen Air Act section 169A, is for sources to procure, install, and operata BART. In some cases this requirement is met with an analysis of potential controls considering five factors set out in EPA's regional haze rule (a "five-factor analysis"). 40 CFR 51.308(e)(1)(ii)(A). As ooted above, EPA has determined that this requirement can be met by a state establishing an alternative set of emission limits which mandate greater reasonable progress toward visibility improvement than direct application of BART on a sourceby-source basis.

In promulgating the 1999 regional haze regulations, EPA stated that to demonstrate thet emission reductions of an elternative program would result in greater emission reductions, "the State must estimate the emission reductions that would result from the use of BARTlevel controls. To do this, the State could undertake a source-specific review of the sources in the State subject to BART, or it could use a modified approach that simplifies the analysis." 64 FR 35742 (July 1, 1999).

In guidance published on October 13, 2006, EPA offered further clarification for states for assessing alternative strategies, in particular regarding the benchmark definition of BART to use in judging whether the alternative is better. See 71 FR 80612. In this rulamaking, EPA stated in the preamble that the presumptive BART levels given in the BART guidelinas would be a suitable baseline against which to compare altornative stretegies where the alternetive has been designed to meet a requirement other than BART. 71 FR at 60619; see also 40 CFR 51.308(e)(2)(i)(C). Illinois' analysis is fully consistent with EPA's conclusions

in this rulemaking. Nevertheless, EPA undertook further analysis comparing Illinois' strategy against more stringent definitions of BART. In brief, EPA found that the alternative restrictions imposed by Illinois can be demonstrated to provide greater emission reductions and greater visibility improvement than even very conservative definitions of BART, even without a full analysis of the emission levels thet constitute BART. The demonstration is discussed below, in the context of response to comments addressing the magnitude of controls at Illinois power plants.

Comment: ELPC believes that the pertinent requirements in Illinois' plan will not achiave greater reasonable progress toward natural visibility conditions than BART." Furthermore, "the MPS/CPS contains absolutely no requirements for specific control equipment to be installed or operated at any source subject to BART in Illinois." ELPC identifies several examples of BART units that are expected to comply with the MPS or CPS with controls that are less affective than BART-level controls. ELPC also finds it problemetic that "requirements for 2017 for Ameren exceed presumptive BART requirements for NO<sub>x</sub> at one of the three plants subject to BART, and far exceed presumptive SO<sub>2</sub> BART limits at oll three (emphasis in original) Ameren plants subject to BART." ELPC raises similar concerns in relation to specified Midwest Generation (MWG) planta. For

this reason, "and because Ameren and MWG need not meet even those weak requirements at their plants subject to BART, the MPS/CPS is not 'better' than presumptive BART limits."

Response: ELPC appears to misunderstand the applicable test for alternate strategies for addressing BART. In particular, ELPC appears to believe that under the alternative approach Illinois must require BART-level controls at each unit subject to BART. In fact, the underlying principle of EPA's guidance on alternative measures is to offer states the flexibility to require less control at BART units than BARTlevel control, provided the states provide additional control at non-BART units thet more than compensates for any degree to which control at BART units falls short of BART. Illinois is using precisely this flexibility. Irrespective of the degree to which control at individual power plant BART units may be less stringent than the limits that for those particular units would be defined as BART, Illinois is requiring control across a universe of sources that includes many sources that are not subject to BART, thereby providing reductions that under EPA's rules and BART guidelines on alternative measures can compensate for any shortfall in control at BART units.

In response to these commenta, EPA conducted further analysis of whether Illinois' requirements, addressing a substantial number of sources, can be expected to provide greater reasonable progress toward visibility protection than application of BART to the more limited number of units subject to a requirement for BART. EPA's analysis did not rely on a full five-factor anelysis of BART at each BART-subject unit. Instead of using presumptive limits, EPA used emission limits described in EPA's RACT/BACT/LAER Clearinghouse as being applied to new sources. These limits, namely 0.06 pounds per million British Thermal Units (#/MMBTU) for NO<sub>x</sub> and also 0.06 #/MMBTU for SO2, ere as stringent and are probably more stringent than would generally be expected to be met at existing power plants, due to the design constraints that are sometimos inherent in controlling emissions at an existing facility.

A more complete description of EPA's analysis is provided in the technical support document being placed in the docket for this rule. Table 1 provides a summary of the results of this analysis.

Federal Register/Vol. 77, No. 130/Friday, July 6, 2012/Rules and Regulations

limiting several units that are not subject to a BART requirement.

A useful perspective is to examine the metrics by which regional baze is evaluated. These metrics are averages of visibility across 20 percent of the days of the year, in particular across the 20 percent of days with the worst visibility and across the 20 percent of days with the best visibility. (See 64 FR 35734) Twenty percent of 365 days in a year is 73 days. Furthermore, the days that have better or worse visibility are distributed throughout the year, so that allowance of greater variability in daily or monthly emissions would not necessarily yield worse (or better) visibility. Thus, while a 30-day average limit would be better suited to assuring appropriate mitigation of visibility impairment, EPA finds Illinois' annual average limitations to be adequately commensurate with the averaging time inherent in the visibility metrics being addressed.

Another facet of the use of annual rather than 30-day or shorter averages is stringency. Given normal variability in emissions, an annual average limitation is by definition less stringent than a 30day or shorter average limitation set at the same level. In some contexts, especially those involving short-term air quality standards, EPA would not accept an annual average limitation without a demonstration that the limitation suffices to mandate that short-term average emission levels must remain below some definable, adoquate level. However, different criteria are warranted in the context of regional haze, for which the relevant emissions are the emissions on the 20 percent of days with worst visibility and the 20 percent of days with best visibility. Examining the stringency of the particular limitations that Illinois has adopted, and considering degree of variability in 73-day average emissions thet might be expected with an annual average emission limit, EPA finds that Illinois' annual average limitations are sufficiently stringent to conclude that emissions on a 30-day average basis can be expected to provide the visibility improvement that Illinois is required to provide.

Comment: ELPC comments that Illinois' long-term strategy must be disapproved. ELPC expresses particular concorn that Illinois' plan does not mandate emission reductions for two power plants, specifically Ameren's Joppa plant and Southern Illinois Power Company's Marion plant, which ELPC believes must be mandated "to achieve the reasonable progress goals for Class I areas affected by the state." ELPC notes that "Illinois claimed that existing or

soon-to-be-implemented regulatory program"-in particular, the MPS/CPS and CSAPR-"would require sufficient omissions reductions on the 15 most significant sources so as to ensure achievement of reasonable progress goals in impacted Class I areas." ELPC acknowledges that the Joppa Plant is addressed to the extent that Ameren's plants are collectively limited under the MPS, but ELPC observes that Ameren has the choice to comply with the MPS "without making any reductions at Joppa," even though the plant has "a Q/D ratio" (dividing emissions by distance to the nearest Class I area) that is "nearly three times larger than any other evaluated source," ELPC also objects that CSAPR "also does not ensure emission reductions at either Joppa or Marion, because (1) the rule is under legal challenge, is currently stayed, end may never go into effect. (2) "does not require emission reductions at particular plants," and (3) by restricting annual emissions does not necessarily limit emissions in seasons when the most degradation in visibility may occw.

Response: Achievement of the applicable reasonable progress goals is not contingent on Illinois limiting emissions from the Joppa or Marion plants in particular. Given the distances of the sources in Illinois from affected Class I areas, the least of which is about 120 kilometers from the Joppa plant to Mingo Wilderness Area, the impact on visibility is primarily dependent on the total emission reductions and not on the geographical distribution of those reductions. That is, even if Ameren for example were to opt to control ita Coffeen plant (about 240 kilometers from Mingo Wilderness Area) more than its Joppa plant, the net effect on visibility would likely be similar.

EPA recognizes that CSAPR is under challenge and is currently stayed. However, Illinois is not relying on additional reductions from CSAPR to provide its appropriate contribution toward achieving reasonable progress in visibility protection. Therefore, the litigation status of CSAPR is not germane to the approvability of Illinois' regional haze plan.

#### III. What action is EPA taking?

EPA is approving Illinois' regional haze plan as satisfying the applicable requirements in 40 CFR 51.308. Most notably, EPA concludes that Illinois has satisfied the requirements for BART in 40 CFR 51.308(e) and has adopted a long-term strategy that reduces emissions in Illinois that, in combination with similar reductions elsewhore, EPA expects to suffice to achieve the reasonable progress goals at Class I areas affected by Illinois.

In this action, EPA is also approving a set of rules and two permits for incorporation into the state implementation plan. Specifically, EPA is approving the following rules: Title 35 of Illinois Administrative Code Rules 225.233 (paragraphs a, b, e, and g), 225.291, 225.292, 225.293, 225.295 225.296 (except paragraph d), and 225 Appendix A. While the rules provide the SO<sub>2</sub> and NO<sub>X</sub> limits as one of two options that the affected utilities may choose between, EPA is incorporating into the SIP Illinois' submittal of letters from the affected utilities choosing the option including the SO<sub>2</sub> and NO<sub>x</sub> limits, which under the approved rules makes these limits permanently enforceable. Therefore, these SO<sub>2</sub> and NO<sub>x</sub> limits are state enforceable and, with this SIP approval, now become federally enforceable as well. EPA also considers the limits of the state permits and the refinery consent decrees to be enforceable. While Illinois adopted the above rules as part of a state rulemaking which mostly addressed mercury emissions, the mercury provisions are not germane to this rulemaking, Illinois did not submit the mercury-related rules, and the limited set of rules that Illinois submitted suffice to mandate the SO<sub>2</sub> and NO<sub>X</sub> emission controls that are pertinent to this action.

#### IV. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Clean Air Act end applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02[a]. Thus, In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criterin of the Clean Air Act. Accordingly, this action meroly approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

• Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);

 Does not impose an information collection burden under the provisions of the Paparwork Reduction Act (44 U.S.C. 3501 et seq.);

• Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*); Federal Register/Vol. 77, No. 130/Friday, July 6, 2012/Rules and Regulations

 Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4);
Does not have Federalism

39948

 Does not have Federalism implications as specified in Executivo Order 13132 (64 FR 43255, August 10, 1999);

• Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);

 Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);

• Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and

• Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substential direct costs on tribal governments or preempt tribal law.

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small **Business Regulatory Enforcement** Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. b phone in the section is not a "major rule" as defined by 5 U.S.C. 804(2). Under section 307(b)(1) of the Clean

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United Stetes Court of Appeals for the appropriate circuit by Septembor 4, 2012. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rula or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

#### List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: May 29, 2012.

Susan Hedman,

Regional Administrator, Region 5. 40 CFR part 52 is amended as follows:

#### PART 52-[AMENDED]

 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

### Subpart O---Illinois

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■ 2. Section 52.720 is amended by adding paragraph (c)(192) to read as follows:

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#### § 52.720 Identification of plan.

(c) \* \* \* (192) On June 24, 2011, Laurel Kroack, Illinois Environmental Protection Agency, submitted Illinois' regional haze plan to Cheryl Newton, Region 5, EPA. This plan includes a long-term strategy with emission limits for mandating emission reductions equivelent to the reductions from implementing best available retrofit technology and with emission reductions to provide Illinois' contribution toward achievement of reasonable progress goals at Class I areas affected by Illinois. The plan specifically includes regulations establishing Multi-Pollutant Standards and Combined Pollutant Standards, along with letters from the affected electric utilities establishing the applicability and enforceability of the option thet includes sulfur dioxide and nitrogen oxide emission limits. Tho plan also includes permits establishing sulfur dioxide and nitrogen oxide emission limits for three additional electric generating plants and two consent decrees establishing sulfur dioxide and nitrogen oxide emission limits for two refineries.

(i) Incorporation by reference. (A) The following sections of Illinois Administrative Codo, Title 35: Environmental Protection, Subtitle B: Air Pollution, Chapter 1: Pollution Control Board, Subchapter c: Emission Standards and Limitations for Stationary Sources, Part 225, Control of Emissions from Large Combustion Sources, published at 33 IL Reg 10427, effective June 26, 2009, are incorporated by reference:

(1) Subpart B: Control Of Marcury Emissions From Coal-Fired Electric Generating Units, Section 225.233 Multi-Pollutant Standards (MPS), only subsections (a), (b), (e), and (g), Section 225.291 Combined Pollutant Standard: Purpose, Section 225.292 Applicability of the Combined Pollutant Standard, Section 225.293 Combined Pollutant Standard: Notice of Intent, Section 225.295 Combined Pollutant Standard: Emissions standards for NO<sub>x</sub> and SO<sub>2</sub>. and Section 225.296 Combined Pollutant Standard: Control Technology Requirements for NO<sub>X</sub>, SO<sub>2</sub>, and PM Emissions, except for 225.296(d).

(2) Section 225.Appendix A Specified EGUs for Purposes of the CPS (Midwest Generation's Coal-Fired Boilers as of July 1, 2006).

(B) Joint Construction and Operating Permit: Application Number 09090046, Issued on June 23, 2011, to City Water, Light & Power, City of Springfield.

(C) foint Construction and Operating Permit: Application Number 09050022, Issued on June 24, 2011, to Kincaid Generation, LLC.

(ii) Additional material.

(A) Letter from Guy Gorney, Midwest Generation to Dave Bloomberg, Illinois EPA, dated December 27, 2007, choosing to be subject to provisions of the Multi-Pullutant Standards that Include emission limits for sulfur dioxide and nitrogen oxides.

(B) Letter from R. Alan Kellay, Ameren, to Jim Ross, Illinois EPA, dated December 27, 2007, choosing to be subject to provisions of the Combined Pollutant Standards that include emission limits for sulfur dioxide and nitrogen oxides.

(C) Letter from Keitli A. McFarland, Dynogy, to Raymond Pilapil, Illinnis EPA, dated November 26, 2007, choosing to be subject to provisions of the Combined Pollutant Standards that include emission limits for sulfur dioxide and nitrogen oxides.

[FR Doc. 2012-16557 Filed 7-5-12; 8:45 am] BILING CODE 6560-50-P

# Exhibit 9

Table Comparing Midwest Generation Emissions at the Proposed 2015-2016 Rate to Presumptive BART Levels

	ooyie		In the method of the boot the state of the the state of the the state of the state										IWGen Analysis					
	Lag 3	1200	Base Year		Presumptive BART		CPS 2015		CPS 2017		CPS Final		CPS 2015		CPS 2017		CPS 2019	
Plant	Unit	1000 mmBTU	Lbs/ mmBTU	Tons	Lbs/ mmBTU	Tons/Year Reduction	Lites/ mmBiTU	Tons/Year Reduction	Lbs/ mmBTU	Tons/Year Reduction	Lbs/ mmBTU	Tons/Year Reduction	Lbs/ mm8TU	Tons/Year Reduction	Lbs/ mmBTU	Tons/Year Reduction	Lbs/ mmBTU	Tons/Year Reduction
Crawford	7	11,627	0.54	3,142	NA	NÁ	0.28	1,512	0.15	2,267	0.11	2,500	R	3,142	R	3,142	R	3,142
Crawford	8	17,348	0.51	4,453	NA	NA	0.28	1,995	0.15	3,123	0.11	3,470	R	4,453	R	4,453	R	4,453
Fisk	19	14,650	0.52	3,843	NA	NA	0.28	1,758	0.15	2,710	0.11	3,003	R	3,843	R	3,843	R	3,843
Joliet 29	71	15,034	0.7	5,276	0.15	4134	0.28	3,157	0.15	4,134	0.11	4,435	0.38	2,405	0.15	4,134	0.11	4,435
Joliet 29	72	13,824	0.7	4,828	0.15	3802	0.28	2,903	0.15	3,802	0.11	4,078	0.38	2,212	0.15	3,802	0.11	4,078
Joliet 29	81	15,585	0.68	5,300	0.15	4130	0.28	3,117	0.15	4,130	0.11	4,442	0.38	2,338	0.15	4,130	0.11	4,442
Joiiet 29	82	15,403	0.68	5,260	0.15	4082	0.28	3,081	0.15	4,082	0.11	4,390	0.38	2,310	0.15	4,082	0.11	4,390
Joliet 9	5	14,369	0.63	4,559	NA	NA	0.28	2,515	0.15	3,449	0.11	3,736	0.38	1,796	0.15	3,449	0.11	3,736
Powerton	51	20,936	0.42	4,444	0.15	2,826	0.28	1,456	0.15	2,826	0.11	3,245	0.38	419	0.15	2,826	0.11	3,245
Powerton	52	21,137	0.43	4,497	0.15	2,959	0.28	1,585	0.15	2,959	0.11	3,382	0.38	528	0.15	2,959	0.11	3,382
Powerton	61	18,293	0.43	3,964	0.15	2,561	0.28	1,372	0.15	2,561	0.11	2,927	0.38	457	0.15	2,561	0.11	2,927
Powerton	62	18,088	0.43	3,909	0.15	2,532	0.28	1,357	0.15	2,532	0.11	2,894	0.38	452	0.15	2,532	0.11	2,894
Waukegan	17	7,502	0.44	1,642	NA	NA	0.28	600	0.15	1,088	0.11	1,238	R	1,642	R	1,642	R	1,642
Waukegan	7	16,117	0.47	3,754	NA	NA	0.28	1,531	0.15	2,579	0.11	2,901	0.38	725	0.15	2,579	0.11	2,901
Waukegan	8	21,950	0.49	5,385	NA	NA	0.28	2,305	0.15	3,732	0.11	4,171	0.38	1,207	0.15	3,732	0.11	4,171
Will County	1	9,398	0.42	1,969	NA	NA	0.26	658	0.15	1,269	0.11	1,457	8	1, <b>96</b> 9	R	1,969	R	1,959
Will County	2	8,293	0.39	1,617	NA	NA	0.2B	456	0,15	995	0.11	1,161	Ř	1,617	R	1,617	R	1,617
Will County	3	15,559	0.47	3,636	NA	NA	0.28	1,478	0.15	2,489	0.11	2,801	0.38	700	0.15	2,489	0.11	2,801
Will County	4	27,585	0.47	6,462	0.15	4414	0.28	2,621	0.15	4,414	0.11	4,965	0.38	1,241	0.15	4,414	0.11	4,965
			0.515	77,940	1	31,440	1	35,465		55,140		61,194	1	33.458		60,354		65.032

"The CPS emission limits are a system-wide average and are not intended to reflect unit-specific emission limits.

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IEPA <--- ---> MWGen

### **CERTIFICATE OF SERVICE**

I, the undersigned, certify that on this 30th day of November, 2012, I have served electronically the attached PETITION FOR VARIANCE on behalf of MIDWEST GENERATION, LLC, with a REQUEST FOR HEARING and the APPEARANCES OF KATHLEEN C. BASSI, STEPHEN J. BONEBRAKE, and ANDREW N. SAWULA, upon the following persons:

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

and by first class mail, postage affixed,

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

Andrew N. Sawula

Andrew N. Sawula

SCHIFF HARDIN LLP Attorneys for Midwest Generation, LLC Kathleen C. Bassi Stephen J. Bonebrake Andrew N. Sawula 233 South Wacker Drive, Suite 6600 Chicago, Illinois 60606 Phone: 312-258-5567 Fax: 312-258-5600 <u>kbassi@schiffhardin.com</u> <u>sbonebrake@schiffhardin.com</u> asawula@schiffhardin.com