

ILLINOIS POLLUTION CONTROL BOARD
August 23, 2012

MIDWEST GENERATION, LLC –)
WAUKEGAN GENERATING STATION,)
)
Petitioner,)
)
v.) PCB 12-121
) (Variance - Air)
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

KATHLEEN C. BASSI AND STEPHEN J. BONEBRAKE; SCHIFF HARDIN, LLP,
APPEARED ON BEHALF OF PETITIONER; AND

CHARLES E. MATOESIAN; DIVISION OF LEGAL COUNSEL, ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY, APPEARED ON BEHALF OF
RESPONDENT.

OPINION AND ORDER OF THE BOARD (by J.A. Burke):

Midwest Generation, LLC – Waukegan Generating Station (Midwest Generation) seeks a variance for twelve months from December 31, 2013 to December 31, 2014 for an electric generating unit (EGU) located at its station at 401 East Greenwood Avenue, Waukegan, Lake County, Agency No. 097190AAC. The requested variance would extend the compliance dates in 35 Ill. Adm. Code 225.296 entitled “Combined Pollutant Standard: Control Technology Requirements for NO_x, SO₂, and PM Emissions.”

As applicable to Midwest Generation’s Waukegan Unit 7, the Combined Pollutant Standard (CPS) would require the installation of flue gas desulfurization (FGD) equipment (35 Ill. Adm. Code 225.296(a)(1)) and the conversion of the hot-side electrostatic precipitator (ESP) on that unit (35 Ill. Adm. Code 225.296(c)(1)) by December 31, 2013. Midwest Generation seeks no change in its existing numerical emission rate limits.

In a filing responsive to the petition, the Illinois Environmental Protection Agency (Agency) found the facts and emission calculations in the petition to be accurate; determined that the requested variance “is expected to result in a net environmental benefit;” and stated that it “neither supports nor objects” to the petition. Agency Response (Agency Resp.) at 12. No hearing was requested or held concerning the petition.

The Environmental Protection Act (Act) gives the Board authority to grant a variance from a Board regulation when it finds that immediate compliance with the regulation would impose an arbitrary or unreasonable hardship on the petitioner. 415 ILCS 5/35(a) (2010). For

the reasons set forth below, the Board finds that requiring Midwest Generation to timely comply with the December 31, 2013 deadline in Sections 225.296(a)(1) and 225.296(c)(1) for Waukegan Unit 7 would impose an arbitrary and unreasonable hardship.

Additionally, the Board notes that the grant of this one-year variance will not result in an overall increase of emissions from Midwest Generation's facility. Due to the early shutdowns of the coal-fired unit at the Fisk Generating station in Chicago (Fisk station) and the coal-fired units at the Crawford Generating station in Chicago (Crawford station), even with the compliance delay at Waukegan Unit 7, there will be an overall reduction of Midwest Generation's emissions. During the one-year term of the variance, the Board finds that the significant reductions in sulfur dioxide (SO₂) and particulate matter (PM) emissions, as well as nitrogen oxide (NO_x) emissions, mitigate the estimated 20 pound increase in mercury emissions, noting that the mercury emissions remain subject to control requirements.

The Board finds that grant of this variance will cause no significant negative impact on the public or the environment. The Board also finds that the requested variance is consistent with federal law. The Board, therefore, grants the requested variance from December 31, 2013 to December 31, 2014, subject to certain conditions suggested by Midwest Generation and not objected to by the Agency.

PROCEDURAL BACKGROUND

On April 10, 2012, Midwest Generation petitioned the Board for a variance from 35 Ill. Adm. Code 225.296(a)(1) and 225.296(c)(1) requiring the installation of pollution control equipment or shutdown to control emissions of NO_x, SO₂, and PM. Midwest Generation requests the variance for a period of one year, from December 31, 2013 to December 31, 2014, with no change in the existing emission rate limits.

The Act requires the Agency to provide public notice of a variance petition, including notice by publication in a newspaper of general circulation in the county where the facility is located within 14 days after the petition is filed. 415 ILCS 5/37(a); 35 Ill. Adm. Code 104.214. Midwest Generation's petition was filed on April 10, 2012. Therefore, newspaper notice was required by April 24, 2012, and the Agency caused the notice to be published on that date. The Agency informed the Board that it also sent, on April 19, 2012, "letter notice" of the petition to "numerous State Representatives and State Senators along with members of Congress, the Chairman of the Lake County Board and the Lake County State's Attorney." Agency Resp. at 2.

The Act requires the Agency to investigate each variance petition and "make a recommendation to the Board as to the disposition of the petition." 415 ILCS 5/37(a); 35 Ill. Adm. Code 104.216. On May 25, 2012, the Agency filed a document titled "Illinois Environmental Protection Agency Recommendation" stating that the Agency "neither supports nor objects to the [Board] granting Midwest Generation's petition." Agency Resp. at 1, 12. Within 14 days after service of an Agency recommendation, the petitioner may file a response to the Agency recommendation or an amended petition. 35 Ill. Adm. Code 104.220. Midwest Generation made no such filing.

The Board will hold a hearing on a variance petition (1) if the petitioner requests a hearing; (2) if the Agency or any other person files a written objection to the variance within 21 days after the newspaper notice, together with a written request for hearing; or (3) if the Board, in its discretion, concludes that a hearing is advisable. *See* 415 ILCS 5/37(a); 35 Ill. Adm. Code 104.224, 104.234. No person filed any objection to the variance petition or requested a hearing. Midwest Generation noted that, in an agreement dated February 28, 2012, the Environmental Law and Policy Center, Sierra Club, Natural Resources Defense Council, and Respiratory Health Association of Metropolitan Chicago “stated that, recognizing the net benefits to the [Combined Pollutant Standard] realized by the early retirements of [Midwest Generation’s] Fisk and Crawford coal-fired units, they would not oppose this request for a variance for Waukegan Unit 7.” Petition (Pet.) at 3.

In the petition, Midwest Generation waived its right to request a hearing. Pet. at 28. Midwest Generation did not request a hearing “because no federal law is affected by the requested variance.” *Id.* However, Midwest Generation reserved its right to request a hearing should the United States Environmental Protection Agency (USEPA) approve Illinois’ Regional Haze State Implementation Plan (SIP) prior to issuance of the Board’s order. *Id.*

As background, on June 24, 2011, the Agency submitted a revision to the Illinois SIP addressing regional haze. *See* 77 Fed. Reg. 3966 (Jan. 26, 2012); Pet. at 25. The Illinois regional haze plan addresses Section 169A of the Clean Air Act (42 U.S.C. 7491) to remedy impairment of visibility in Class I areas such as national parks and wilderness areas. 77 Fed. Reg. 3966. The Illinois submittal included adding Sections 225.296(a)(1) and 225.296(c)(1), the subject of this variance petition, to the Illinois SIP. Pet. at 25, Pet. Exh. 8. On January 26, 2012, USEPA proposed approval of Illinois’ submittal. 77 Fed. Reg. 3966; Pet. at 25. As of the date of filing the petition, USEPA had not yet taken final action on this proposal.

On July 6, 2012, during this variance proceeding, USEPA approved the Illinois submittal. 77 Fed. Reg. 39943. USEPA granted final approval for Illinois’ Regional Haze SIP as proposed by Illinois which means Sections 225.296(a)(1) and 225.296(c)(1) are part of the Illinois SIP effective August 6, 2012. *Id.* Any variance to Sections 225.296(a)(1) and 225.296(c)(1), therefore, needs to be submitted to USEPA to be incorporated into the Illinois SIP.

One of the requirements when amending the Illinois SIP is to allow the opportunity for a public hearing. *See* 42 U.S.C. § 7410(a) and 40 C.F.R. § 51.102. Historically, when a Board action may affect a provision of the Illinois SIP, Board hearings on proposed rules, adjusted standard petitions, and variance petitions have been used to meet this federal hearing requirement. Accordingly, although no person requested a hearing on this variance within 21 days of the initial newspaper notice, the Board set a hearing for July 10, 2012 in Waukegan. Consistent with the federal requirement that states provide an opportunity for public hearing, in the Board’s publication of the hearing date, the Board noted that the hearing would be cancelled if the Board received no requests for the hearing by July 3. *See* 40 C.F.R. § 51.102. No person requested that the July 10 hearing be held and, on July 5, the hearing officer cancelled the hearing.

BASIS FOR ISSUING VARIANCE

A “variance is a temporary exemption from any specified rule, regulation, requirement or order of the Board.” *See* 35 Ill. Adm. Code 104.200(a)(1). Under Title IX of the Act (415 ILCS 5/35-38), the Board is responsible for granting variances when a petitioner demonstrates that immediate compliance with a Board regulation would impose an “arbitrary or unreasonable hardship” on petitioner. 415 ILCS 5/35(a). Specifically, the Act provides:

The Board may grant individual variances beyond the limitations prescribed in this Act, whenever it is found, upon presentation of adequate proof, that compliance with any rule or regulation, requirement or order of the Board would impose an arbitrary or unreasonable hardship. However, the Board is not required to find that an arbitrary or unreasonable hardship exists exclusively because the regulatory standard is under review and costs of compliance are substantial and certain. 415 ILCS 5/35(a); *see also* 35 Ill. Adm. Code 104.200, 104.208, 104.238.

The Board may grant a variance, however, only to the extent consistent with applicable federal law. 415 ILCS 5/35(a). Further, the Board may issue a variance with or without conditions, and for only up to five years. *See* 415 ILCS 5/36(a).

The burden of proof is on the petitioner. 415 ILCS 5/37(a); 35 Ill. Adm. Code 104.200(a)(1), 104.238(a). The petitioner must prove that immediate compliance with Board regulations would cause an arbitrary or unreasonable hardship that outweighs public interest in compliance with the regulations. *See Willowbrook Motel v. PCB*, 135 Ill. App. 3d 343, 349-50, 481 N.E.2d 1032, 1036-37 (1st Dist. 1985).

BACKGROUND OF THE COMBINED POLLUTANT STANDARD

Analysis of this variance request requires an understanding of the underlying regulation and the history of its adoption. In 2005, USEPA promulgated regulations requiring reduction of NO_x, SO₂, and mercury. *See* 70 Fed. Reg. 25162 (May 12, 2005); 70 Fed. Reg. 28606 (May 18, 2005). The Agency proposed rules to the Board to implement both federal rules. The first rulemaking was Proposed New 35 Ill. Adm. Code 225 Control of Emissions from Large Combustion Sources (Mercury), R06-25 (Dec. 21, 2006). This rule amended 35 Ill. Adm. Code Part 225 Subpart A and added Subpart B. The second rulemaking was Proposed New Clean Air Interstate Rule (CAIR) SO₂, NO_x Annual and NO_x Ozone Season Trading Programs, 35 Ill. Adm. Code 225, Subparts A, C, D, E, and F, R06-26 (Aug. 23, 2007).

As a result of these rulemakings, under Part 225, Control of Emissions from Large Combustion Sources, affected utilities are provided two compliance options for reducing emissions: one option imposes stringent limits on mercury emissions alone and the other option requires implementing mercury control technology in conjunction with emission limits for SO₂ and NO_x. Specifically, Sections 225.291 through 225.299, collectively referred to as the Combined Pollutant Standard (CPS), address the Midwest Generation facilities. 35 Ill. Adm. Code 225.291 - 225.299 and 225.Appendix A. On December 27, 2007, Midwest Generation opted in to the CPS and identified Waukegan Unit 7 as one of the EGUs to be included in the

Midwest Generation CPS Group. Pet. at 8. The specific rule provisions from which Midwest Generation seeks relief are:

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

- a) Control Technology Requirements for NO_x and SO₂
 - 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 . . .
 - ...
 - 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 . . .
 - 1) Waukegan 7 on or before December 31, 2013 . . .

35 Ill. Adm. Code 225.296.

MIDWEST GENERATION'S VARIANCE PETITION

Midwest Generation petitioned the Board for a variance from two provisions of the CPS “to avoid arbitrary and unreasonable hardship by permitting the company to adapt to unanticipated conditions that have evolved since the adoption of the CPS.” Pet. at 2. Midwest Generation points to two “unanticipated conditions.” *Id.* First, Midwest Generation claims that “energy market prices” have been “significantly deteriorating” and new federal environmental regulations “have made long-term investment in the smallest generating units . . . questionable.” *Id.*

Second, Midwest Generation determined through bidding future construction work that “it can gain cost and other efficiencies” by installing FGD equipment on Waukegan Unit 7 concurrently with Waukegan Unit 8 which is due to be retrofitted by December 31, 2014. Pet. at 2. Midwest Generation asserts that none of these conditions was foreseen when the CPS was adopted, and therefore these CPS provisions impose an undue economic hardship on Midwest Generation. *Id.*

Station Background

The Waukegan Generating Station (Waukegan station) went online between 1952 and 1962 and can generate approximately 781 net megawatts of electricity. Pet. at 4. The station employs approximately 157 people. *Id.*

The CPS applies to three EGUs at the Waukegan station: Waukegan Unit 6, Waukegan Unit 7, and Waukegan Unit 8. Pet. at 4; 35 Ill. Adm. Code 225. Appendix A. Waukegan Unit 6 was shut down by December 31, 2001, as required by 35 Ill. Adm. Code 225.297(a)(1). Pet. at 4, fn. 2. The remaining two units fire coal as their primary fuel and natural gas as auxiliary fuel during startup and for flame stabilization. Pet. at 4.

Particulate matter emissions from each unit are controlled by an ESP. Pet. at 4. The ESP for Waukegan Unit 7 is a hot-side ESP. *Id.* Mercury emissions are controlled by injection of powdered activated carbon (ACI). *Id.* at 5. SO₂ emissions are controlled by using very low-sulfur coal. *Id.*

The Waukegan station is located in Lake County, which is part of the Chicago ozone and PM_{2.5} nonattainment areas. Pet. at 5, fn. 6 (includes detailed discussion of attainment status in Illinois). The Waukegan station is a major source of air pollution under the Clean Air Act and is subject to the Clean Air Act Permitting Program (CAAPP). *Id.* at 6.

Requested Relief

Midwest Generation seeks relief from the requirement to perform the following activities by December 31, 2013 on Waukegan Unit 7: (i) permanently shut down or install and have operational FGD equipment (35 Ill. Adm. Code 225.296(a)(1)) and (ii) replace the hot-side ESP with a cold-side ESP, install an appropriately designed fabric filter, or permanently shut down the unit (35 Ill. Adm. Code 225.296(c)(1)). Pet. at 9, 27. Midwest Generation requests a one-year extension, to December 31, 2014, to comply with these requirements. *Id.* at 10, 27.

Midwest Generation notes that it does not seek any relief from the system-wide SO₂ annual emission rates set forth at Section 225.295(b) or the NO_x emission rate and control requirements set forth at Sections 225.295 through 225.298. Pet. at 10. Nor does Midwest Generation seek relief from the mercury control requirements set forth in Section 225.294. *Id.* Further, Midwest Generation does not seek relief from any CPS requirement applicable to other units in the Midwest Generation CPS Group. *Id.*

Midwest Generation explains that it seeks this variance well in advance of the December 31, 2013 compliance date because long lead time is needed to plan and perform the construction required to comply with Sections 225.296(a)(1) and 225.296(c)(1). Pet. at 10. Midwest Generation states “it is essential that Midwest Generation know now whether the Board will grant the relief so that it does not embark on unnecessary and costly activities in anticipation of construction, as well as the actual construction.” *Id.*

Examined Alternatives

Midwest Generation examined alternatives to comply with the CPS requirement in Section 225.296(a)(1) to install FGD equipment. Pet. at 10. First, it evaluated installing a dry scrubber. *Id.* Next, Midwest Generation evaluated installing a dry sorbent injection system at a cost of \$18 million. *Id.* at 11. Midwest Generation applied for and obtained a construction permit to install the dry sorbent injection system on Waukegan Unit 7. *Id.* Midwest Generation started construction in 2011 but later obtained an extension of the permit. *Id.*

Midwest Generation also examined alternatives to comply with the CPS requirement in Section 225.296(c)(1) to replace the hot-side ESP with a cold-side ESP or install a fabric filter. Pet. at 12. First, it evaluated installing a fabric filter (baghouse). *Id.* at 10, 12. Midwest Generation faced challenges with this alternative including lack of adequate space, lengthy planning, and cost. *Id.* at 11, 12. Next, Midwest Generation evaluated converting the ESP from hot-side to cold-side at a cost of approximately \$70 million. *Id.* The permit Midwest Generation obtained for the dry sorbent injection system also covered converting the ESP on Waukegan Unit 7. *Id.*

Compliance Efforts and Hardship

Construction Permit

Midwest Generation obtained a construction permit from the Agency dated November 19, 2010 to install the FGD equipment (a dry sorbent injection system) on Waukegan Unit 7 and convert the hot-side ESP on that unit. Pet. at 7, 13, Pet. Exh. 5. Midwest Generation also obtained a one-year extension of this permit from the Agency. Pet. at 7.

Regulatory Uncertainty

Midwest Generation summarizes the status of two recent federal air pollution rules: the Cross-State Air Pollution Rule (CSAPR) (76 Fed. Reg. 48208 (Aug. 8, 2011)) and the Mercury and Air Toxics Standards (MATS) (77 Fed. Reg. 9304 (Feb. 16, 2012)).

In August 2011, USEPA adopted CSAPR to replace the Clean Air Interstate Rule (CAIR). Pet. at 13. Both rules were written to apply to fossil fuel-fired electric generators. *Id.* A federal court remanded CAIR to USEPA for additional action, but allowed CAIR to remain effective until USEPA replaced it with a new rule. *Id.* In response to this court order, USEPA promulgated CSAPR. *Id.* Midwest Generation characterizes CSAPR as

significantly more stringent than the CAIR, namely the addition of assurance provisions or variability limits that establish hard mass emission caps on each subject state's emissions of SO₂ and NO_x. *Id.* at 13-14.

Midwest Generation asserts two uncertainties with respect to implementing CSAPR. Pet. at 14. First, it is unclear how the Agency will implement CSAPR, including which allowance allocation method it will use. *Id.* Second, CSAPR has been challenged in federal court and the

court ordered that implementation of the rule be stayed. *Id.* Midwest Generation anticipates that even assuming the fastest case scenario where the court issues an opinion by the end of 2012 upholding CSAPR, CSAPR would become effective in 2013 and reduction in SO₂ allowances would apply in 2015. *Id.*

In February 2012, USEPA adopted MATS which “codifies the Utility Maximum Achievable Control Technology (MACT) requirement applicable to coal- and oil-fired EGUs pursuant to Section 112 of the Clean Air Act.” Pet. at 14. Midwest Generation asserts that MATS “was not even proposed at the time that Midwest Generation obtained its construction permit” and “Midwest Generation could not have had any idea of the scope of the rule.” *Id.*

Midwest Generation states that MATS requires emission reductions for mercury, non-mercury hazardous metals, and hydrogen chloride. Pet. at 15. Midwest Generation explains that MATS allows monitoring particulate matter emissions as a surrogate for non-mercury hazardous metals and the technology to control non-mercury hazardous metals is the same as for particulate matter, namely ESPs or baghouses. *Id.* For hydrogen chloride, MATS allows the option to comply with a SO₂ emission limit as a surrogate. *Id.* Midwest Generation concludes that “the measures that Midwest Generation must undertake to comply with the CPS overlap with its compliance obligations under the MATS.” *Id.* MATS requires compliance by April 16, 2015 with the possibility of a one-year extension. *Id.*

Midwest Generation argues that CSAPR and MATS, both possibly requiring compliance in 2015, have “overlapping, significant SO₂, mercury, and PM emission reduction obligations that conflict with the CPS’s 2013 deadlines applicable to Waukegan Unit 7.” Pet. at 15. The one-year extension sought by the variance would “help [Midwest Generation] synchronize these various regulatory timing requirements.” *Id.* Furthermore, Midwest Generation contends that “at least some of this uncertainty” surrounding appeals of CSAPR and MATS “could be alleviated by deferring the deadlines at issue for Waukegan 7.” *Id.* at 16. Coordinating compliance with these various obligations “could help Midwest Generation avoid additional and unnecessary significant costs and disruption of unit operation.” *Id.*

Midwest Generation, therefore, asserts compliance with the current December 31, 2013 CPS deadlines would impose an unreasonable hardship. Midwest Generation notes that it “does not claim that it cannot comply with the CPS, but that doing so is arbitrary and unreasonable at this time and poses an undue hardship.” Pet. at 16.

Environmental Impact

Sulfur Dioxide Emissions

The CPS requires Midwest Generation to achieve system-wide annual average SO₂ emission rates starting with 0.44 lb/mmBtu¹ in 2013 and declining in subsequent years. Pet. at 17; 35 Ill. Adm. Code 225.295(b). Using 2007 actual data, Midwest Generation estimates that

¹ “mmBtu” stands for million British thermal units or 1,000,000 Btu.

system-wide SO₂ emissions for 2013 would be 66,109 tons using the CPS rate of 0.44 lb/mmBtu. Pet. at 17.

If the Fisk station shuts down by the end of 2012, Midwest Generation estimates that system-wide SO₂ emissions for 2013 would be 62,282 tons. *Id.* This results in a reduction of 3,827 tons or 5.6 percent in 2013. *Id.*

The CPS requires that the Fisk station be upgraded or shutdown by December 31, 2015. Pet. at 17. Midwest Generation calculates that the cumulative reduction of SO₂ emissions in 2013, 2014, and 2015 from shutting down the Fisk station by the end of 2012 would total 11,481 tons (3,827 tons per year over three years) or 7.5 percent. *Id.* at 18.

The CPS requires that Crawford Unit 8 be upgraded or shutdown by December 31, 2017 and Crawford Unit 7 by December 31, 2018. Pet. at 18. If both Crawford units are shutdown by the end of 2014, Midwest Generation calculates that Crawford Unit 7 would not emit approximately 10,408 tons of SO₂ in 2015, 2016, 2017, and 2018 and Crawford Unit 8 would not emit approximately 13,437 tons of SO₂ in 2015, 2016, and 2017. Pet. Exh. 9. The total reduction of SO₂ from shutting down the Crawford units by the end of 2014 would total 23,592 tons. *Id.*, Pet. Exh. 9.

In 2011, the Waukegan station emitted 9,929 tons of SO₂; 3,801 tons were attributed to Waukegan Unit 7. Pet. at 5, 21 (Table 1). If the Waukegan station complied with the current regulatory deadlines, the estimated SO₂ emissions for Waukegan Unit 7 are 1,016 tons in 2014. *Id.* at 21 (Table 1). If the variance is granted and the retrofits required for Waukegan Unit 7 are delayed for one year, the estimated SO₂ emissions for Waukegan Unit 7 are 3,974 tons in 2014 – an increase of 2,957 tons. *Id.*

Accordingly, Midwest Generation argues that emission reductions from shutting down the Fisk and Crawford stations exceed the additional year of emissions from Waukegan Unit 7, resulting in a net benefit to the environment. Pet. at 21 (Table 1), 22, 24. In addition, Waukegan Unit 7 complies with an acid rain permit issued to it and will continue to do so during the term of the variance. Pet. at 23.

Particulate Matter Emissions

Midwest Generation calculates that the reduction of PM emissions in 2013, 2014, and 2015 from shutting down the Fisk station by the end of 2012 would total 2,084 tons. *Id.* at 18. If both Crawford units are shutdown by the end of 2014, Midwest Generation calculates that Crawford Unit 7 would not emit approximately 1,380 tons of PM in 2015, 2016, 2017, and 2018 and Crawford Unit 8 would not emit approximately 2,156 tons of PM in 2015, 2016, 2017. Pet. Exh. 9. Midwest Generation calculates that the cumulative reduction of PM from shutting down both Crawford units would total 3,536 tons. *Id.*, Pet. Exh. 9. The total tons of PM reduced from early shutdown of the Fisk and Crawford stations would be 5,620 tons. *Id.*

In 2011, the Waukegan station emitted 768 tons of PM; 140 tons were attributed to Waukegan Unit 7. Pet. at 5, 21 (Table 1). If the variance is granted and the retrofits required for

Waukegan Unit 7 are delayed for one year, the estimated PM emissions for Waukegan Unit 7 are 157 tons in 2014. *Id.* If Waukegan complied with the current regulatory deadlines, the estimated PM emissions for Waukegan Unit 7 are 140 tons in 2014. *Id.*

Accordingly, Midwest Generation argues that emission reductions from shutting down the Fisk and Crawford stations exceed the additional year of emissions from Waukegan Unit 7, resulting in a net benefit to the environment. Pet. at 22, 24. Midwest Generation notes that Waukegan Unit 7 is subject to PM limitations in 35 Ill. Adm. Code 212.203 and will continue to comply during the term of the variance. Pet. at 23.

Nitrogen Oxide Emissions

The CPS requires Midwest Generation to achieve a system-wide emission rate of 0.11 lb NO_x/mmBtu in 2012. Pet. at 19; 35 Ill. Adm. Code 225.295(a). Midwest Generation asserts that the variance will not affect NO_x emissions at Waukegan Unit 7. *Id.*

However, Midwest Generation claims that the shutdown of the Fisk and Crawford stations will reduce system-wide NO_x emissions. Midwest Generation calculates that the cumulative reduction of NO_x emissions in 2013, 2014, and 2015 from shutting down the Fisk station by the end of 2012 would total 3,456 tons. Pet. at 18. Midwest Generation calculates that Crawford Unit 7 would not emit approximately 2,663 tons in 2015, 2016, 2017, and 2018 and Crawford Unit 8 would not emit approximately 3,437 tons in 2015, 2016, 2017. *Id.* The total reduction of NO_x from shutting down the Crawford units would total 6,100 tons. *Id.*

Mercury Emissions

Based on 2010 and 2011 actual emission data, Midwest Generation calculates that annual mercury emissions are 5 lbs/year at Crawford Unit 7, 3 lbs/year at Crawford Unit 8, and 8 lbs/year at the Fisk station. Pet. at 20. Midwest Generation calculates that the cumulative reduction of mercury emissions in 2013, 2014, and 2015 from shutting down the Fisk station by the end of 2012 would be approximately 23 pounds. *Id.* Crawford Unit 7 would not emit approximately 18 pounds of mercury in 2015, 2016, 2017, and 2018 and Crawford Unit 8 would not emit approximately 12 pounds in 2015, 2016, 2017. *Id.* The total reduction of mercury from shutting down the Fisk and Crawford units would total approximately 54 pounds. *Id.*

In 2011, the Waukegan station emitted 79 pounds of mercury; 74 pounds were attributed to Waukegan Unit 7. Pet. at 5, 21 (Table 1). If Waukegan complied with the current regulatory deadlines, the estimated mercury emissions for Waukegan Unit 7 are 8 pounds in 2014. *Id.* at 21 (Table 1). If the variance is granted and the retrofits required for Waukegan Unit 7 are delayed for one year, the estimated mercury emissions for Waukegan Unit 7 are 83 pounds in 2014 – an increase of 75 pounds. *Id.*

Midwest Generation argues that mercury emission reductions from shutting down the Fisk and Crawford stations mitigate the one-year delay in achieving emission reductions from Waukegan Unit 7. Pet. at 20. Specifically, Midwest Generation states

[t]he impact of a year's delay in reducing mercury emissions at Waukegan will be minimal and will be significantly offset by the effectively contemporaneous closures of the coal-fired units at Fisk and Crawford. *Id.* at 23.

Based on "USEPA publications," Midwest Generation argues that "reductions in fine particulate matter precursors SO₂ and NO_x resulting from early shutdowns of the coal-fired units at Fisk and Crawford would have a far greater benefit" than controlling mercury emissions. *Id.* at 23.

Pursuant to the CPS, Midwest Generation installed mercury control equipment on Waukegan Unit 7 and Unit 8 in July 2008. *Pet.* at 19. Since 2007, mercury emissions at the Waukegan station were reduced from approximately 231 pounds per year to less than 80 pounds per year. *Id.* Waukegan Unit 7 is achieving in the range of 72 percent removal efficiency when operating at lower loads, and Waukegan Unit 8 is consistently achieving greater than 90 percent. *Id.* at 5, 19. The CPS requirement to convert the hot-side ESP is intended to improve mercury removal efficiency. *Id.* Midwest Generation contends that using "a somewhat less efficient ESP for a single year should have minimal impact." *Id.* at 23. Midwest Generation notes that Waukegan Unit 7 will comply with unit-by-unit limits in the CPS by the January 1, 2015 deadline and will continue to operate the activated carbon injection system on Waukegan Unit 7. *Id.* at 19-20; *See* 35 Ill. Adm. Code 225.294(c). Midwest Generation also asserts that "Unit 7 will have begun significantly reducing mercury emissions prior to implementation of MATS." *Id.* at 19.

Consistency with Federal Law

Midwest Generation contends that the Board may grant the requested variance consistent with federal law. *Pet.* 25. On June 24, 2011, the Agency submitted a revision to the Illinois SIP to satisfy Illinois' obligation under the Clean Air Act to develop a Regional Haze SIP. 77 Fed. Reg. 3966; *Pet.* at 25. This submittal included adding Sections 225.296(a)(1) and 225.296(c)(1), the subject of this variance petition, to the Illinois SIP. *Pet.* at 25, *Pet. Exh. 9*. On January 26, 2012, USEPA proposed approval of Illinois' submittal. 77 Fed. Reg. 3966; *Pet.* at 25. Accordingly, Midwest Generation concluded, at the time of its petition, that the variance seeks relief that is consistent with federal law, because the CPS currently is not part of the Illinois SIP and is not federally enforceable. *Pet.* at 25.

Additionally, Midwest Generation argues that the one-year delay in upgrading Waukegan Unit 7, as requested by the variance, would have "no negative impact on the Agency's calculations regarding emissions levels." *Pet.* at 25. In its Regional Haze SIP revision submittal, the Agency argued that the Midwest Generation system-wide average SO₂ emission rates in the CPS provide greater reductions than applying presumptive Best Available Retrofit Technology (BART) to BART-eligible units. *Id.* at 25-26. Midwest Generation will continue to comply with the SO₂ emission rates in Section 225.295(b) thus not impacting the Agency's calculations. *Id.* at 26. Midwest Generation also notes that Waukegan Unit 7 is not one of the BART-eligible units identified in the Agency's Regional Haze SIP revision. *Id.* at 25. Rather, Waukegan Unit 7 will continue to be subject to the CPS.

However, Midwest Generation acknowledges that if the SIP revision becomes final before the end of the variance term, the December 31, 2014 compliance date in the variance will conflict with the December 31, 2013 compliance date in the SIP. Pet. at 26. In that event, Midwest Generation states that it will request that the Agency submit the variance to USEPA as a SIP revision. *Id.* Midwest Generation observes that “[i]t is possible, perhaps likely, in that case that the variance period could expire before USEPA took action on revising the SIP to reflect the variance.” *Id.*

Variance Conditions and Compliance Plan

Midwest Generation proposes the following compliance plan:

DATE	ACTIVITY
Continuously during pendency of the variance	Comply with the system-wide SO ₂ emissions rate set forth in Section 225.295(b). Comply with the ACI rate set forth in Section 225.294(g). Comply with CAIR or CSAPR, as applicable. Comply with the Acid Rain Program. Comply with all other applicable requirements.
On or before September 15, 2014	Apply for a new or extended construction permit, as needed, for the installation of the FGD equipment and conversion of the hot-side ESP or other control methodologies that Midwest Generation determines are more appropriate for Waukegan Unit 7.
On or before December 31, 2014	Shut down Unit 7; or install and have operational FGD equipment, and convert the hot-side ESP to a cold-side ESP or install an appropriately designed fabric filter.
On or before December 31, 2012	Shut down the coal-fired unit at Fisk Generating Station.
On or before December 31, 2014	Shut down the coal-fired units at Crawford Generating Station.

Pet. at 27-28.

AGENCY RESPONSE TO VARIANCE PETITION

On May 25, 2012, the Agency filed a document titled “Illinois Environmental Protection Agency Recommendation” stating that the Agency “neither supports nor objects to the [Board] granting Midwest Generation’s petition.” Agency Resp. at 1.

Background

The Agency recounts Midwest Generation's description of the Waukegan station and permit history and does not articulate any disagreement with any of this portion of Midwest Generation's petition. Agency Resp. at 3-4. The Agency notes that there is a case pending in the United States Court of Appeals for the Seventh Circuit captioned United States v. Midwest Generation, Docket No. 12-1026, but does not give a reason for referencing the case. Agency Resp. at 4.

Requested Relief

The Agency recognizes that Midwest Generation's petition requests a variance from 35 Ill. Adm. Code 225.296(a)(1) and 225.296(c)(1) for twelve months beginning December 31, 2013 and ending December 31, 2014. Agency Resp. at 1-2, 4-5. The requested variance would give Midwest Generation an additional year to install FGD equipment and convert the hot-side ESP or shut down Waukegan Unit 7. *Id.* at 2, 5. Citing to Midwest Generation's petition, the Agency points out that "Petitioner stresses that it is not that it cannot comply with the CPS" but "[r]ather, it would be expensive and inefficient for it to do so." *Id.* at 5, citing Pet. at 16. Further, because the variance request "results in a new environmental benefit, it would be arbitrary and unreasonable to make [Midwest Generation] comply." *Id.*

Agency Investigation of Facts in the Petition

The Agency informs the Board that it "has investigated the facts alleged" in the variance petition. Agency Resp. at 5. The Agency recounts that Midwest Generation examined several options to comply with the requirement of Section 225.296(a)(1) to install FGD equipment or shut down the unit. *Id.* at 6. The Agency notes Midwest Generation's assertion that installing the Waukegan Unit 7 equipment at the same time as the Waukegan Unit 8 equipment will lead to significant cost savings. *Id.* Furthermore, the conversion of the hot-side ESP must be coordinated with the regional transmission system operator. *Id.*

The Agency summarizes the status of various federal rules and the impact on the Waukegan facility. As to mercury emissions, delaying the conversion of the hot-side ESP on Waukegan Unit 7 will delay control of mercury and other hazardous pollutants. Agency Resp. at 6. However, the Agency concludes that mercury emissions will be controlled and the facility "will still reduce mercury emissions significantly prior to implementation of the federal [MATS]." *Id.* MATS replaced the Clean Air Mercury Rule (CAMR). *Id.* As to interstate air pollution, USEPA promulgated the CSAPR. *Id.* CSAPR replaced CAIR. *Id.* CSAPR is "significantly more stringent than CAIR." *Id.* CSAPR has been challenged in federal court and "it is uncertain if the deadlines in the CSAPR will also be delayed, or if the conditions of the CSAPR will change assuming it survives the appeal." *Id.* The Agency notes Midwest Generation's contention that a one-year extension granted by the variance will help to synchronize these timing requirements. *Id.* at 7, citing Pet. at 15.

The Agency informs that it "has reviewed the information supplied by the Petitioner and found it to be accurate." Agency Resp. at 7. In addition, Midwest Generation's "calculations

concerning emission reductions are also accurate.” *Id.* The Agency concludes “[a]ccordingly, the Petitioner’s variance results in a net environmental benefit.” *Id.*

Environmental Impact

The Agency supplements the information provided by Midwest Generation as to nearby air emission monitoring stations. Midwest Generation stated that there are two monitoring stations in Lake County: Waukegan and Zion. Agency Resp. at 7, citing Pet. at 5-6. The Agency notes that the Waukegan station closed in 2010. In addition, there is a monitoring station in Northbrook. Agency Resp. at 7. The Agency reports that “[t]here have been 19 exceedances of the National Ambient Air Quality Standard (NAAQS) for ozone measured at these monitoring stations for either the 1 hour standard or the 8 hour standard during the 2009, 2010, and 2011 ozone season.” *Id.*

The Agency concludes that “Midwest Generation has shown that there will be an environmental benefit to the granting of the variance.” Agency Resp. at 8. The Agency describes Midwest Generation’s “central argument” as being that the shutdown of the Fisk and Crawford stations will more than compensate for the increased pollution from delaying the retrofit of Waukegan Unit 7. *Id.* at 7. This argument assumes that the Fisk and Crawford units would otherwise remain operating and not upgrade until required to do so under the CPS. *Id.* at 7-8. The early shutdown of the Fisk and Crawford stations “gives the Petitioner cumulative estimated reductions (considering the increase in emissions from Waukegan 7 for one year) of SO₂ of 32,231 tons for years 2013 through 2018, particulate matter reductions of 5,602 tons for years 2013 through 2018 and NO_x emissions reductions of 9,556 tons for years 2013 through 2018 should the variance be granted.” *Id.* at 8.

The Agency notes that mercury emissions will increase by 20 pounds if the variance is granted. Agency Resp. at 8. The Agency acknowledges Midwest Generation’s argument that “the reduction in PM precursors, SO₂ and NO_x, outweighs any deferral in the reduction of mercury that would be required under the CPS.” *Id.* citing Pet. at 23. The Agency also notes Midwest Generation’s argument that the reductions in mercury emissions from shutting down the Fisk and Crawford stations mitigate the extra year of mercury emissions from Waukegan Unit 7. *Id.* The Agency agrees with Midwest Generation, “especially considering the vast difference in emissions avoided compared to emissions produced.” *Id.* at 9.

Arbitrary and Unreasonable Hardship

The Agency repeats Midwest Generation’s arguments that the hardship to Midwest Generation from not granting the variance outweighs any impact on human health and the environment because there is a net benefit to the environment from the early closure of the Fisk and Crawford stations. Agency Resp. at 10. The Agency states that Midwest Generation is “correct in stating that the closing of the coal-fired boilers at Fisk and Crawford will compensate for running the Waukegan 7 an extra year without FGD.” *Id.* The Agency also agrees that “the regulatory regime which formed the CPS has changed dramatically” and “USEPA has issued new, and quite different, rules to replace CAIR and CAMR.” *Id.*

Consistency with Federal Law

The Agency presents the situation created by the timing of this petition in relation to pending federal rules. Agency Resp. at 10-12. The Agency previously submitted portions of the CPS as amendments to the Illinois SIP for purposes of satisfying the federal BART program addressing regional haze. *Id.* at 11. USEPA had not yet approved this SIP revision at the time of the Agency's filing. *Id.* The Agency notes that Midwest Generation argues that the variance request is consistent with federal law because the CPS provisions relevant to this variance are not currently part of the Illinois SIP. *Id.* citing Pet. at 25. If the Regional Haze SIP amendments are approved, Midwest Generation argues that the variance would cause no negative impacts on the Agency's calculations regarding emission levels. *Id.* Midwest Generation "is willing to request that the Illinois EPA submit the variance order along with updated emission calculations as another SIP amendment." *Id.* citing Pet. at 26.

The Agency asserts that any variance granted to Midwest Generation must be submitted to USEPA as a SIP revision. Agency Resp. at 11. Furthermore, to meet the requirements of the Clean Air Act, a public hearing must be held on the proposed variance before it may be submitted as a SIP revision. *Id.* The Agency states that it "will submit a Board order granting the variance to USEPA as a SIP revision." *Id.* at 12. The Agency anticipates "[i]t is probable that USEPA will concur with such a SIP revision as there will be a significant decrease in SO₂ and NO_x emissions due to the early closure of the Fisk and Crawford stations." *Id.*

Compliance Plan

The Agency notes that Midwest Generation's variance request proposes early closure of the coal-fired boilers at its Fisk and Crawford stations. Agency Resp. at 12. The requested variance would extend the compliance date for Waukegan Unit 7 by one year. *Id.* The Agency concludes that the compliance plan is reasonable. *Id.*

Recommendation and Conclusion

The Agency acknowledges that it "must prepare a recommendation for the Board" pursuant to 415 ILCS 5/37(a) and 35 Ill. Adm. Code 104.216(b). Agency Resp. at 12. While the Agency neither supports nor objects to the Board granting Midwest Generation's petition, the Agency concludes "Midwest Generation's proposal is expected to result in a net environmental benefit." *Id.*

DISCUSSION

The Act authorizes the Board to grant variances "beyond the limitations prescribed in this Act, whenever it is found, upon presentation of adequate proof, that compliance with any rule or regulation . . . would impose an arbitrary or unreasonable hardship." 415 ILCS 5/35(a). Midwest Generation seeks relief from the requirement to perform the following activities by December 31, 2013 on Waukegan Unit 7: (i) permanently shut down or install and have operational FGD equipment (35 Ill. Adm. Code 225.296(a)(1)) and (ii) replace the hot-side ESP with a cold-side ESP, install an appropriately designed fabric filter, or permanently shut down

the unit (35 Ill. Adm. Code 225.296(c)(1)). Pet. at 9, 27. Midwest Generation requests a one-year extension, to December 31, 2014, to comply with these requirements. *Id.* at 10, 27.

To obtain a variance, Midwest Generation must establish that the hardship from denying the variance from Sections 225.296(a)(1) and 225.296(c)(1) “outweighs any injury to the public or the environment” from granting the variance. Marathon Oil Co. v. EPA, 242 Ill. App. 3d 200, 206, 610 N.E.2d 789, 793 (5th Dist. 1993). If Midwest Generation only shows that compliance will be difficult, “that proof alone is an insufficient basis” for granting the variance. *Id.* Thus, “only if the hardship outweighs the injury does the evidence rise to the level of an arbitrary or unreasonable hardship.” *Id.*

Accordingly, the Board analyzes the injury to the public or the environment from granting the requested variance, and the hardship to Midwest Generation from compliance with the rule. The Board then weighs the hardship against the injury to determine whether Midwest Generation demonstrated that the hardship is arbitrary and unreasonable to support granting a variance.

Environmental Impact of Requested Variance

Midwest Generation states that the variance will provide northeastern Illinois with a “substantial net benefit” in air emission reductions, while continuing to comply with the emission limits of the rule. Pet. at 1. The Agency reviewed Midwest Generation’s emission calculations and informs the Board that the estimates are accurate. Agency Resp. at 7. Further, the Agency agrees that the variance petition results in a net environmental benefit. *Id.* at 7, 8, 10, 12. As discussed below, the Board finds that Midwest Generation demonstrated that the requested variance will reduce emissions during the term of the variance and result in a net benefit to the environment.

The Board initially notes that Midwest Generation does not seek relief from any numerical emission limit, most notably the system-wide SO₂ emission rate set forth at Section 225.295(b). Pet. at 10. Furthermore, Midwest Generation does not seek relief from the mercury control requirements applicable to Waukegan Unit 7 set forth in Section 225.294 or the NO_x emission and control requirements set forth at Sections 225.295 through 225.298. *Id.* Midwest Generation does not seek relief from any CPS requirement applicable to other units in the Midwest Generation CPS Group. *Id.*

The Board finds that Midwest Generation demonstrated that the difference in SO₂ emissions of 2,957 tons resulting from the one-year delay in retrofitting Waukegan Unit 7 are offset by the reduced SO₂ emissions of 3,827 tons in 2014 from closing the Fisk station. In addition, the cumulative reduction of SO₂ emissions from shutting down the Fisk station three years early are 11,342 tons and the Crawford Units 7 and 8 three and four years early are 10,408 and 13,437 tons, respectively. Accounting for the difference in emissions at Waukegan Unit 7 if the variance is granted of 2,957 tons, this results in a net benefit to air quality of reducing emissions by 32,231 tons of SO₂ overall. Pet. Exh. 9.

The Board finds that Midwest Generation demonstrated that the difference in particulate matter emissions of 18 tons resulting from the one-year delay in retrofitting Waukegan Unit 7 are offset by the reduced particulate matter emissions of 694 tons² in 2014 from closing the Fisk station. In addition, the cumulative reduction of particulate matter emissions from shutting down the Fisk station three years early and the Crawford units three and four years early are 2,084 tons and 3,536 tons, respectively. This results in a net benefit to air quality of reducing emissions by 5,602 tons. Pet. at 21 (Table 1).

The delay in retrofitting Waukegan Unit 7 is estimated to result in mercury emissions of 75 pounds. Midwest Generation calculates that annual mercury emissions are 8 lbs/year at the Fisk station. Thus, the early closure of the Fisk station would only offset 8 pounds of mercury in 2014 during the term of the variance. The cumulative reduction of mercury emissions from shutting down the Fisk station three years early and the Crawford units three and four years early total approximately 55 pounds. Thus, a negative net benefit in reduced emissions of 20 pounds of mercury over the course of the years 2013 to 2018 would result if the variance were granted. Pet. at 12, Exh. 9. As the Agency noted, although the variance would result in lower emissions of PM, SO₂, and NO_x than without the variance; mercury emissions would be 20 pounds greater with the variance. Agency Resp. at 8. However, the Board notes that Midwest Generation is not seeking relief from the mercury emission standards in Section 225.294 and has committed to operating Waukegan Unit 7 in compliance with the halogenated activated carbon injection rates as set forth in Section 225.294(g).

Hardship to Midwest Generation from Compliance

Midwest Generation asserts that the following conditions were not foreseen when Sections 225.296(a)(1) and 225.296(c)(1) were adopted and therefore impose an undue economic hardship on Midwest Generation: (i) “energy market prices” have been significantly deteriorating; (ii) new federal environmental regulations “have made long-term investment in the smallest generating units . . . questionable”; and (iii) “it can gain cost and other efficiencies” by installing FGD equipment on Waukegan Unit 7 concurrently with Waukegan Unit 8 which is due to be retrofitted by December 31, 2014. Pet. at 2.

Energy Market Prices

Midwest Generation makes the conclusory statement that “energy market prices” have been “significantly deteriorating.” Pet. at 2. However, Midwest Generation makes no further mention of this basis for hardship in its petition. Midwest Generation submitted no exhibit or other evidence to support this contention. Midwest Generation also did not explain how this condition impacts its ability to timely comply with Sections 225.296(a)(1) and 225.296(c)(1).

² 694 tons of particulate matter is based on the information in Petition Exhibit 9, dividing by three the avoided Fisk emissions of 2,084 tons of PM over the three-year period of 2013 to 2015.

New Federal Regulations

Midwest Generation argues that uncertainty as to the scope and timing of implementing CSAPR and MATS causes hardship to Midwest Generation. Midwest Generation argues that CSAPR and MATS, both requiring compliance in approximately 2015, have “overlapping, significant SO₂, mercury, and PM emission reduction obligations that conflict with the CPS’s 2013 deadlines applicable to Waukegan Unit 7.” Pet. at 15. The Agency agrees that CSAPR is “significantly more stringent than CAIR.” Agency Resp. at 6. The Agency also agrees that “the regulatory regime which formed the CPS has changed dramatically” and “USEPA has issued new, and quite different, rules to replace CAIR and CAMR.” *Id.* at 10.

The one-year extension sought by the variance would allow court challenges to CSAPR and MATS to run their course and Midwest Generation will be in a better position to determine how to proceed with required retrofits. Coordinating compliance with these regulations helps Midwest Generation avoid additional and unnecessary significant costs and disruption in operations.

Coordinating Unit 7 Retrofit with Unit 8

For Waukegan Unit 7 to comply with Sections 225.296(a)(1) and 225.296(c)(1), Midwest Generation must install FGD equipment and convert the hot-side ESP or shut down the unit. Midwest Generation examined alternatives to comply with these requirements and decided that the most cost effective option was to install a dry sorbent injection system to comply with Section 225.296(a)(1) and convert the hot-side ESP to a cold-side ESP to comply with Section 225.296(c)(1). Pet. at 10-12. Midwest Generation estimates that this option will cost \$88 million as compared to installing a dry scrubber and baghouse costing \$240 million. *Id.* at 11. Midwest Generation already obtained a construction permit for this work but would need to incur the remaining costs that installation requires. *Id.* at 7.

Midwest Generation is also required to perform upgrades on Waukegan Unit 8 but the deadline for this work is December 31, 2014. Pet. at 2. Midwest Generation did not quantify the cost savings from performing the Waukegan Unit 7 and Unit 8 work concurrently but contends that they would “gain cost and other efficiencies” from performing the work concurrently on both units. *Id.* at 2.

Weighing Environmental Impact against Hardship to Midwest Generation

The Board finds that the environmental impact of the requested variance for the Waukegan station is a net benefit to air quality, considering the early shutdown of the Fisk and Crawford stations. Midwest Generation has shown that the variance will result in significant reductions in SO₂, NO_x and PM emissions. Midwest Generation will achieve this net reduction in emissions by taking credit for the early shutdown of the Fisk and Crawford stations to offset one year of emissions due to delaying upgrades on Waukegan Unit 7. The Agency agrees with Midwest Generation’s calculations and concludes that the shutdowns yield “cumulative estimated reductions (considering the increase in emissions from Waukegan 7 for one year) of SO₂ of 32,231 tons for years 2013 through 2018, PM reductions of 5,602 tons for years 2013

through 2018 and NO_x emissions reductions of 9,556 tons for years 2013 through 2018 should the variance be granted.” Agency Resp. at 8.

The Board recognizes that the shutdown of the Fisk and Crawford stations will not completely offset mercury emissions from Waukegan Unit 7 during 2014. According to Midwest Generation’s estimates, there will be approximately 75 pounds of mercury emissions in 2014 attributable to the variance. If the cumulative emissions from the Fisk and Crawford station shutdowns are applied to offset mercury emissions from Waukegan Unit 7 in 2014, the variance would result in approximately 20 more pounds of mercury emissions than without the variance. The Agency notes that mercury emissions will be controlled during the variance and the facility “will still reduce mercury emissions significantly prior to implementation of the federal Mercury Air Toxics Standard.” Agency Resp. at 6. The Agency also agrees with Midwest Generation’s argument that “the reduction in PM precursors, SO₂ and NO_x, outweighs any deferral in the reduction of mercury that would be required under the CPS.” *Id.* at 8-9. The Board finds that the significant reductions in SO₂ and PM emissions, as well as NO_x emissions, mitigate the estimated mercury emissions, which remain subject to control requirements, during the variance period. *See* Agency Resp. at 9.

Accordingly, the Board is persuaded that the overall reduction in pollutant emissions resulting from this variance strongly favors granting the variance. Against this net benefit to the environment from the requested variance, the Board weighed the 20 pounds of mercury emissions attributable to the variance and the alleged hardship to Midwest Generation from not granting the variance. Specifically, the Board considered the estimated \$18 million in compliance costs from retrofitting Waukegan Unit 7. Currently, this retrofit is required to be completed by December 31, 2013 but Midwest Generation claims that it would be more cost effective and less disruptive to operations if the work could be coordinated with similar work on Waukegan Unit 8 due to be completed by December 31, 2014. The Board previously granted variances, in part, to allow sources to coordinate required retrofits with other construction projects at a facility. *See ExxonMobil Oil Corp. v. Illinois Environmental Protection Agency*, PCB 11-86, 12-46 (consol.) (December 1, 2011); *Dynegy Midwest Generation, Inc. v. Illinois Environmental Protection Agency*, PCB 09-48 (May 7, 2009).

The CPS mandates certain deadlines for equipment upgrades or shutdowns. Through this variance, Midwest Generation is requesting a reordering of the compliance deadlines among units in the Midwest Generation CPS Group without any change in commitment toward complying with applicable numerical emission standards. Midwest Generation committed to the early shutdown of the Fisk and Crawford stations and in return seeks to push forward the retrofit deadlines for Waukegan Unit 7. The purpose of a variance is to allow additional time for compliance by a source in appropriate cases, and granting this variance serves this purpose.

The Agency contends that “it would be arbitrary and unreasonable to make [Midwest Generation] comply” with the current deadline, in part, because the variance request “results in a new environmental benefit.” Agency Resp. at 16. Considering the overall reduction in pollutant emissions during the term of the requested variance, the Board finds that requiring Midwest Generation to comply with the December 31, 2013 deadline in Sections 225.296(a)(1) and

225.296(c)(1) is an arbitrary and unreasonable hardship. Accordingly, the Board grants the variance as requested by Midwest Generation, subject to the conditions set forth in the order.

Consistency with Federal Law

The Board has authority under Section 110 of the Clean Air Act to adopt regulations that are part of the State's plan for implementation, maintenance, and enforcement of air quality standards. The variance procedure to grant relief from a Board regulation is consistent with the authority granted to the states under Section 110 of the Clean Air Act. The Agency states that it "will submit a Board order granting the variance to USEPA as a SIP revision." Agency Resp. at 12. The Agency anticipates "[i]t is probable that USEPA will concur with such a SIP revision as there will be a significant decrease in SO₂ and NO_x emissions due to the early closure of the Fisk and Crawford stations." *Id.* The Board, therefore, finds that granting Midwest Generation a variance from the rule is consistent with federal law.

Compliance Plan and Variance Conditions

Midwest Generation's petition includes a compliance plan. Pet. at 27-28. The Agency did not suggest any other variance conditions beyond those proposed in the petition. The Board will include the proposed compliance plan as conditions to the variance.

CONCLUSION

The Board finds that Midwest Generation established that requiring immediate compliance with the CPS upgrade deadlines for Waukegan Unit 7 by December 31, 2013 imposes an arbitrary or unreasonable hardship. Midwest Generation seeks no change in its numerical emission rates but seeks to reschedule compliance with equipment upgrade deadlines. Also, Midwest Generation committed to reducing emissions earlier than required at two other facilities by permanently shutting down the facilities.

The Board grants Midwest Generation a variance for Waukegan Unit 7 for a period beginning December 31, 2013 until December 31, 2014 from the requirements of 35 Ill. Adm. Code 225.296(a)(1) and 225.296(c)(1). This variance is granted subject to the conditions outlined in the order below.

ORDER

The Board grants Midwest Generation, LLC – Waukegan Generation Station (Midwest Generation) a variance for Waukegan Unit 7 located at 401 East Greenwood Avenue, Waukegan in Lake County for a period beginning December 31, 2013 until December 31, 2014 from the requirements of Section 225.296(a)(1) and (c)(1) subject to the following conditions:

1. During the period of the variance, Midwest Generation must:
 - (a) comply with the system-wide SO₂ emissions rate set forth in Section 225.295(b),

- (b) comply with the rates of injection of halogenated activated carbon as set forth in Section 225.294(g),
 - (c) comply with the Clean Air Interstate Rule (CAIR) or Cross-State Air Pollution Rule (CSAPR), as applicable,
 - (d) comply with the federal Acid Rain Program at 40 C.F.R. § 72, and
 - (e) comply with all other applicable requirements.
2. On or before September 15, 2014, Midwest Generation must apply for a new or extended construction permit, as needed, for the installation of the flue gas desulfurization (FGD) equipment and conversion of the hot-side electrostatic precipitator (ESP) or other control methodologies that Midwest Generation determines are more appropriate for Waukegan Unit 7.
 3. On or before December 31, 2014, Midwest Generation must either permanently shut down Unit 7; or install and have operational FGD equipment, and convert the hot-side ESP to a cold-side ESP or install an appropriately designed fabric filter.
 4. On or before December 31, 2012, Midwest Generation must shut down the coal-fired unit at Fisk Generating Station.
 5. On or before December 31, 2014, Midwest Generation must shut down the coal-fired units at Crawford Generating Station.

IT IS SO ORDERED.

Chairman T. A. Holbrook abstains

If Midwest Generation chooses to accept this variance, it must, within 45 days after the date of this opinion and order, file with the Board and serve on IEPA a certificate of acceptance and agreement to be bound by all the terms and conditions of the granted variance. "A variance and its conditions are not binding upon the petitioner until the executed certificate is filed with the Board and served on the Agency. Failure to timely file the executed certificate with the Board and serve the Agency renders the variance void." 35 Ill. Adm. Code 104.240. The form of the certificate follows:

CERTIFICATE OF ACCEPTANCE

I (We), _____, having read the opinion and order of the Illinois Pollution Control Board in docket PCB 12-121, dated August 23, 2012, understand and accept the opinion and order, realizing that this acceptance renders all terms and conditions of the variance set forth in that order binding and enforceable.

Petitioner: MIDWEST GENERATION, LLC – WAUKEGAN GENERATING STATION	
By: _____ Authorized Agent	
Title: _____	
Date: _____	

Section 41(a) of the Environmental Protection Act provides that final Board orders may be appealed directly to the Illinois Appellate Court within 35 days after the Board serves the order. 415 ILCS 5/41(a) (2010); see also 35 Ill. Adm. Code 101.300(d)(2), 101.906, 102.706. Illinois Supreme Court Rule 335 establishes filing requirements that apply when the Illinois Appellate Court, by statute, directly reviews administrative orders. 172 Ill. 2d R. 335. The Board's procedural rules provide that motions for the Board to reconsider or modify its final orders may be filed with the Board within 35 days after the order is received. 35 Ill. Adm. Code 101.520; see also 35 Ill. Adm. Code 101.902, 102.700, 102.702.

I, John Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on August 23, 2012, by a vote of 4-0.



John Therriault, Assistant Clerk
Illinois Pollution Control Board