

ILLINOIS POLLUTION CONTROL BOARD
November 21, 2013

ILLINOIS POWER HOLDINGS, LLC and)	
AMERENENERGY MEDINA VALLEY)	
COGEN, LLC;)	
)	
Petitioner,)	PCB 14-10
)	(Variance - Air)
AMEREN ENERGY RESOURCES, LLC,)	
)	
Co-Petitioner,)	
)	
v.)	
)	
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

CLAIRE A. MANNING AND WILLIAM D. INGERSOLL, BROWN, HAY & STEPHENS, LLP, APPEARED ON BEHALF OF PETITIONER ILLINOIS POWER HOLDINGS, LLC; AMY ANTONIOLLI AND RENEE CIPRIANO, SCHIFF HARDIN LLP, APPEARED ON BEHALF OF PETITIONER AMERENENERGY MEDINA VALLEY COGEN, LLC AND CO-PETITIONER AMEREN ENERGY RESOURCES, LLC; AND

GINA ROCCAFORTE, ASSISTANT COUNSEL, APPEARED ON BEHALF OF RESPONDENT.

OPINION AND ORDER OF THE BOARD (by J.D. O’Leary):

Petitioners, Illinois Power Holdings, LLC (IPH), AmerenEnergy Medina Valley Cogen, LLC (Medina Valley), and Co-Petitioner Ameren Energy Resources, LLC (AER) (collectively, petitioners) seek a variance from the sulfur dioxide (SO₂) emission rate in the multi-pollutant standard (MPS) rules applicable to the AER MPS Group of facilities in Illinois. The AER MPS Group includes the following seven coal-fired electric generating plants: Coffeen Energy Center (Montgomery County), Duck Creek Energy Center (Fulton County), E.D. Edwards Energy Center (Peoria County), Joppa Energy Center (Massac County), Hutsonville Energy Center (Crawford County), Meredosia Energy Center (Morgan County), and Newton Energy Center (Jasper County) (collectively, the MPS Group or MPS plants). Pet. at 2.

Petitioners’ variance petition (petition) seeks relief from 35 Ill. Adm. Code 225.233(e)(3)(C)(iii) for five years beginning January 1, 2015 and ending December 31, 2019, and relief from 35 Ill. Adm. Code 225.233(e)(3)(C)(iv) for three years, beginning January 1, 2017 and ending December 31, 2019. *Id.* at 2-3. This variance would replace the variance from the MPS for the same plants that AER currently holds. See Ameren Energy Resources v. IEPA,

PCB 12-126 (Sept. 20, 2012); Petitioners' Response to the Board' First Set of Questions (Pet. First Resp.) at 8.

On September 5, 2013, the Illinois Environmental Protection Agency (Agency) filed its "Recommendation" in response to the petition (Agency Recommendation). The Agency "neither supports nor objects to the [Board] granting the Petition subject to the terms and conditions contained herein." Agency Rec. at 1-2. The Agency determined that no environmental harm would result if the Board were to grant a variance requiring compliance with an overall annual SO₂ emission rate of 0.35 lb/mmBtu¹ from 2013 through 2019, considering that IPH and Medina Valley would continue not to operate the Meredosia and Hutsonville stations. *Id.* at 13, 29. The Agency also states that such a variance, if subject to certain additional conditions to which IPH has agreed, would confer a "continued net environmental benefit." *Id.* at 17.

On August 15, 2013, the Board received the objection to the petition of the Environmental Law & Policy Center (ELPC), Natural Resources Defense Council, Respiratory Health Association (RHA), and Sierra Club (collectively, the Citizens Groups).

The Board received 2,472 public comments in favor of granting the petition, and 3,354 comments opposed, including several spoken at hearing and many written. The Board appreciates the extraordinary time and effort of federal, State, and local officials, individual citizens, and citizens groups who provided their professional opinions, personal stories, and concerns in this matter.

The Environmental Protection Act (Act) gives the Board authority to grant a variance from a Board regulation when it finds that compliance with the regulation would impose an arbitrary or unreasonable hardship on the petitioner. 415 ILCS 5/35(a) (2012). For the reasons set forth below, the Board finds that petitioners have demonstrated that timely compliance with Section 225.233(e)(3)(C)(iii) in 2015 and 2016 and with Section 225.233(e)(3)(C)(iv) starting in 2017 would impose an arbitrary or unreasonable hardship on them. Additionally, the Board finds that the requested variance will result in an overall reduction in emissions and therefore has no significant negative impact on the environment or health. The Board also finds that the requested variance is consistent with federal law. The Board, therefore, grants the variance subject to certain agreed conditions.

PROCEDURAL BACKGROUND

On July 22, 2013, petitioners filed a petition for a variance from the overall SO₂ annual emission rate in the MPS applicable to the seven coal-fired electric generating stations in the AER MPS Group. *See* 35 Ill. Adm. Code 225.233(e)(3)(C)(iii) and (iv). Pet. at 2-3. As discussed in the variance granted to AER in PCB 12-126, AER generates electricity at only five of these seven stations. AER independently ceased operations and then agreed to continue not to operate the Meredosia and Hutsonville stations for the combined term of the dual variances. *Id.* at 3; Pet. Exh. 1 at 8-9. Petitioners here seek relief from Section 225.233(e)(3)(C)(iii) for five years beginning January 1, 2015 and ending December 31, 2019, and relief from Section

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

225.233(e)(3)(C)(iv) for three years, beginning January 1, 2017 and ending December 31, 2019. Pet. at 2-3.

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. Petitioners' petition was filed on July 22, 2013. Therefore, publication of newspaper notice was required by August 5, 2013. The Agency placed newspaper notices in newspapers in each of the seven counties where facilities in the AER MPS Group are located on July 24 and July 25, 2013. The Agency informed the Board that it also mailed notices of the petition to elected officials, consistent with 35 Ill. Adm. Code 104.214(b). Agency Rec. at 3.

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 September 5, 2013, the Agency filed a document titled "Recommendation" stating that the Agency "neither supports nor objects to the [Board] granting the Petition subject to the terms and conditions contained herein." Agency Rec. at 1-2. 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. Petitioners 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. In the petition, petitioners did not request a hearing, but asked that if the Board decided to hold a hearing, it should take place in Springfield, Illinois. Pet. at 68. Based on the filings received, and the history in the prior PCB 12-126 variance proceeding, the Board concluded that a hearing was warranted in this case, and granted the request to hold it in Springfield.

On August 15, 2013, the Board received the Citizens Groups' objection to the petition. *See* 35 Ill. Adm. Code 104.224.

In advance of the hearing, the Board's hearing officer, Carol Webb, issued two sets of questions to petitioners and the Agency to clarify points raised in the petition and related issues. The hearing officer issued the first set of questions on August 14, 2013, and the second set of questions on September 12, 2013. On September 5, 2013, petitioners (Pet. First Resp.) and the Agency (Agency First Resp.) filed their responses to the hearing officer's first set of questions. On September 16, 2013, petitioners (Pet. Second Resp.) and the Agency (Agency Second Resp.) filed their responses to the hearing officer's second set of questions.

The Board held the public hearing on September 17, 2013 in Springfield. Petitioners and the Agency appeared as participants in the hearing. Petitioners presented testimony from three witnesses. The Citizens Groups presented sworn statements of two witnesses, subject to cross-examination. In addition, the Board received 148 oral public comments during the hearing. The

Board received the transcript of the September 17, 2013 hearing on September 19, 2013. Petitioners filed a joint post-hearing brief (Pet. Br.), and co-petitioner AER also filed a separate post-hearing brief in response to comments (AER Br.) on October 7, 2013.

In addition to the oral public comments received at the hearing, the Board has received 5,676 written public comments. One comment was submitted to the Agency and the Agency attached the comment to its response. The deadline for filing public comments was September 24, 2013. The Board notes that the number of public participants is greater than the 5,676 comments received, as some public comments were signed by more than one individual. *See, e.g.,* PC#114 (signed by 4,518 individuals). The Board received an additional nine public comments following the close of the public comment deadline.

PETITIONERS' POST-HEARING MOTION

On October 17, 2013, petitioners filed a motion for leave to file *instanter* (Pet. Mot.) a public comment regarding an October 11, 2013 decision by the Federal Energy Regulatory Commission (FERC). Pet. Mot. at 2; *see also* Petitioners' Post-Hearing Comment at 1-2, citing Ameren Energy Generating Co., No. EC13-93-000 (FERC Oct. 11, 2013). FERC's decision approved the transaction by which IPH would acquire from AER the operating MPS plants and Medina Valley would acquire the shuttered Meredosia and Hutsonville stations. *Id.* at 2. Petitioners state that FERC's decision moves the IPH-Ameren transaction "one step closer to consummation," adding that petitioners expect the transaction to close before the end of 2013, "assuming a favorable decision from the Board." *Id.*

To ensure a complete record, the Board grants petitioners' motion.

STATUTORY 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. Further, the Board may issue a variance from any regulation with or without conditions, and for a period of time not exceeding five years. *See* 415 ILCS 5/36(a) and (b).

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 Partnership v. PCB*, 135 Ill. App. 3d 343, 349-50, 481 N.E.2d 1032, 1036-37 (1st Dist. 1985).

BACKGROUND OF THE MULTI-POLLUTANT STANDARD AND PRIOR RELATED VARIANCE PROCEEDING

Regulatory Background

In 2005, the United States Environmental Protection Agency (USEPA) promulgated regulations requiring reduction of nitrogen oxide (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 Rules (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 have 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. This second option is found at Section 225.233 and is referred to as the Multi-Pollutant Standard (MPS). 35 Ill. Adm. Code 225.233. On December 27, 2007, AER opted into the MPS for the MPS Group. Pet. at 5-6; *see also Ameren Energy Resources*, PCB 12-126, slip op. at 5-6 (Sept. 20, 2012).

In 2008, AER petitioned the Board for a variance from the 2013 and 2014 SO₂ emission rates (0.33 lb/mmBtu or a rate equivalent to 44% of the Base Rate of SO₂ emissions, whichever is more stringent) found at Section 225.233(e)(2). Ameren Energy Generating Co. et al. v. Illinois Environmental Protection Agency, PCB 09-21 (Jan. 22, 2009). The Board denied that variance request as not being the proper regulatory relief mechanism. *Id.* AER then participated in the rulemaking captioned Amendments to 35 Ill. Adm. Code 225: Control of Emissions from Large Combustion Sources (Mercury Monitoring), R09-10 (June 18, 2009). As a result, the Board promulgated a final rule which included adding subsection (3) to Section 225.233(e), titled “Ameren MPS Group Multi-Pollutant Standard.” Accordingly, Sections 225.233(e)(3)(C)(iii) and (iv), which are the subject of this variance request, became effective on July 15, 2009. *See Ameren Energy Resources*, PCB 12-126, slip op. at 5.

The specific rule provisions from which petitioners seek relief are:

Section 225.233 Multi-Pollutant Standard (MPS)

e) Emission Standards for NO_x and SO₂

...

3) Ameren MPS Group Multi-Pollutant Standard

...

C) SO₂ Emission Standards

...

iii) Beginning in calendar year 2015 and continuing in calendar year 2016, for the EGUs in the Ameren MPS Group, the owner and operator of the EGUs must comply with an overall SO₂ annual emission rate of 0.25 lb/million Btu.

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

On June 24, 2011, the Agency submitted a revision to the Illinois State Implementation Plan (SIP) addressing regional haze. *See* 77 Fed. Reg. 3966 (Jan. 26, 2012). The Illinois regional haze plan addresses Section 169A of the Clean Air Act (CAA) (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 to USEPA included adding Sections 225.233(e)(3)(C)(iii) and (iv), the subject of this variance petition, to the Illinois SIP. *See Ameren Energy Resources*, PCB 12-126, slip op. at 6 (Sept. 20, 2012). On July 6, 2012, while PCB 12-126 was pending, 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 225.233(e)(3)(C)(iii) and (iv) are part of the Illinois SIP effective August 6, 2012. *Id.*

2012 AER Variance Proceeding

AER Variance

On May 3, 2012, AER filed a petition for a variance from the overall SO₂ annual emission rate in the MPS applicable to all seven coal-fired power plants in the AER MPS Group. *Ameren Energy Resources*, PCB 12-126, slip op. at 1 (June 6, 2012). AER stated that, as of January 2012, it generated electricity at only five of these seven stations, having ceased operations at the Meredosia and Hutsonville stations in December 2011. *Ameren Energy Resources*, PCB 12-126, slip op. at 1 (June 6, 2012). AER sought relief from Section 225.233(e)(3)(C)(iii) for five years beginning January 1, 2015 and ending December 31, 2019,

and relief from Section 225.233(e)(3)(C)(iv) for approximately three years, beginning January 1, 2017 and ending January 15, 2020. *Id.*

On September 20, 2012, the Board granted AER combined dual variances for the period December 31, 2015 to December 31, 2019 from the requirements of 35 Ill. Adm. Code 225.233(e)(3)(C)(iii) and for the period January 1, 2017 to December 31, 2019 from the requirements of 35 Ill. Adm. Code 225.233(e)(3)(C)(iv), subject to conditions specified in the order. Ameren Energy Resources, PCB 12-126 (Sept. 20, 2012). These conditions included, among others, that AER continue to not operate the Meredosia and Hutsonville stations from the date of the order through December 31, 2020, but that the FutureGen 2.0 project at the Meredosia facility was exempt from the restriction. Ameren Energy Resources, PCB 12-126, slip op. at 68 (Sept. 20, 2012). The Board also imposed a schedule with specified engineering and construction milestones for completion of the Flue Gas Desulfurization project at the Newton Power Station (Newton FGD project), through which AER would comply with the 2015 overall SO₂ annual emission rate by January 1, 2020. *Id.* at 9, 69. AER also agreed to meet an SO₂ annual emission rate of 0.38 lb/mmBtu from the date of the order through December 1, 2012; an emission rate of 0.35 lb/mmBtu from January 1, 2013 through December 31, 2019; and, beginning January 1, 2020, an emission rate of 0.23 lb/mmBtu. *Id.* at 68.

Based on these lower SO₂ emission rates and the continued closure of the Meredosia and Hutsonville plants, the Board found that a variance would provide a “net environmental benefit” in the form of emission of 33,544 fewer tons of SO₂ from 2012 through 2020 as compared to emissions if the MPS instead applied. Ameren Energy Resources, PCB 12-126, slip op. at 54 (Sept. 20, 2012). In light of this net benefit to the environment, the Board found “arbitrary or unreasonable” the hardship to AER attributable to uncertainty about the fate of federal air pollution standards for electrical generating units (EGUs) and the continuing decline in wholesale electricity prices. *Id.* at 62-63. The Board also adjusted the term of the variance from Section 225.233(e)(3)(c)(iv), which AER had originally proposed to end on January 15, 2020, back to December 31, 2019, such that the combined dual variance periods were kept to a total five years, the variance limit under 415 ILCS 5/36(b). *Id.* at 57. In this case, petitioners propose to maintain the same variance period as the Board adopted in PCB 12-126.

Motion to Substitute IPH for AER

On May 2, 2013, AER and IPH filed a motion to reopen PCB 12-126 and substitute IPH for AER as grantee of the variance relief with the ongoing conditions set forth in the Board’s September 20, 2012 order. Ameren Energy Resources, PCB 12-126, slip op. at 1-2 (June 6, 2013). These movants stated that AER continued to face financial challenges following issuance of the variance, and that in December 2012, Ameren Corporation (Ameren) had “announced its intent to exit the merchant generation business in Illinois within five years.” *Id.* at 2. After Dynegy Inc. (Dynegy) contacted Ameren regarding a potential acquisition of AER’s five operating coal-fired plants (*i.e.*, excluding the Meredosia and Hutsonville stations), AER and IPH, as an indirect subsidiary of Dynegy, entered into a transaction agreement to effectuate the plant transfer. *Id.* Under the deal, the two shuttered stations would be transferred from AER to Medina Valley, an existing indirect subsidiary of Ameren. *Id.* AER and IPH stated that the transaction would not go forward unless the Board transferred AER’s variance to IPH. *Id.*

On June 6, 2013, the Board denied the motion to substitute IPH for AER as grantee of the variance issued on September 20, 2012. Ameren Energy Resources, PCB 12-126 (June 6, 2013). The Board noted that while it had previously allowed substitution of parties in adjusted standard cases, those cases do not apply in the context of variance relief because a variance depends on a showing that the *petitioner's* compliance with a Board regulation or order would impose an “arbitrary or unreasonable hardship” *on the petitioner*. Ameren Energy Resources, PCB 12-126, slip op. at 9-10 (June 6, 2013); *see also* 415 ILCS 5/35(a). The Board explained that its hardship finding in PCB 12-126 was

specific to AER based on the evidence AER presented. The Board is not persuaded that, as movants request, IPH can be substituted for AER in AER's variance proceeding. For IPH to obtain a variance, IPH must file a petition and demonstrate that *IPH's compliance* with a rule or regulation, requirement or order of the Board would impose an arbitrary or unreasonable hardship *on IPH*. Ameren Energy Resources, PCB 12-126, slip op. at 10 (June 6, 2013) (emphasis added).

In addition, the Board noted that while the AER variance relates to seven facilities, IPH would “only take control of five of these facilities,” with Medina Valley assuming control of the other two facilities. Ameren Energy Resources, PCB 12-126, slip op. at 11 (June 6, 2013). Accordingly, the Board continued, any new variance request omitting the two plants IPH would not acquire could “not be subject to the same analysis,” but would require the Board to “undertake a new analysis” limited to the five plants in the requested variance. *Id.*

The Board concluded that IPH “may file a variance petition consistent with Section 104.202(a) of the Board's regulations, or make any other appropriate filing concerning the facilities consistent with [the] order.” Ameren Energy Resources, PCB 12-126, slip op. at 11 (June 6, 2013).

PETITIONERS' VARIANCE PETITION

Petitioners petition the Board for a variance from Section 225.233(e)(3)(C)(iii) and (iv) of the MPS, seeking additional time to comply with the overall SO₂ annual emission rates because:

[w]ith power prices remaining depressed, IPH will continue to face the continuing financial pressures that AER faced at the time of its variance petition. . . . These depressed power prices have severely eroded operating margins of the Energy Centers in the MPS Group and will continue to limit the ability of the Energy Centers to generate cash flow for the next several years. . . . Without those operating margins, IPH will not have the cash flow from power sales to fund large scale capital expenditures needed to comply with the MPS, such as completion of the Newton FGDs [flue gas desulfurization equipment]. . . . Pet. at 36.

Petitioners state that, contrary to positions advocated by the Citizens Groups, there is “no reason to presume” that in approaching the transaction by which IPH would take ownership of the five operating MPS plants, petitioners should expect that the Board would “reverse the course toward compliance it set for this very MPS Group last year—given the very real hardship such decision would represent.” Pet. Br. at 10. Petitioners add that the IPH-Ameren transaction “needed to consider the very real costs (and obligations) associated with required completion of the Newton FGD [p]roject as the method of achieving compliance.” *Id.*

Corporate Structure

AER is a subsidiary of Ameren Corporation. Affidavit of Martin J. Lyons (Pet. Exh. 1) at 1. Ameren Corporation is a public utility holding company whose primary assets are the common stock of its subsidiaries, including AER, Ameren Missouri and Ameren Illinois. *Id.* Ameren Corporation’s subsidiaries “are separate, independent legal entities with separate businesses, assets, and liabilities.” *Id.* AER consists of merchant generating operations that include Ameren Energy Generating Company (GENCO) and Ameren Energy Resources Generating Company (AERG). *Id.* at 2 & n.1. GENCO is AER’s only publicly-registered and rated company. *Id.* GENCO is a registered company with the Securities and Exchange Commission, and its financials are publicly reported. *Id.* at 2. AER owns, through various operating subsidiaries, the seven coal-fired generating stations in the MPS Group. *Id.* at 5.

Medina Valley is an existing indirect subsidiary of Ameren. Pet. Exh. 1 at 5.

IPH is a limited liability company owned directly by Illinois Power Holdings II, which is a directly wholly owned subsidiary of Dynegy. Affidavit of Mario E. Alonso (Pet. Exh. 2) at 2. IPH is a non-recourse entity formed to acquire the equity interest in Ameren’s operating merchant generating stations pursuant to a March 14, 2013 transaction agreement between Ameren and IPH. *Id.* Following closing under the transaction agreement, IPH will own all of Ameren’s interest in GENCO, AERG, and other AER subsidiaries. *Id.* Dynegy’s subsidiaries, including IPH, are independent legal entities with separate assets and liabilities. *Id.*

Petitioners state that the transaction agreement is the culmination of Ameren’s “fundamental business decision,” made after the Board granted AER’s request for a variance in PCB 12-126, to “exit the merchant generating business.” Pet. at 4. Under the transaction agreement, AER’s corporate structure would change. Ameren would “initiate a reorganization of AER,” creating “New AER” to accept the active generating facilities in the MPS group, namely, the Coffeen, Duck Creek, E.D. Edwards, Joppa, and Newton plants. *Id.*, citing Pet. Exhs. 1, 2. In turn, IPH would acquire New AER and, with it, the five active generating plants. *Id.* Medina Valley would acquire the generating stations that the PCB 12-126 order granting the AER variance requires to remain shuttered for the term of the variance, namely, the Meredosia and Hutsonville stations. *Id.*

Facilities

The seven coal-fired power plants that are the subject of the instant variance consist of the Coffeen (Montgomery County), Duck Creek (Fulton County), E.D. Edwards (Peoria

County), Joppa (Massac County), Newton (Jasper County), Hutsonville (Crawford County), and Meredosia (Morgan County) Energy Centers. AER opted all 21 EGUs at these seven plants into the Ameren MPS Group Multi-Pollutant Standard on December 27, 2007. Pet. at 6. Since then, AER ceased operation of the Meredosia (Morgan County) and Hutsonville (Crawford County) stations and, under the variance AER holds, has committed to not operating these stations during the term of the variance. AER continues to generate electricity at the remaining five stations. *Id.* at 17.

Petitioners note that IPH's parent company Dynegy, through its subsidiaries, Dynegy Midwest Generation LLC (DMG) and Dynegy Kendall Energy, LLC, owns and operates five coal and natural gas-fired power generation facilities in Illinois with a capacity of 4,200 MW. Dynegy's Illinois generating assets include four operating coal-fired electric generating stations: Baldwin Energy Complex (Randolph County), Havana Power Station (Mason County), Hennepin Power Station (Putnam County), and Wood River Power Station (Madison County). DMG permanently retired a fifth plant, the Vermilion Power Station, in November 2011. Pet. at 56.

The principal emissions at the MPS Group power plants are SO₂, NO_x, and particulate matter (PM). Pet. at 17. When the instant petition was filed, the counties where the MPS Group plants are located were all designated as attainment for all pollutants, but petitioners acknowledge that USEPA was considering including a portion of Peoria County in its designations of 1-hour SO₂ NAAQS nonattainment areas, which would include the E.D. Edwards Energy Center. AER filed a comment with USEPA objecting to the inclusion. *Id.*

The MPS Group controls SO₂ emissions with pollution control equipment, specifically three FGD units at the Duck Creek and Coffeen stations, and by using low sulfur coal or blending low sulfur coal with Illinois coal. Pet. at 17; AER Br. at 6-7. NO_x emissions are controlled using low NO_x burners, over-fired air, selective catalytic reduction systems, and burning combinations of low sulfur coal. *Id.* The MPS plants control PM using flue gas conditioning and electrostatic precipitators (ESP). *Id.* Mercury emissions are controlled using scrubbers and sorbent injection technologies. *Id.* at 18.

Relief Requested

Petitioners seek a variance from Section 225.233(e)(3)(C)(iii) for five years, beginning January 1, 2015 and ending December 31, 2019, and from Section 225.233(e)(3)(C)(iv) for three years, beginning January 1, 2017 and ending December 31, 2019. Pet. at 2-3. To meet the current overall SO₂ annual emission rates for 2015 and 2016 in Section 225.233(e)(3)(C)(iii), and for 2017 and beyond for the rate in Section 225.233(e)(3)(C)(iv), IPH intends to continue AER's plan to install FGD equipment at the Newton station. *See Ameren Energy Resources*, PCB 12-126, slip op. at 8; Pet. Br. at 40. The variance granted to AER in PCB 12-126 set certain milestones and reporting dates for construction of the Newton FGD project. Pet. at 3. Petitioners assert that AER has already paid approximately half of the \$500 million estimated total cost of that project. *Id.* at 24-25, citing Pet. Exh. 8.

Petitioners state that unlike generators in other states, Illinois' merchant generators like IPH do not have a regulated customer base from which environmental and other compliance expenses may be recovered through base rates. Pet. at 37. Accordingly, such generators rely primarily on revenues from the sale of power in the "competitive wholesale electricity market," meaning that they are exposed to "market prices, swings in load demand, and commodity price volatility." *Id.* Because of depressed power prices and uncertainty regarding federal environmental regulations, petitioners add, AER's financial outlook, credit profile, and access to capital have further deteriorated since AER received the PCB 12-126 variance. *Id.*, citing Affidavit of George Bilicic (Pet. Exh. 9); AER Br. at 17-18. As a result, petitioners assert, IPH will not at closing have the financial resources to "complete construction or otherwise comply with the MPS." *Id.*, citing Pet. Exh. 2. IPH predicts that power prices will begin to recover in 2015, but gradually, and not fast enough to complete construction of the Newton FGD units in time to meet the 2015 and 2017 MPS emission rates. *Id.* at 41. Thus, IPH believes the five-year term of the requested variance is "critical" to allow time for recovery of power prices and for IPH to accumulate sufficient financial resources to comply at the end of the variance period. *Id.*

Petitioners, like AER in PCB 12-126, do not seek a change to NO_x limits or mercury control requirements. Pet. at 62-63.

Compliance Plan

IPH states that it "has analyzed all of the commitments made by AER in the prior proceeding [PCB 12-126], and has agreed to assume each and every commitment." Pet. at 22. Under the variance, petitioners state IPH will keep the seven-plant MPS Group intact for purposes of MPS compliance, even though IPH will not acquire the shuttered Hutsonville and Meredosia generating stations. Medina Valley will assume control of those two plants, which it has agreed as a condition of the requested variance not to operate through December 31, 2020, with the FutureGen project at the Meredosia station being exempt from this restriction. Pet. Exh. 8 at 12.

Petitioners propose that the MPS Group will meet an overall SO₂ annual emission rate of 0.35 lb/mmBtu from 2013 through 2019, and 0.23 lb/mmBtu thereafter, just as AER committed to do in PCB 12-126. To achieve this rate, IPH will maximize FGD performance at the Duck Creek and Coffeen stations, such that the scrubbers will operate at a 98-99 percent SO₂ removal rate; continue to burn low sulfur coal from Wyoming's Powder River Basin (PRB) at the E.D. Edwards, Joppa, and Newton plants; and manage generation as necessary to maintain compliance. In addition, as noted above, Medina Valley will keep the shuttered plants out of service through December 31, 2020, with the exception of the FutureGen project. Pet. at 20-22 & Exh. 8 at 12-13.

By agreeing to the same SO₂ emission rate of 0.35 lb/mmBtu as AER did in PCB 12-126, IPH commits to limit use of higher SO₂ content coal to the Duck Creek and Coffeen stations, and to use low sulfur PRB coal at the Edwards, Newton, and Joppa stations. Pet. at 22-23. Upon acquiring the MPS plants, IPH states that its subsidiaries will inherit and be bound by the long-term contracts AER previously entered into for the purchase of low sulfur (0.55 lb/mmBtu) coal from 2013 through 2017. *Id.* at 23. While IPH is committed to upholding these contracts, it is

also considering purchasing even lower sulfur coal by drawing on DMG's coal-purchasing experience. IPH has learned that one supplier has 0.50 lb/mmBtu PRB coal. IPH states that it anticipates purchasing such coal, depending on "availability, performance risk, price, and the MPS Group's emission performance." Pet. at 23; Pet. Exh. 8 at 7-8.

Further, IPH will maintain progress on the Newton FGD project in accordance with the schedule set forth in PCB 12-126. Petitioners state that so far, all major equipment components for the project have been procured, and engineering design is scheduled to continue through 2014. Field construction work will occur in stages, including installation of ductwork and insulation, construction of the absorber building, and completion of electrical systems and piping connections. Proceeding in this manner, petitioners expect to comply with the final MPS overall SO₂ emission rate beginning in 2020. Pet. at 21-22.

Necessary Parties

Petitioners assert that they meet the criteria under Section 104.202(a) of the Board's procedural rules (35 Ill. Adm. Code 104.202(a)) for persons eligible to file a petition for a variance. Pet. at 10. That rule provides that "[a]ny person seeking a variance from any rule or regulation, requirement or order of the Board that would otherwise be applicable to that person may file a variance petition." 35 Ill. Adm. Code 104.202(a). Upon closing of the IPH-Ameren transaction, petitioners explain, the MPS emission rates would otherwise be applicable to both IPH and Medina Valley absent a variance, so each is a proper petitioner. According to petitioners, AER is a proper co-petitioner because it is the plants' current owner, with a "direct and substantial interest" in this proceeding. *Id.* at 11.

Petitioners state that IPH and Medina Valley are the persons to whom the Ameren MPS would "otherwise be applicable," as Section 104.202(a) specifies. Pet. at 11. Petitioners believe the Board must provide "regulatory certainty to the new owners" of the MPS plants "without requiring existing ownership as a prerequisite, which, petitioners maintain, neither the Act nor the Board's rules requires. *Id.* Petitioners claim Ensign-Bickford Co. v. IEPA, PCB 02-159 (Apr. 3, 2003), cited in Ameren Energy Resources, PCB 12-126, slip op. at 10-11 (June 6, 2013), is distinguishable because in Ensign-Bickford the petitioner sought to transfer a variance to a prospective purchaser of the facility that was not a party to the motion to transfer. *Id.* at 12. Here, petitioners add, all the necessary parties are parties to the variance petition. *Id.*; Pet. Br. at 8-11.

Further, petitioners argue that the statement in Ensign-Bickford that the future owner in that case, Dyno Nobel, could petition for a variance after closing on the agreement to acquire the facility, is dicta and did not preclude Dyno Nobel, let alone variance petitioners in general, from filing a variance petition before owning the facility at issue. *Id.* at 12-13. This dicta in Ensign-Bickford should not be followed, petitioners continue, since the Board has previously granted a variance to a company that was in the process of acquiring the affected facilities. *Id.* at 13 & n.10, citing Allied Chemical Corp. v. IEPA, PCB 80-92 (June 12, 1980). According to petitioners, the Board has previously granted variances "as to multiple petitioners" regarding future compliance dates where the petitioners showed an arbitrary or unreasonable hardship. *Id.* at 14; Pet. Br. at 9-10.

Arbitrary or Unreasonable Hardship

Regulatory Uncertainty

Petitioners state that AER opted into the MPS in 2007 with the expectation that future federal regulatory requirements were imminent. Pet. at 25. Such regulations have not materialized, however, according to petitioners, and Illinois “stands alone in its stringent MPS requirements, putting the MPS Group at a disadvantage to its competitors.” *Id.* at 25-26. Petitioners summarize the development of certain federal air pollution rules and their implementation in Illinois. *Id.* at 25-27. In 2005, USEPA promulgated regulations requiring reduction of NO_x and SO₂ emission known as CAIR, 70 Fed. Reg. 25162 (May 12, 2005) and reduction of mercury emissions known as CAMR, 70 Fed. Reg. 28606 (May 18, 2005). Both rules applied to coal-fired EGUs like the MPS plants. Pet. at 25; AER Br. at 3-6.

As noted above, the Agency proposed rules to the Board to implement both federal rules. See Ameren Energy Resources, PCB 12-126, slip op. at 10-11. Negotiations between AER and the Agency resulted in the promulgation of Section 225.233 in the Board’s R06-25 proceeding. *Id.*; AER Br. at 5-6.

Subsequently, in February 2008, a federal court vacated the federal CAMR. Pet. at 26, citing New Jersey v. Environmental Protection Agency, 517 F.3d 574 (D.C. Cir. 2008). Shortly thereafter, a federal appellate court remanded the federal CAIR to USEPA but ordered that CAIR remain effective until replaced with a new rule. Pet. at 26, citing North Carolina v. Environmental Protection Agency, 550 F.3d 1176 (D.C. Cir. 2008).

In August 2011, USEPA adopted the Cross-State Air Pollution Rule (CSAPR) to replace CAIR. Pet. at 26; 76 Fed. Reg. 48208 (Aug. 8, 2011). On judicial review, CSAPR was vacated by a federal court in August 2012. Pet. at 26, citing EME Homer City, LP v. Environmental Protection Agency, 696 F.3d 7 (D.C. Cir. 2012), *cert. granted*, 133 S. Ct. 2857 (2013). On June 24, 2013, the United States Supreme Court granted certiorari in that case, and will review the decision this term. Pet. at 26. USEPA also adopted the Mercury and Air Toxics Standard (MATS) to control various emissions from EGUs. Pet. at 26 n.14; 77 Fed. Reg. 9304 (Feb. 16, 2012). A challenge to that rule is pending in federal court. See White Stallion Energy Center, LLC v. Environmental Protection Agency, No. 12-1100 (D.C. Cir. Feb. 16, 2012).

Petitioners state that the unknown future of these federal regulations leaves coal-fired power generators uncertain as they await a ruling by the Supreme Court and USEPA’s response on remand, whether or not that leads to promulgation of a “CAIR/CSAPR replacement yet again.” Pet. at 26-27. Exacerbating this uncertainty, petitioners continue, is the President’s Climate Action Plan, announced June 25, 2013, which directs USEPA to issue greenhouse gas emission standards for existing power plants no later than June 1, 2015. *Id.* at 27. Petitioners add that no one knows yet how USEPA will interpret this new mandate. *Id.* In light of these federal regulatory developments, petitioners contend that planning for merchant generators is “even more complex” because of the resulting negative impacts on markets and power prices. *Id.* Petitioners believe that the Board should, accordingly, “stay on the course” that it took in

PCB 12-126, so that if federal mandates require plant closures, the impact will be nationwide rather than peculiar to Illinois. Pet. Br. at 32.

According to petitioners, the impact of federal regulatory uncertainty falls disproportionately on Illinois generators, for two reasons. First, Illinois has an unregulated consumer choice market under the State's Electric Service Consumer Choice and Rate Relief Law of 1997. Pet. at 28, citing 220 ILCS 5/16-101 (2012). One of the primary purposes of this law, according to petitioners, was to "incent" Illinois utilities to transfer their generating plants to affiliates or third parties, where they would no longer be controlled by the utilities but would, instead, compete in a wholesale power market that would determine prices. *Id.* As a result, petitioners continue, Illinois' merchant generators, unlike generators in neighboring states, do not have a captive customer base from which it can recover, through base rates, expenditures on environmental compliance. *Id.* Rather, petitioners assert, Illinois merchant generators' investment in pollution control equipment depends on their ability to recover the costs from future market prices for power. *Id.*

Second, petitioners state, the MPS rule is significantly more stringent than emission standards in nearby states and was adopted in anticipation of federal mandates that have been vacated or are currently on appeal. Pet. at 29. According to petitioners, other states such as Indiana, Kentucky, Missouri, and Iowa have not adopted air pollution control regulations in advance of a federal mandate. *Id.* at 29 & n.18. In the meantime, petitioners assert, "economic conditions have fallen beyond any price declines that were foreseeable" when the 1997 consumer choice law was enacted. *Id.* at 29. New methods of natural gas extraction are a "game changing" technology and have fundamentally altered the outlook for gas supplies and pricing, according to petitioners. Petitioners state that general recessionary conditions, along with mandatory requirements for renewable power supply, have further depressed power prices. *Id.* As a result, contrary to expectations when the MPS were adopted, market power prices cannot support necessary capital expenditures to complete the Newton FGD project in time to meet the MPS 2015 and 2017 SO₂ emission rates. *Id.* at 29-30. Petitioners assert that with depressed power prices, merchant generators like IPH cannot easily, if at all, generate sufficient cash flows to fund "large-scale capital projects." *Id.* at 37, citing Pet. Exh. 2. These economic conditions and impacts were unforeseeable and not "self-imposed," according to petitioners, and their convergence amounts to the arbitrary or unreasonable hardship that *any* owner of the MPS plants would face. *Id.* at 30; Pet. Br. at 27.

Accordingly, petitioners state that, "at a time when the Illinois economy is abysmal," Illinois generators such as AER now compete at a disadvantage with out-of-state generators, who, through regional transmission organization Midwest Independent System Operator, Inc. (MISO), may "more easily and efficiently" sell power across state lines. Pet. at 30, 36-37. And, petitioners add, these out-of-state generators do not have deregulated power markets like Illinois and also have not had to invest significant capital in pollution control to meet stringent state standards. *Id.* Petitioners urge the Board, therefore, to engage in a "responsible cost-benefit analysis," as Section 35(a) of the Act (415 ILCS 5/35(a) (2012)) requires. *Id.*

Plant Closures

Petitioners claim that unless they receive a variance, “plant closures are inevitable.” Pet. at 30. If a variance is not granted, despite the Board’s having found the very same relief appropriate in PCB 12-126, and IPH nonetheless proceeds to acquire the MPS plants, IPH’s only compliance option would be to close a combination of the plants—the E.D. Edwards and Joppa stations—by January 1, 2015. *Id.* at 30-31. Given depressed power prices, which petitioners expect to continue “for several more years,” IPH will not have the financial resources to complete the Newton FGD project in time to meet the MPS. *Id.* at 31, citing Pet. Exh. 2. Even if the necessary resources were available, petitioners add, the Newton FGDs could not be completed in sufficient time to avoid shutting down the E.D. Edwards and Joppa plants. *Id.* Rather, petitioners reiterate, a multi-year construction schedule to complete the FGDs is necessary. *Id.* at 25.

If instead the IPH acquisition does not close, petitioners state that Ameren would “continue to explore exit possibilities,” including the sale of assets, restructuring of debt and equity in GENCO, or a combination of these steps. Pet. at 31, citing Pet. Exh. 1. Restructuring would require negotiations with GENCO bondholders, which would create uncertainty for “employees, suppliers and local communities.” *Id.* AER believes that no other potential buyer would be willing to acquire the active MPS plants without a variance, unless the buyer intended to close one or more plants. *Id.* According to petitioners, IPH, with a continuation of the variance relief granted to AER, “represents the best path forward for the continued operation” of the MPS plants and ultimate compliance with the MPS. *Id.*

Further, petitioners assert that shutting down the Edwards and Joppa plants would “adversely affect” 274 “direct” jobs, 1,374 “indirect” jobs, over \$121 million annually in the local economies near the two plants, and over \$338 million per year in the State’s economy. Pet. at 32, citing Ameren Energy Resources, PCB 12-126, slip op. at 62; Pet. Br. at 23, citing Pet. Exh. 7. Shutting these plants would, according to petitioners, have “a devastating impact on the local economies and materially undermine the State’s struggling economy.” *Id.* at 24. This would impose an arbitrary or unreasonable hardship on the communities and the State as well as IPH. *Id.* Petitioners summarize and quote extensively from the oral comments of several State and local public officials at the PCB 12-126 hearing about the crushing impact shutting down the E.D. Edwards and Joppa plants would have on the affected regions, local communities, school districts, and other government bodies. *Id.* at 32-34, citing Ameren Energy Resources, PCB 12-126, Tr. (Aug. 1, 2012). For example, petitioners note that State Representative Brandon Phelps

recognized that the government and private sectors are facing a huge financial crisis. He explained that Joppa provides 164 well-paying jobs for southern Illinois which, when compared to Chicago demographics, is the equivalent [of] 10,000 jobs in southern Illinois. Economics must factor into Illinois’ environmental regulations and pollution control because these rules were adopted assuming that federal rules would soon follow their adoption. While he recognized the commitment of the power companies to reduce emissions, he recommended that compliance be deferred to a later date given the current economic situation. Pet. at 32.

In their joint post-hearing brief, petitioners emphasize that economic impacts—including “hardships alleged to the community, [a facility’s] employees, and the [affected] area economy—attributable to denying a variance are relevant hardships to be weighed against environmental impact.” Pet. Br. at 17. In fact, petitioners argue, the appellate court has made clear that the Board is required to evaluate such hardships. *Id.* at 16-17, citing Material Service Corp. v. PCB, 41 Ill. App. 3d 192, 354 N.E.2d 37 (3d Dist. 1976); *see also* Caterpillar Tractor Co. v. PCB, 48 Ill. App. 3d 655, 363 N.E.2d 419 (3d Dist. 1977).

Costs of Compliance

Petitioners argue that the costs of compliance with the MPS are “staggering.” Pet. at 24. To comply with environmental obligations for the MPS Group, petitioners recount, AER has already spent over \$1 billion in capital expenditures. These expenditures included over \$813 million for installation of SO₂ scrubbers on three units, over \$177 million for installation of SCR systems to reduce NO_x emissions at three plants, and over \$20 million for installation of activated carbon injection (ACI) systems on 12 units. Additionally, AER has spent over \$7 million in annual operating costs for the SCRs and \$17 million for the ACI systems. *Id.*

For the Newton FGD Project, IPH estimated the total costs of construction for the two FGD units to be approximately \$500 million, with half of those costs already spent to date. Pet. Br. at 35; Pet. Br. Exh. 3 at 2. In accordance with the construction milestones under the proposed variance conditions, IPH has budgeted \$18 million in annual expenditures through 2017 for continued construction of the Newton FGD project. Petitioners state that IPH plans to spend the remainder of the total estimated costs to complete the project in 2018 and 2019. Pet. at 24-25; Pet. Exh. 8 at 12-13.

In addition to the expenditures associated with the Newton FGD project, IPH estimates expenditures for annual operations and maintenance for compliance with the MPS NO_x and mercury emission limits for the five operating MPS plants to be in the several million dollar range. Pet. at 25; Pet. Exh. 8 at 13.

Petitioners state that even if IPH could begin construction of the Newton FGDs immediately upon acquiring the plants in late 2013, it could not complete construction of the project in time to comply with the MPS 2015 overall SO₂ annual emission rate because construction activities are expected to take up to 24 months. Pet. at 34-35, citing Pet. Exh. 8; Pet. Br. at 35. The lack of financial resources to begin construction immediately is the direct result of “severely depressed power prices,” according to petitioners. *Id.* at 35. From 2006-07 to 2012, power prices in the market relevant to the MPS plants declined from \$60 per megawatt hour to approximately \$29.50-\$33.50 per megawatt hour. *Id.* at 35, citing Pet. Exh. 2; Ameren Energy Resources, PCB 12-126, slip op. at 62-63. Power prices remain depressed, petitioners state, currently at approximately \$31.85 per megawatt hour. *Id.*, citing Pet. Exh. 9. Petitioners note that independent market observers and financial analysts expect power prices to remain depressed for “the next several years,” and that natural gas prices will remain at “distressed levels.” *Id.* at 35-36.

With power prices remaining depressed, petitioners assert that IPH will continue to face the same financial pressures that AER was experiencing when it filed its variance petition in PCB 12-126. Pet. at 36. Low power prices have “severely eroded operating margins” of the MPS plants and will continue to limit their ability to generate cash flows for the next several years, according to petitioners. *Id.*

Petitioners further contend IPH will not have the financial resources at closing to timely complete construction of the Newton FGDs or otherwise comply with the MPS because AER currently does not have such resources. Pet. at 37, citing Pet. Exh. 2. Moreover, petitioners assert, AER’s financial outlook, credit profile, and access to third party capital have further deteriorated since AER received the variance in PCB 12-126, because of persistently low power prices and ongoing federal regulatory uncertainty. *Id.*, citing Pet. Exh. 9. Petitioners add that in the first quarter of 2013, AER had a \$151 million net income loss, and AER subsidiary GENCO has approximately \$825 million in long-term public bond debt outstanding, with \$300 million of the debt maturing in 2018 and \$250 million maturing in 2020. *Id.* at 38, citing Pet. Exh. 2. This debt requires approximately \$59 million in annual interest payments, and GENCO’s credit rating was cut by 4 and 3 notches by two credit rating agencies since AER received the variance. *Id.* Under the transaction agreement, GENCO will remain responsible for repayment of the \$825 million debt, including the \$59-million annual interest payments. *Id.*

At closing, petitioners state, IPH will have approximately \$220 million in cash, including a minimum of \$133 million in proceeds from exercising AER’s “put option,” which is designed to provide GENCO with “cash liquidity” by selling its natural gas power plants in Elgin, Gibson City, and Grand Tower. Pet. at 38-39 & n.22. Petitioners further state that of that amount, approximately \$203 million will be at GENCO and approximately \$17 million at AERG/Ameren Marketing. *Id.*, citing Pet. Exh. 2. Depending on the volatility of commodity markets, IPH will use the “vast majority” of the \$220 million in cash to fund operations, potential losses, interest payments, and working capital and credit support needed for day-to-day operations. *Id.* at 39. Two years after closing, petitioners add, IPH will need the resources to replace existing credit support from Ameren, which, under current conditions, would use up a significant amount of the \$220 million in cash available at closing. *Id.* at 39. Accordingly, petitioners conclude, a significant amount of the \$220 million will not be available to fund completion of the Newton FGDs or any MPS compliance alternatives. *Id.*

In addition to \$220 million in cash, petitioners note that IPH will have \$160 million in working capital at closing that will be needed for day-to-day business expenses, including fuel inventory and materials/supply. Pet. at 39, citing Pet. Exh. 2 at 11. Thus, petitioners assert that the cash IPH will have at closing will not be available to fund completion of the Newton FGDs or any other alternatives to comply with the MPS. *Id.* IPH maintains that the available funds at closing will not even be sufficient to sustain IPH’s operations for several years without the annual gross margin and cost improvements of approximately \$60 million that IPH’s parent company, Dynegy, expects due to operational synergies. Petitioners state that those synergies would come from gross margin and cost improvements at New AER, through improvements in reduced forced outage rates, outage planning, fuel and rail procurement practices, and vendor optimization, among others. *Id.* at 40, citing Pet. Exh. 2 at 12.

Accordingly, petitioners continue, at closing, IPH will have sufficient liquidity to meet anticipated operating obligations, including to (a) continue construction of the Newton FGDs according to petitioners' proposed compliance plan; (b) "maximize the existing FGD systems" at the Duck Creek and Coffeen plants; and (c) utilize low sulfur coal at the Newton, E.D. Edwards, and Joppa stations. Pet. at 39-40.

IPH cautions that while it expects to achieve positive cash flow beginning in 2015 as power prices recover, the recovery and associated positive cash flow will be gradual rather than immediate. Pet. at 40, citing Pet. Exh. 2. Petitioners add that as Dynegy has publicly stated, it believes power prices will begin to recover when compliance with the federal MATS "tightens [power] supply as environmentally noncompliant or uneconomic generation units in the Midwest continue to retire." *Id.* at 40-41; Pet. Br. at 21-22, citing Pet. Br. Exh. 2. But because the predicted recovery will not be immediate, petitioners continue, IPH will not be able to complete the Newton FGD project in time to meet the 2015 and 2017 MPS emission rates. *Id.* at 41. Rather, petitioners claim, the gradual recovery of power prices (anticipated to begin after April 2015) will provide IPH with sufficient cash flow and liquidity to ramp up and complete construction of the Newton FGDs by year end 2019. *Id.* at 40, citing Pet. Exh. 2 at 11. Accordingly, petitioners contend that the requested five-year variance is critical for IPH to meet the MPS emission rates. *Id.* at 41.

Regarding other financing sources, petitioners state that IPH will not be able to obtain financing from external third party lenders because of AER's weak balance sheet at closing and distressed power markets. Pet. at 41-42, citing Pet. Exh. 2. According to petitioners, before reaching the transaction agreement, Dynegy approached "several" financial institutions to request that they extend a credit facility to support IPH. *Id.* at 42. Petitioners add that each institution declined to extend credit because of the low cash flow profile, negligible lien capacity of the MPS plants, existing debt, and weak credit of the businesses. *Id.*, citing Exh. 2 at 7. Petitioners add that because IPH, New AER, and AERG are not and will not become publicly traded companies rated by the credit rating agencies, they will have "limited financing options." *Id.* at 43.

Also, petitioners state that GENCO is currently restricted by its debt covenants from obtaining external financing since GENCO's interest coverage ratio is less than the minimum level of 2.5. Pet. at 43, citing Pet. Exh. 2 at 8. If GENCO's interest coverage ratio does not improve significantly by the debt maturity dates, petitioners assert that GENCO would have to repay its outstanding debts (\$300 million in 2018; \$250 million in 2020) to the bondholders. Due to these potential debt maturities and the continuing financial challenges, petitioners claim it "is critical that IPH, including GENCO, preserve and accumulate cash until power market prices recover, operating results improve, cash flows increase, and the ability to obtain external lender financing returns." *Id.* That, petitioners add, "will not be possible under IPH without the requested variance relief." *Id.*

In addition, petitioners state that Dynegy, IPH's ultimate parent company, is not in a position to provide financial support for major capital projects, as it is limited by the same financial pressures that prevented Ameren from supporting AER at the time that AER sought a variance in PCB 12-126. Pet. at 43 & n.25. In fact, petitioners continue, the financial and credit

pressures on Dynegy are worse than those Ameren faces, since Dynegy is solely a merchant generation company. Petitioners note that Dynegy filed for Chapter 11 bankruptcy protection in July 2012. *Id.* at 43-44. Since emerging from bankruptcy in October 2012, Dynegy has reported operating losses of \$104 million for the fourth quarter of 2012 and \$142 million for the first quarter of 2013. *Id.* at 44, citing Pet. Exh. 2. Thus, petitioners maintain, even though Dynegy expects power pricing to improve beginning in 2015, Dynegy does not have the financial resources to fund completion of the Newton FGDs in time to meet the MPS. *Id.*; Pet. Br. at 21.

According to petitioners, integrating IPH into Dynegy's capital structure or providing financial support to IPH would negatively affect Dynegy's credit rating. *Id.* A downgrading of Dynegy's credit rating would jeopardize Dynegy's balance sheet and liquidity, petitioners add. *Id.*; Pet. Br. at 21, citing Pet. Br. Exh. 2. Thus, petitioners assert that, although it may, "if necessary," provide very limited financial support for working capital to maintain IPH's day-to-day operations, Dynegy cannot financially support the major capital projects necessary to meet the MPS. *Id.* at 45. Moreover, petitioners continue, under IPH ownership the active MPS plants must be "economically viable on their own" and operate as independent, self-funding businesses. *Id.* at 45. Accordingly, petitioners maintain that "the various financial challenges faced by IPH are the same, if not worse, than those faced by AER when it was granted the variance." *Id.* The rationale for the variance remains the same, petitioners contend: allow IPH to "manage its liquidity and credit quality" as it continues to face a "challenged merchant generation operating environment." *Id.*

Hardship Not Self-Imposed

Petitioners argue it would be "simply wrong" to dismiss their petition outright based on Board decisions finding claimed hardships "self-imposed." Pet. at 46. According to petitioners, a self-imposed hardship, as that term has been used in prior Board opinions such as Ekco Glaco v. IEPA, PCB 87-41 (Dec. 17, 1987), means a "quagmire of [the petitioner's] own making, due to lack of diligence or despite knowledge of requirements." *Id.* There is no similar lack of due diligence or failure to acknowledge applicable requirements here, petitioners maintain. *Id.* at 46-47. Rather, petitioners continue, IPH, through the transaction agreement, has exhibited a thorough understanding of applicable regulatory requirements as well as the need to substantiate the requested relief; IPH did not, petitioners continue, appear before the Board "after-the-fact, assuming the Board would provide a lifeboat." *Id.* at 47; Pet. Br. at 18-19.

Petitioners claim that finding the hardship in this case self-imposed would amount to a ruling that a business could not "contract for, and achieve through the Board's processes," a variance for the "same exact facilities" from the "same exact" statutory requirements that the current owner had achieved under "virtually the same circumstances." Pet. at 47. Such a ruling, according to petitioners, would be inconsistent with the Board's statutory responsibility to provide regulatory relief where it is warranted, and would also be contrary to prior Board rulings. *Id.*, citing Allied Chemical Corp. v. IEPA, PCB 80-92 (May 1, 1980); Allied Chemical, PCB 80-92 (June 12, 1980). Under such circumstances, petitioners conclude, the hardship here is "anything but self-imposed." *Id.*

In their joint post-hearing brief, petitioners argue that Willowbrook Motel and Lindgren Foundry are distinguishable from this case. Pet. Br. at 27-28, 31-32. In Willowbrook Motel, petitioners contend, the appellate court did not find petitioners' claimed hardship—"financial loss and associated consequences of a single development project," according to petitioners—inadequate merely because the partnership's purchase of the property was conditioned on the grant of a variance. *Id.* at 32. Rather, petitioners contend, the court ruled petitioners did not demonstrate any hardship that outweighed the public interest in restricting development "where improper sewage capacity exists." *Id.* Here, by contrast, petitioners do not claim such "purely financial" or transaction-related hardships, but an "unforeseen and complex convergence of circumstances that is both arbitrary and unreasonable." *Id.* These hardships, according to petitioners, "will be transferred to Petitioners along with the transfer of the facilities." *Id.* As for Lindgren Foundry, petitioners contend that, unlike the new foundry owners in that case, they do not seek to "reopen a closed business" that is out of compliance with applicable standards. *Id.* at 23.

Environmental Impact

Amount of Sulfur Dioxide Emissions

Petitioners propose to continue operating under AER's compliance plan imposed in PCB 12-126. They present a comparison of estimated SO₂ emissions under the MPS versus the proposed variance compliance plan from 2010 through 2020 and 2013 through 2020, in tables 1 and 2 of their petition, respectively. Pet. at 58; Pet. Exh. 10. Petitioners assert that the proposed compliance plan would produce a net overall reduction in SO₂ emissions as compared to anticipated emissions under the MPS. Pet. Exh. 11 at 3. Petitioners estimate that "MPS baseline SO₂" emissions, or emissions from the MPS Group under the MPS rather than the requested variance, would total 655,359 tons from 2010 through 2020. Pet. Exh. 10, tables 1-2.

Under the proposed variance, petitioners continue, they would be allowed to operate at an overall SO₂ annual emission rate of 0.35 lb/mmBtu from 2013 through 2019, and 0.23 lb/mmBtu beginning in 2020, which they estimate would lead to a total of 581,056 tons of SO₂ emitted from 2010 through 2020. Petitioners refer to this amount as "Net Variance SO₂" emissions. Petitioners assert that the proposed variance would result in 74,303 fewer tons of SO₂ emitted from 2010 through 2020 than if MPS compliance were required, yielding a "net environmental benefit." Pet. at 59; Pet. Exh. 10, table 1; Pet. Exh. 11 at 2-3. According to petitioners, the projected 74,303-ton reduction in SO₂ emissions under the proposed variance represents 13,633 fewer tons than projected under the variance granted in PCB 12-126. Pet. at 18, 59; Pet. Exh. 8 at 14. The reason for this difference, petitioners explain, is that in 2012, the MPS Group actually achieved an overall SO₂ annual emission rate of 0.36 lb/mmBtu, whereas AER's variance permitted operation at a rate of 0.38 lb/mmBtu. The difference also is attributable to adjustments to the emissions analysis for 2013 to 2016 to reflect that the FutureGen 2.0 project to be constructed at the Meredosia site is now not expected to begin operation until September 2017. *Id.* at 59, Exh. 11 at 2-3.

Petitioners contend that the relevant period for reviewing overall reductions in SO₂ emissions is 2010 through 2020. Pet. at 59. Petitioners add that this period permits comparison

of emissions that would have been allowed under the MPS and takes into account actual emissions and the effect of the conditions imposed under the AER variance. *Id.* Petitioners claim that “[a]ll of these factors have resulted in benefits to human health and the environment not otherwise required under the MPS.” *Id.*

Petitioners state that even if the period of assessment is instead 2013 through 2020, there would still be a net environmental benefit, in the form of 7,778 fewer tons of SO₂ emitted, under the variance as compared to under the MPS. Pet. at 59-60, Pet. Exh. 8 at 14; Pet. Exh. 10, table 2; Pet. Exh. 11 at 3. Either way, petitioners add, the tables “demonstrate that no adverse environmental impact exists to outweigh the hardships associated with plant closures.” Pet. at 60.

Beyond these cumulative emission reductions, petitioners expect to achieve further SO₂ emission reductions beyond projections under the AER variance. Petitioners assert these will come, first, from the expected retirement of E.D. Edwards Unit 1 before the end of the requested variance term. Second, petitioners are considering use of coal with an even lower sulfur content than the 0.55 lb/mmBtu sulfur coal AER is committed to using at the Newton, E.D. Edwards, and Joppa stations. Third, petitioners point out, there will be additional SO₂ reductions associated with extended outages at Newton during 2019 in order to complete the Newton FGD project, and because at least one FGD will be operational for part of 2019. Petitioners note that such additional reductions cannot be quantified currently, and that they are not accounted for in the emission calculations petitioners submitted in exhibit tables with the petition. Pet. at 61-62, Pet. Exh. 8 at 14-16.

In response to questions posed by hearing officer order about petitioners’ willingness to accept annual emissions caps and reporting requirements to ensure the proposed “net benefit” is realized, petitioners indicated that they do not support such caps. Petitioners stated that these would eliminate operational flexibility, contrary to the intent behind the MPS, which was negotiated as a system-wide, rate-based regulatory structure. Petitioners represented that expected emissions would be consistent with the claimed net environmental benefit. Pet. First Resp. at 4-6; Pet. Br. Exh. 3 at 7-9. As to a cap on mass emissions for the E.D. Edwards station in particular, petitioners acknowledged that it is in an area recently designated by USEPA as nonattainment for the new 1-hour SO₂ NAAQS, but stated that an annual mass emissions cap for the plant would be premature and would not assure compliance with that NAAQS. Rather, petitioners continued, the Agency will need to analyze air emissions modeling to determine culpable sources and appropriate emission limits or control measures as part of the SIP. Pet. First Resp. at 7. However, at that time petitioners did agree to an annual mass emissions reporting requirement to be submitted to the Agency with its annual emissions report. *Id.* at 4-6.

Petitioners added that Dynegy and IPH had entered with the Agency into a memorandum of agreement (MOA) regarding overall emissions in Illinois. Under the MOA, IPH agrees to permanently retire E.D. Edwards Unit 1 as soon as MISO allows it to be taken out of service. Petitioners also pointed to other commitments under the MOA not related to the requested variance, including the permanent retirement of the air permits at Stallings (Madison County) and Oglesby (LaSalle County) combustion turbine facilities and the installation of Advanced Gas Path Technology at Kendall Power Station (Kendall County), subject to closing of the IPH-

Ameren transaction. Petitioners stated that IPH would accept a requirement to retire E.D. Edwards Unit 1 as a variance condition. Pet. First Resp. at 3, 6.

In responses to questions posed in a second hearing officer order, petitioners agreed to accept a cap on mass SO₂ emissions across the MPG Group of 327,996 tons from fourth quarter 2013 through 2020 to ensure achievement of the net benefit of a 7,778-ton reduction in SO₂ emissions under the requested variance. Petitioners plan to use a variety of methods, including additional conditions proposed by the Agency in its “Recommendation,” summarized below: use of low sulfur coal; operation of the Duck Creek and Coffeen FGD systems at 98% removal efficiency; and closure of E.D. Edwards Unit 1 when permitted. Pet. Second Resp. at 2-3; Pet. Br. Exh. 3 at 7-9. Petitioners reiterated that further emissions reductions will be realized during the final construction phase of the Newton FGD project while each generating unit suspends operations to permit installation of the FGDs. Pet. Second Resp. at 5.

With their second response, petitioners provided revised projected emissions to show emissions under the proposed variance from fourth quarter 2013 through 2020, as well as emissions based solely on the heat input and emission reductions associated with the five operating MPS plants only. The revised tables both show, under the proposed variance and the proposed emissions cap, cumulative reductions in SO₂ of 7,778 tons from fourth quarter 2013 through 2020. Petitioners note that while they provided this information, they continue to believe the Board should consider all seven MPS plants and not just the period when IPH will own the five active MPS plants. Pet. Second Resp. at 2-3 & Att. A, B; Pet. Br. at 41-42.

Human Health Impacts of SO₂ and PM

Petitioners commissioned a separate review of the proposed variance’s health effects from Lisa JN Bradley, PhD, Senior Toxicologist with AECOM. Pet. at 60; Pet. Exh. 12; Tr. at 73. Petitioners state that Dr. Bradley provides an overview of the NAAQS, a summary of SO₂ emissions in Illinois, an analysis of the impact of the SO₂ emissions resulting from the requested variance, a discussion of the health effects of SO₂ exposure, and a discussion of USEPA’s December 2012 revision of the annual PM_{2.5} NAAQS as it might relate to the proposed variance. Pet. at 60. Dr. Bradley concludes that the variance would “not result in an adverse impact and, in fact, would result in an overall net health benefit.” Pet. Exh. 12 at 7, Tr. at 73. As noted below, Dr. Bradley also testified at the variance hearing.

Dr. Bradley states that the NAAQS were first issued in 1971 pursuant to the CAA, with primary standards to protect public health and secondary standards to protect the public welfare, including animals, crops, visibility, and buildings. Dr. Bradley states that the 2010 primary 1-hour SO₂ NAAQS is 75 ppb and the 1973 secondary 3-hour SO₂ NAAQS is 0.5 ppm. Pet. Exh. 12 at 2. Dr. Bradley depicts graphically a trend of generally decreasing SO₂ emissions and 24-hour SO₂ air quality measurements in Illinois since 2007. Pet. Exh. 12 at 2-4, fig. 2-3; Tr. at 74. Dr. Bradley notes a decrease in SO₂ emissions since 1990, which, she adds, is notable given the increasing use of coal in the energy sector in the United States. Tr. at 74.

Dr. Bradley presents comparisons of the MPS Group’s baseline SO₂ emissions under the MPS with SO₂ emissions under the requested variance and identifies emission reductions under

the variance as compared to the MPS. Pet. Exh. 12 at 4-5, fig. 4, 5. Dr. Bradley states that from 2013 through 2020, fewer tons of SO₂ will be “in the atmosphere” than if a variance is denied. Pet. Exh. 12 at 6-7. Dr. Bradley adds that, “[a]ssuming that one accepts that the SO₂ emissions pose a health threat, the requested variance represents a tradeoff between greater reductions in health effects in 2013 and 2014 in exchange for smaller reductions in health effects between the years of 2015 and 2019.” *Id.* at 10, 16; Tr. at 80.

Dr. Bradley further notes that based on epidemiological studies, USEPA has concluded that the evidence suggests there is a causal relationship between respiratory morbidity and short-term exposure to SO₂, but not long-term SO₂ exposure. Pet. Exh. 12 at 7; Tr. at 79-80. According to Dr. Bradley, nine out of ten of the epidemiological studies USEPA relied on failed to find a statistically significant association between SO₂ and health effects. Tr. at 75, 80-81. Dr. Bradley testified that when information on the presence of other pollutants is used, the observed health effects are more strongly correlated with other pollutants rather than SO₂. *Id.* at 78-79.

Dr. Bradley explains that controlled studies in humans have shown an apparent spectrum of sensitivity to SO₂, with some people being unaffected by SO₂ concentrations that lead to severe bronchoconstriction in others. Dr. Bradley states that asthmatics are particularly sensitive to SO₂, and asthma is the health effect most commonly cited as associated with SO₂ exposure. Pet. Exh. 12 at 7; Tr. at 74-75. Dr. Bradley noted that in controlled human studies, responses to SO₂ in asthmatics were seen only at high concentrations on the order of 250 ppb over a 10-minute period. To put these concentrations into context, Dr. Bradley stated that in 2011, the statewide average 1-hour SO₂ high was 63 ppb and the 24-hour concentration was 15 ppb. Pet. Exh. 12 at 12.

Although there has been a rise in reported asthma cases in the United States over the past 30 years, Dr. Bradley states that “exposure to outdoor pollution is probably the least plausible explanation given that the air quality in Illinois [based on the Illinois 2011 Annual Air Quality Report] and the nation as a whole, specifically with respect to SO₂ emissions, has improved dramatically” at the same time as asthma has become more prevalent. Pet. Exh. 12 at 7; Tr. at 76. According to Dr. Bradley, the literature suggests that some of the increase in asthma cases over the past 30 years is due to changes in healthcare access, physician perception, diagnostic coding, and diagnoses. Pet. Exh. 12 at 9-10; Tr. at 76-77.

As to whether cumulative reductions in SO₂ emissions will have any effect on short-term impacts, Dr. Bradley explains that long-term concentrations are not completely independent of short-term concentrations. For example, Dr. Bradley stated, USEPA has done evaluations to determine the relationship between short-term and longer-term concentrations, and has set longer-term standards to limit the relative frequency with which shorter-term exposures occur above a certain level. Pet. Exh. 12 at 11. Dr. Bradley also pointed out that USEPA’s screening modeling guidance assumes the maximum annual concentration is equal to 0.08 of the maximum 1-hour concentration. *Id.* Dr. Bradley opined that given the relationship between long- and short-term SO₂ concentrations, the net reduction in SO₂ emissions under the proposed variance versus the MPS “is also expected to have an effect on reducing short-term exposures over the variance time period.” *Id.*; Pet. Br. at 47, citing Pet. Br. Exh. 6.

As to the relationship between SO₂ and PM, Dr. Bradley explains that SO₂ is a precursor for fine sulfate particles and that PM is a stronger causal agent for mortality and morbidity than gaseous SO₂. Pet. Exh. 12. at 12. Even so, Dr. Bradley adds, PM has many different sources and compositions, and recent studies have found that carbonaceous forms of PM_{2.5} such as black carbon that are emitted from diesel engines or combustion of residual oils are “the critical health determinants.” *Id.* at 13. Dr. Bradley asserts that recent epidemiological studies “have not shown a correlation between adverse health effects and ambient SO₂ or its particulate product, sulfate.” *Id.* However, Dr. Bradley points out, the current NAAQS for PM assumes all particles of a certain size have the same toxicity per unit of mass regardless of chemical composition. *Id.* For this reason, Dr. Bradley continues, the National Academy of Sciences and the National Research Council have found that the PM NAAQS “greatly oversimplifies complex biological phenomena.” *Id.*

Dr. Bradley notes that the PM_{2.5} NAAQS were revised in December 2012. Pet. Exh. 12 at 1. The primary annual PM_{2.5} standard was revised to 12 µg/m³, while the 24-hour PM_{2.5} standard remained unchanged at 35 µg/m³. Pet. Exh. 12, Att. 2 at 1; *see also* 78 Fed. Reg. 3086 (Jan. 15, 2013). In a separate review, AECOM, looking to PM_{2.5} measurements in the vicinity of the MPS Group, found “no evidence to suggest that the stations are contributing to elevated PM concentrations, or in the case of the Coffeen and Newton facilities, concentrations in excess of the NAAQS.” Pet. Exh. 12, Att. 2 at 5. AECOM found decreasing PM_{2.5} from 2010 to 2012, a trend it attributed to lower precursor emissions of SO₂ and NO_x. *Id.* Dr. Bradley opined that this trend is expected to continue, with no adverse impact from the requested variance. *Id.* at 14.

In post-hearing comments, Dr. Bradley opines that the 1-hour SO₂ NAAQS of 75 ppb should not be interpreted as a biological threshold above which adverse effects would be expected to occur because USEPA set the standard to be protective of exposures that actually occur at higher levels. Pet. Br. Exh. 6 at 3. Citing 2009-11 Agency air monitoring reports, Dr. Bradley concludes that “current SO₂ air quality in the State of Illinois is protective of even the most sensitive members of the population.” *Id.* at 4.

Dr. Bradley further states that Illinois data shows SO₂-related PM makes up only a minor component of total PM_{2.5} detected by monitors. Dr. Bradley notes that since SO₂ emissions from the MPS Group would not increase over current levels during the variance period, increases in sulfate-derived PM_{2.5} also would not occur. Pet. Br. Exh. 6 at 5, Att. B.

Regarding Mr. Klafka’s modeling analyses, Dr. Bradley states that they relied on the maximum allowable 1-hour emissions rate, which “is not condoned by most recent USEPA guidance.” Pet. Br. Exh. 6 at 1. The analyses also used the single highest maximum peak 1-hour emission rate measured, Dr. Bradley continues, rather than actual hourly emissions data. *Id.* at 1-2. Dr. Bradley asserts that this value was used to evaluate all hours of operation, which is “clearly unrealistic.” *Id.* at 2. Dr. Bradley recites AECOM’s conclusion that “applying appropriate emissions estimates and proper stack height corrections to [Mr. Klafka’s] air model will result in modeled compliance at all three of the plants.” *Id.* at 2, 6; Pet. Br., Att. A.

Nitrogen Oxides and Mercury Emissions

Petitioners point out that the variance petition does not seek a change to the MPS limits for nitrogen oxides (NO_x) or mercury and would not impact such emissions. Pet. at 62; Pet. Exh. 13 at 2. Petitioners state that the MPS Group currently complies and will continue to comply with the applicable MPS emission limitations for NO_x and mercury under IPH's ownership. Pet. at 62-63.

Petitioners state that AER has already spent over \$20 million installing ACI technology for mercury control on twelve units at four plants. To date, operation costs have totaled another \$17 million. Pet. at 63.

Petitioners state that since the variance in PCB 12-126 was granted, AER has taken additional steps to reduce mercury emissions beyond the MPS requirements. AER has selected five EGUs to meet the 0.008 lb/GWh mercury emission limit during 2013, even though the MPS compliance date is not until January 1, 2015. Pet. at 63; Pet. Exh. 13 at 2; *see also* 35 Ill. Adm. Code 225.233(d)(1). The five EGUs and respective compliance dates are Coffeen Units 1 and 2, beginning February 1, 2013; Newton Units 1 and 2, beginning April 1, 2013; and E.D. Edwards Unit 3, beginning July 1, 2013. Additionally, petitioners state that Duck Creek and Joppa Units 1 through 6 have qualified as "low mass emitting" units by demonstrating that potential mercury emissions are considered *de minimis*, *i.e.*, less than 29 lb/yr. Pet. Exh. 13 at 2; *see also* 35 Ill. Adm. Code 225.240(a)(4). Petitioners point out that AER's voluntary action has resulted in mercury reductions one to one and a half years earlier than the MPS requires. Pet. Exh. 13 at 2.

NAAQS Attainment Areas

Petitioners state that as of the date the petition was filed, all counties in which the MPS plants are located were designated attainment for all pollutants. Pet. at 17 & n.11. However, petitioners acknowledge that USEPA was considering including a portion of Peoria County (that would include the E.D. Edwards station) in its designations of one-hour SO₂ nonattainment areas. AER filed a comment with USEPA objecting to that designation. Pet. at 17 & n.11, 67.

Weighing Hardship Against Environmental Impact

Petitioners recite that Section 35(a) of the Act (415 ILCS 5/35(a) (2012)) provides the Board may grant a variance whenever it is found, upon presentation of adequate proof, that compliance with any Board regulation or order would impose an arbitrary or unreasonable hardship. Pet. at 54. This standard requires a petitioner to establish that the hardship the petitioner faces without a variance would "outweigh any injury to the public or the environment from granting a variance." *Id.* at 55, citing Marathon Oil Co. v. IEPA, 242 Ill. App. 3d 200, 610 N.E.2d 789 (5th Dist. 1993). According to petitioners, the Board has previously found an arbitrary or unreasonable hardship where "technically and economically feasible means of compliance have not been identified despite diligent efforts by the petitioner." *Id.*, citing Mobil Oil Co. v. IEPA, PCB 86-45, slip op. at 6 (Aug. 14, 1986). Petitioners also cite other Board decisions granting variance relief based on a Board finding that the variance would cause "minimal or no adverse environmental impact." *Id.* The Board has even granted a variance,

petitioners add, after finding that the adverse environmental impact did not outweigh the “huge cost of compliance.” *Id.*, citing Shell Oil Co. v. IEPA, PCB 83-24 (Mar. 21, 1984).

Further, petitioners maintain that Section 35(a) of the Act, as the courts have interpreted it, does not require that the Board find a “net benefit to the environment” to grant a variance. Pet. at 55. Nevertheless, petitioners add, AER’s compliance plan in PCB 12-126 provides such a net benefit, and IPH simply seeks to implement the same compliance plan “little more than one year later.” *Id.* Accordingly, petitioners continue, the Board should recognize that the requested variance would also provide a net environmental benefit. *Id.* The change in ownership of the plants, petitioners add, should be of no consequence in the Board’s analysis of environmental impact in this case. *Id.* at 55-56.

Compliance Alternatives

Petitioners state that the range of compliance alternatives and AER’s discussion of them in PCB 12-126, which the Board found adequate, apply equally in this case. Pet. at 48, citing Pet. Exh. 8. According to petitioners, “[t]he costs and technological limits prevailing at the time of the Board’s opinion in September 2012 have not changed in any material way.” *Id.* Petitioners add that IPH’s independent projections show that completing the Newton FGD project still remains “the most prudent and cost effective control technology” to achieve compliance with the MPS. *Id.*²

Curtailing Operations

Petitioners state that they considered curtailing generation, such as through “derates” (*i.e.*, reduced power ratings) and seasonal operations, to meet the MPS overall SO₂ annual emission limits, and determined that doing so would not be economically feasible. Pet. at 48-49. Petitioners explain that the fixed costs of operating the facilities would remain the same, but curtailing operations would not generate the same revenue to cover those costs and would defeat IPH’s ability to fund completion of the Newton FGD project. Pet. at 49, citing Pet. Exh. 8 at 6. For all five operating plants to continue to operate and timely meet the 2015 MPS SO₂ emission rate would require the Newton, E.D. Edwards, and Joppa stations to each curtail operations to one-third capacity. *Id.* Doing so, or moving to seasonal operations at these plants, would, according to petitioners, render the plants unable to generate sufficient cash flow and ultimately lead to their shutdown. *Id.*

Nonetheless, IPH expects that E.D. Edwards Unit 1 will be permanently retired during the term of the requested variance. Pet. at 49. Although Ameren filed a request with MISO to retire that unit on December 31, 2012, MISO determined the unit was still needed for reliability purposes until certain transmission system reinforcements go into service. *Id.* Petitioners state that, to continue operation of the unit, MISO filed an “unexecuted System Support Resource

² The petition does not address as a compliance alternative the proposal of Foresight Energy, LLC to fund completion of the Newton FGD project under a long-term contract for Illinois coal, without the need for a variance. That proposal was raised for the first time at hearing, and then again in a post-hearing comment (PC#2000), and is summarized, along with petitioners’ responses to the proposal in their post-hearing briefs, below.

(SSR) Agreement” with FERC on July 11, 2013. *Id.* Petitioners explain that the July SSR Agreement covers the 2013 calendar year, but can be renewed for up to 12 months at a time, subject to an annual review of mitigation alternatives. *Id.* At the time of the July 11, 2013 filing, MISO expected that E.D. Edwards Unit 1 would continue to operate as an SSR unit until December 2016, when the required reinforcements to the transmission system will be implemented. *Id.* Although petitioners acknowledge that new alternatives are considered as part of the SSR annual review process, they expect MISO will renew the SSR Agreement annually, but in any event E.D. Edwards Unit 1 will be retired before the end of the requested variance term. Pet. at 49-50; Pet. Exh. 8 at 14-15.

Low Sulfur Coal

Petitioners state that IPH would continue AER’s commitment in PCB 12-126 to limit the use of higher sulfur coal to the Duck Creek and Coffeen stations since both stations are already equipped with “wet FGD systems.” Pet. at 22-23, citing Pet. Exh. 8 at 7. At the other three operating stations, E.D. Edwards, Newton, and Joppa, IPH would also continue to use low sulfur PRB coal, with a sulfur content of 0.55 lb/mmBtu. *Id.* at 23. Petitioners explain that IPH will inherit the binding contracts AER already has in place for 2013-2017 to purchase this low sulfur coal. *Id.* The contracts cover the majority of the expected coal supply needs for 2013 and 2014, approximately one half in 2015 and 2016, and approximately one fourth in 2017. Petitioners explain that the contracts cannot be breached without incurring material penalties. *Id.*

Further, IPH anticipates it may need coal with an even lower sulfur content than 0.55 lb/mmBtu to ensure compliance with the variance SO₂ mitigation emission limit. Petitioners state that IPH is aware, based on DMG’s coal-purchasing experience, that PRB coal with a sulfur content of just 0.50 lb/mmBtu is available from one supplier. Pet. at 23, citing Pet. Exh. 8 at 7. Petitioners state that the amount of such coal IPH will need will depend on actual SO₂ emissions performance in future years. *Id.* Petitioners state that while IPH cannot commit to solely purchasing the 0.50 lb/mmBtu coal for its remaining needs, it will honor AER’s prior commitment under PCB 12-126 relating to the use of low sulfur coal. *Id.*

Conversion to Natural Gas

Petitioners recite AER’s conclusion in PCB 12-126 that “under current market conditions, a natural gas conversion at Joppa would reduce operations to a season basis only and lead to reduced revenue and a loss of jobs.” Pet. at 51. Petitioners add that based on IPH’s own review of conversion to natural gas, the estimated cost of interconnection to natural gas pipelines is \$100 million for the E.D. Edwards station, and \$70 million for the Newton plant. In addition, petitioners continue, these costs do not include the cost of converting the existing coal-fired boilers to natural gas firing. Pet. at 51-52. Based on industry literature and case studies, petitioners estimate the cost of such conversion could exceed “tens of millions of dollars.” Pet. at 51-52, citing Pet. Exh. 8 at 9-10.

For the Joppa station, IPH estimates a 50 percent capacity conversion to natural gas would cost about \$25 million, while a 100 percent capacity conversion would cost approximately \$38 million. Pet. at 53. In addition, IPH estimates another \$4.5 million would be needed beyond

that for gas supply pipeline and equipment improvements. *Id.* at 52-53. Petitioners state that while “Joppa (Units 1 and 4) have the physical capability to co-fire natural gas up to approximately 45 percent of heat input at full load,” co-firing natural gas at those units would not be cost effective even at levels less than 45 percent. *Id.* at 53-54. IPH reiterates AER’s concern in PCB 12-126 that conversion of the Joppa station to natural gas would reduce operations to a seasonal basis only, leading to reduced revenues. *Id.* at 53, citing Pet. Exh. 8 at 11-12.

Beyond the capital costs, IPH also examined production levels and revenues associated with natural gas firing. Pet. at 54. IPH explains that “[t]he key factor for sustained use of natural gas co-firing is the price differential between natural gas and coal,” as “dispatch on natural gas is more expensive than on coal.” *Id.* at 52, 54. IPH cites current market conditions in Illinois showing production costs related to PRB coal at \$20 to \$25/MWh and natural gas at \$40/MWh. *Id.* at 54. Using the Newton facility as an example, IPH explains that at these costs during on-peak days, “Newton fired on natural gas during 2012 would have been dispatched only two percent of the time.” *Id.* at 53; Pet. Exh. 8 at 10.

Petitioners reiterate that IPH will not have sufficient liquidity to fund any such large-scale capital projects over the next several years. Pet. at 53, citing Pet. Exh. 2. In addition, petitioners assert, converting the Newton units to natural gas instead of pursuing completion of the Newton FGD project “would waste the several hundred million spent, to date, on the Newton FGD project,” and would also lead to lower production and, therefore, reduced revenues to cover capital expenditures and fixed operating costs. *Id.* at 52-53, Pet. Exh. 8 at 10.

Control Equipment

Petitioners state that IPH independently reviewed AER’s assessment in PCB 12-126 of alternative technologies for emissions control equipment, and concluded that the associated costs and technological limits have not changed in any way since the PCB 12-126 proceeding. Petitioners add that IPH agrees with AER’s prior conclusion that “these technologies are infeasible because they would cost more than the Newton FGD project.” Pet. at 50, citing Pet. Exh. 8 at 8. This is particularly true, according to petitioners, since construction of the Newton FGD project is already underway. Pet. at 51.

Petitioners further state that they revisited various participants’ suggestion in PCB 12-126 that dry sorbent injection (DSI) would be an appropriate and economically feasible technology to reduce SO₂ emissions from the Joppa and E.D. Edwards generating stations. Pet. at 50. Although, according to petitioners, IPH did not perform a site-specific engineering analysis of DSI at each facility, IPH did analyze DSI at other coal-fired plants and relied on Dynegy’s experience to arrive at order of magnitude cost estimates. *Id.*; Pet. Exh. 2. IPH estimated the capital cost of installing DSI for the Joppa station (all six units) at \$60 million and at \$30 million for the E.D. Edwards station (Units 2 and 3). *Id.* In addition to these capital costs, petitioners explain, costs for PM control technologies, such as baghouses, must also be considered because DSI would increase PM emissions. *Id.* Based on an engineering report from URS presented in PCB 12-126, petitioners estimate the “real expected capital cost” of DSI along with the associated particulate matter controls would be approximately \$433 million at the Joppa facility and \$280 million at the E.D. Edwards station, on top of the annual cost of DSI, which ranges

from \$15 million to \$44 million. *Id.* at 50-51. And, petitioners note, there would be additional costs for disposal of the reacted DSI material, which “would not be insignificant.” Petitioners reiterate that IPH will not have sufficient liquidity to fund such a large-scale capital project over the next several years. *Id.* at 51; Pet. Exh. 8 at 8-9.

Compliance with Federal Law

Petitioners contend that granting the requested variance would be consistent with federal law, and specifically, the Clean Air Act, 42 U.S.C. § 7401 *et seq.*, and would be within Illinois’ current obligations under the Illinois SIP to attain and maintain compliance with the NAAQS. Pet. at 64; Pet. Exh. 8 at 16. Petitioners state that IPH understands the requested variance relief would not exempt the MPS Group from compliance with federal requirements and that additional controls might be needed for the MPS Group if new requirements are adopted pursuant to the Clean Air Act in the future. Pet. at 67; Pet. Exh. 8 at 16.

Best Available Retrofit Technology (BART)

Petitioners assert that the requested variance is consistent with federal regional haze requirements, including Best Available Retrofit Technology (BART). Pet. at 64. Petitioners explain that USEPA mandated regional haze plans to include emission limitations representing BART for each BART-eligible source. *Id.*; *see also* 40 CFR § 51.308(e). On July 6, 2012, USEPA approved revisions to the Illinois State Implementation Plan (SIP) to address regional haze that included relevant sections of the MPS and the Illinois Combined Pollutant Standards (CPS) along with two permits. Pet. at 64; *see also* 77 Fed. Reg. 39943 (July 6, 2012). In so doing, USEPA noted that the Illinois SIP would achieve greater emission reductions and visibility protection than BART. Pet. at 64. Petitioners state that relative to the MPS, the requested variance will provide even greater emission reductions by the BART compliance deadline in 2017. Accordingly, petitioners continue, “a SIP amendment incorporating this variance would only serve to enhance Illinois’ ability to comply with the Clean Air Act’s regional haze rules.” *Id.*

CSAPR

Petitioners maintain that CSAPR, if it ever goes into effect, will not be as “onerous as the MPS” because CSAPR is based on mass emissions, whereas the MPS imposes stringent emission rates. Pet. at 65. According to petitioners, MPS also does not allow compliance through a cap-and-trade program like CSAPR, which would allow for the purchase of emission allowances. Petitioners assert that the costs anticipated for buying allowances under CSAPR are expected to be less than the costs associated with installing pollution control technology to comply with the MPS. *Id.*

MATS

In response to the federal appeals court’s vacatur of CAMR in February 2008, USEPA adopted MATS, covering coal- and oil-fired power plants. Pet. at 65; *see also* 77 Fed. Reg. 9304 (Feb. 16, 2012). For coal-fired EGUs, MATS set emission limits for mercury, PM, hydrogen

chloride, and trace metals and established alternative numeric emissions limits. Pet. at 65. MATS requires compliance by April 16, 2015, with an additional one or two years to achieve compliance in certain circumstances. Petitioners assert that IPH will comply with MATS at each of the five operating MPS plants by using a combination of the existing FGD systems, sorbent injection technologies, and ESPs. *Id.*; Pet. Exh. 8 at 16.

NAAQS

Petitioners assert that the requested variance is consistent with the NAAQS and the Illinois SIP, including the two recent federal rules pertaining to the NAAQS for PM_{2.5} and one-hour SO₂. Pet. at 65.

As to PM_{2.5}, petitioners explain that USEPA adopted a revised primary annual PM_{2.5} NAAQS in December 2012, effective March 18, 2013. Pet. at 66; *see also* 78 Fed. Reg. 3086 (Jan. 15, 2013). USEPA anticipates making the initial PM_{2.5} nonattainment area designations by December 12, 2014. In accordance with Section 188(c) of the Clean Air Act, attainment would not be required until six years after the designation, which would be December 2020. Pet. at 66.

Petitioners note that none of the MPS plants is located in an area that USEPA has preliminarily identified as exceeding the revised primary annual PM_{2.5} NAAQS, and that the MPS does not establish emission limits for PM. Moreover, petitioners point out that the requested variance period would end December 31, 2019, almost one year before the anticipated PM_{2.5} NAAQS attainment deadline.

As to the SO₂ NAAQS, petitioners note that USEPA adopted a new primary one-hour SO₂ NAAQS in 2010. Pet. at 66; *see also* 75 Fed. Reg. 35520 (June 22, 2010). Petitioners further note that USEPA had intended to finalize its initial one-hour SO₂ NAAQS nonattainment area designations in June 2013, but had not done so as of the date their petition was filed. Once the nonattainment area designations are finalized, Section 192 of the Clean Air Act provides five years from the date of designation to achieve attainment. Pet. at 66.

After the variance in PCB 12-126 was granted, USEPA issued a recommendation that one of the nonattainment areas for the one-hour SO₂ NAAQS should be Hollis Township in Peoria County, Illinois. Petitioners note that this is where the E.D. Edwards station is located. Pet. at 67. Petitioners conclude that IPH recognizes that the requested variance relief would not exempt the E.D. Edwards plant from compliance with any future Clean Air Act requirements, including any Illinois regulations necessary to implement SIP obligations concerning the 1-hour SO₂ NAAQS. *Id.*

Suggested Variance Conditions

Petitioners originally requested the same relief with the same conditions as the Board granted in PCB 12-126, with modifications to reflect the effectiveness of the variance upon closing of the property transaction, the applicability of the variance to the new owners of the MPS Group, and more current operable dates. Pet. at 68. In response to questions from the Board, petitioners state that they have agreed to three additional conditions proposed by the

Agency in its recommendation. Pet. Second Resp. at 4-5. In addition, petitioners proposed two further conditions in response to Board questions regarding a potential emissions cap and annual reporting. *Id.* at 2-3. Accordingly, petitioners propose the following language:

The Board grants Petitioners, ILLINOIS POWER HOLDINGS, LLC and AMERENENERGY MEDINA VALLEY COGEN, LLC, combined dual variances for the electrical generating units in the Ameren multi-pollutant standard (MPS) Group from the applicable requirements of 35 Ill. Adm. Code 225.233(e)(3)(C)(iii) for a period beginning January 1, 2015 through December 31, 2019 and 35 Ill. Adm. Code 225.233(e)(3)(C)(iv) for a period beginning January 1, 2017 through December 31, 2019, subject to the following conditions:

1. Illinois Power Holdings, LLC (IPH) must assure compliance with paragraph 2 and must comply with an overall SO₂ annual emission rate of 0.35 lb/mmBtu through December 31, 2019, and beginning January 1, 2020, must comply with an overall SO₂ annual emission rate of 0.23 lb/mmBtu.
2. AmerenEnergy Medina Valley Cogen, LLC shall not operate the electrical generating units at the Meredosia and Hutsonville Power Stations until after December 31, 2020. The FutureGen project at the Meredosia Energy Center is exempt from this restriction.
3. Through December 31, 2019, IPH shall continue to burn low sulfur coal at the E.D. Edwards, Joppa and Newton Energy Centers. The combined annual average stack emissions of these three stations shall not exceed 0.55 lb sulfur/mmBtu on a calendar year annual average basis.
4. Through December 31, 2019, IPH shall operate the existing Flue Gas Desulfurization systems at the Duck Creek and Coffeen Energy Centers to achieve a combined SO₂ removal rate of at least 98 percent on a calendar year annual average basis.
5. IPH shall permanently retire E.D. Edwards Unit 1 as soon as allowed by the Midcontinent Independent System Operator, Inc.
6. IPH shall limit the MPS Group system-wide mass emissions of SO₂ to no more than 327,996 tons, through December 31, 2020.
7. For each year through 2020, IPH shall report to the Agency the mass SO₂ with its Annual Emissions Reports. For the purposes of this condition, the mass SO₂ emissions would be the combined tons of SO₂ emitted by the five operating power stations in the MPS Group: Coffeen, Duck Creek, E.D. Edwards, Joppa, and Newton Energy Centers.

8. Regarding the Flue Gas Desulfurization project at the Newton Power Station (I.D. No. 079808AAA) (Newton FGD project):
- a. On or before July 1, 2015, IPH must complete engineering work on the Newton FGD project.
 - b. On or before December 31, 2017, IPH must obtain a new or extended construction permit, if needed, for the installation of the FGD equipment at the Newton Power Station.
 - c. On or before December 31, 2018, IPH must complete construction of the absorber building on the Newton FGD project.
 - d. On or before July 1, 2019, IPH must complete steel fabrication of ductwork and insulation activities on the Newton FGD project.
 - e. On or before July 1, 2019, IPH must complete installation of electrical systems and piping on the Newton FGD project.
 - f. On or before September 1, 2019, IPH must set major equipment components into final position on the Newton FGD project.
 - g. Beginning with calendar year 2013 and continuing through 2019, annual progress reports must be filed with the Agency as to the status of construction activities relating to the Newton FGD project by the end of each calendar year. These annual progress reports must include an itemization of activities completed during the year, activities planned to be completed in the forthcoming year, progress of the Newton FGD project to comply with the timelines specified in this variance, and the estimated in-service date.
9. Annual progress reports must be submitted to:

Illinois Environmental Protection Agency
Attn: Ray Pilapil, Manager
Bureau of Air-Compliance Section
1021 N. Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276

and

Illinois Environmental Protection Agency
Attn: Gina Roccaforte, Assistant Counsel
Division of Legal Counsel-Air Regulatory Unit
1021 N. Grand Ave. East

P.O. Box 19276
Springfield, IL 62794-9276

Pet. Br. at 52-53.

Also in response to a Board question about the legal implications for the proposed variance if the IPH-Ameren transaction were to not close, petitioners submitted a proposed certificate of acceptance requiring petitioners, in accepting the variance, to identify the date on which the transaction closed. Pet. Second Resp. at 5-6, Att. D. Petitioners explain that if “hypothetically” the transaction does not close, petitioners would not execute the certificate of acceptance and AER would continue to own the MPS Group and be subject to the variance granted in PCB 12-126. *Id.* at 6.

AGENCY RESPONSE

The Agency filed a document entitled “Recommendation” stating that the Agency “neither supports nor objects to the [Board’s] granting the Petition subject to the terms and conditions contained herein.” Agency Rec. at 1-2. The Agency adds that it has received one written comment, which is attached to its response. *Id.* at 3; Agency Rec. Exh. 1.

Agency Investigation of Facts in the Petition

The Agency summarizes the variance petition and requested relief in this case, as well as the Board’s decisions granting a variance in PCB 12-126 and denying IPH and AER’s motion to reopen the docket and substitute parties. Agency Rec. at 2-29. The Agency states that it “has investigated the facts alleged in Petitioner’s Petition for Variance.” *Id.* at 14. The Agency does not affirmatively state whether petitioners’ presented facts are accurate but neither does it point to any errors by petitioners.

Environmental Impact

The Agency confirms that petitioners have attached to their petition information as to nearby air emission monitoring stations. Agency Rec. at 14. The Agency notes that if the variance is granted, the Agency agrees with petitioners that the MPS Group includes the five operating plants that IPH would acquire as well as the shuttered Meredosia and Hutsonville stations. *Id.* at 4. The Agency further agrees that the seven counties where the MPS Group facilities are located (Montgomery, Fulton, Peoria, Massac, Crawford, Morgan, and Jasper) were designated attainment for all pollutants as of the time of the Agency’s filing. *Id.* at 4. However, effective October 4, 2013, the Agency notes that one of the areas USEPA designated as nonattainment for the 1-hour SO₂ NAAQS is Hollis Township in Peoria County, which includes the E.D. Edwards plant. Agency Rec. at 4, citing 78 Fed. Reg. 47199 (August 5, 2013).³

³ The areas designated as nonattainment for the 2010 primary SO₂ NAAQS are the Lemont, IL Illinois designated area, which includes Cook County (partial – Lemont Township) and Will County (partial – DuPage Township and Lockport Township), and the Pekin, IL designated area, which includes Tazewell County (partial – Cincinnati Township and Pekin Township) and Peoria

The Agency also states that, as noted above, after the variance petition was filed, the Agency entered into the MOA with IPH, DMG, and Dynegy Kendall that, according to the Agency, commits these three generators to additional steps and actions beyond those proposed in the petition that will further improve air quality in Illinois. Agency Rec. at 11. In particular, the MOA commits (1) IPH to permanently retire E.D. Edwards Unit 1 as soon as MISO allows, which could be as early as 2017; (2) DMG, the owner and operator of the Stallings and Oglesby gas-fired combustion turbine facilities, to withdraw the air operating permits for these two facilities no later than December 31, 2014; and (3) Dynegy Kendall, the owner and operator of the Kendall Power Station, to implement an Advanced Gas Path project on its four combustion turbines as early as 2015. *Id.* at 18.

The Agency states that the MOA commitments, along with the variance SO₂ mitigation emission rate of 0.35 lb/mmBtu, and the continued cessation of operations at the Hutsonville and Meredosia stations through 2020 (except for FutureGen), will produce a number of net environmental benefits. Among these are decreases in the intake of cooling water and service water from the Illinois River, the elimination of National Pollutant Discharge Elimination System permitted discharges (including thermal discharges), and emission reductions for multiple air pollutants including SO₂, NO_x, carbon monoxide, carbon dioxide, and PM as a result of the permanent retirement of units and the implementation of the Advanced Gas Path project. Agency Rec. at 18.

The Agency notes that although the variance delays the effective dates of the 2015 and 2017 MPS SO₂ annual emission rates, petitioners' offer to meet an earlier more stringent SO₂ mitigation rate will result in total SO₂ mass emissions lower than the projected emissions under the current MPS overall SO₂ annual emission rates. Agency Rec. at 14. According to the Agency, the petition demonstrates that fewer tons of SO₂ would be emitted under the variance than under the MPS. *Id.* at 15. Taking into account the earlier more stringent SO₂ variance rate, actual MPS plant SO₂ emissions in 2012 that were lower than projected in PCB 12-126, and the shuttering of the Hutsonville and Meredosia plants, the Agency recites petitioners' claim that these are additional benefits to human health and the environment not required under the MPS. *Id.* The Agency also notes petitioners' assertion that just for 2013-2020, when IPH would hold the variance, the MPS Group would achieve a net environmental benefit of 7,778 fewer total tons of SO₂ emissions than if the MPS instead applied. *Id.* at 16. Further, the Agency states that this figure does not reflect other SO₂ emissions reductions during the variance term such as the retirement of E.D. Edwards Unit 1, the use of coal with sulfur less than 0.55 lb/mmBtu, or the extended outages at the Newton station for the FGD installation. *Id.*

The Agency adds that it

has evaluated the SO₂ emissions calculations and related information submitted by Petitioners and agrees that Petitioners' compliance plan as set forth in the Petition shows a net environmental benefit consistent with previous net environmental benefit determinations. Furthermore, this proposed variance does

County (partial—Hollis Township). Agency Rec. at 4, citing 78 Fed. Reg. 47199 (Aug. 5, 2013).

not allow any increase in SO₂ emissions above what is currently allowed pursuant to the PCB 12-126 variance. Therefore, there can be no environmental harm if this variance is granted since there will be no increase in the allowable emissions. However, the Illinois EPA believes that the imposition of certain conditions consistent with some of the terms in the compliance plan is also warranted. . . . Accordingly, there would be no injury to the public if the variance were granted with [the additional] conditions as proposed [by the Agency]. Agency Rec. at 17.

In addition, the Agency notes that there are no pending state enforcement actions against petitioners. Agency Rec. at 11.

Compliance Costs

The Agency states that AER has already spent over \$1 billion in capital expenditures to comply with the MPS. These capital expenditures include over \$813 million for installation of SO₂ scrubbers on three units, over \$177 million on installation of SCR systems to reduce NO_x emissions at three plants, and over \$20 million on installation of ACI on 12 units. Agency Rec. at 9. The Agency states that AER has spent over \$7 million per year in operating costs for the SCRs and \$17 million per year for operation of the ACI systems, and that IPH has estimated several more million dollars will be expended through 2019 to continue to comply with the MPS NO_x and mercury emission limits. *Id.* at 9-10

Further, the Agency states that to date AER has already spent about half of the total \$500 million in construction costs for the two Newton FGD units. Agency Rec. at 10. The Agency adds that IPH has budgeted \$18 million in annual expenditures through 2017 for the Newton FGD project, with the remainder scheduled for 2018 and 2019. *Id.*

Arbitrary or Unreasonable Hardship

The Agency recounts petitioners' contention that the same hardship factors that the Board recognized in PCB 12-126 remain relevant to this case. Agency Rec. at 19. The Agency summarizes petitioners' arguments that the hardship is attributable to current regulatory uncertainty at the federal level; the inability of Illinois generators to recover costs of large capital projects from a captive customer base; Illinois air pollution regulations that are more stringent than neighboring states' regulations; an uneven playing field with generators in neighboring states that have captive customer bases and that have not been required to invest significant capital in environmental controls; and depressed power market prices. Agency Rec. at 19-21.

The Agency recites petitioners' claim that if the variance is not granted, plant closures are inevitable and may include shutting down the E.D. Edwards and Joppa Energy Centers. Agency Rec. at 20-21. The Agency adds that, according to petitioners, even if the necessary financial resources were available, without the variance, the Newton FGDs cannot be completed in time to avoid shutting down the E.D. Edwards and Joppa Energy Centers. *Id.* at 21. The Agency recites petitioners' estimate that installation of the Newton FGDs will take up to 24 months. *Id.* at 23.

The Agency notes that it is required under the Board's procedural rules to estimate the cost that compliance would impose on petitioners and on others. Agency Rec. at 19, citing 35 Ill. Adm. Code 104.216(b)(5). The Agency summarizes petitioners' claim that if the E.D. Edwards and Joppa Energy Centers plants were to be shut down, it would adversely affect 274 direct jobs, 1,374 indirect jobs, over \$121 million per year to local economies, and more than \$338 million per year to the State's economy. Agency Rec. at 22. The Agency concludes that it "is not able to estimate the costs that compliance would impose on the Petitioners" because petitioners did not include itemized calculations or supporting data with the cost factors they provided. *Id.* at 24.

Consistency with Federal Law

The Agency summarizes petitioners' assertion that the requested variance is consistent with federal law and petitioners' supporting arguments relating to compliance with BART, CSAPR, and MATS. Agency Rec. at 25-26. The Agency notes that given USEPA's recent designation of Hollis Township, Peoria County, as nonattainment for the 2010 primary 1-hour SO₂ NAAQS, petitioners recognize that the requested variance relief would not exempt the E.D. Edwards station from compliance with any federal or Illinois requirements needed to implement SIP obligations for that NAAQS. *Id.* The Agency adds that "Illinois is required to develop plans to attain and maintain the NAAQS," and "[m]ore importantly, must address its impact on downwind states pursuant to Section 110(a)(2)(D) of the [Clean Air Act]." *Id.* at 26. The Agency previously submitted the PCB 12-126 variance to USEPA for approval as a SIP revision. *Id.* at 26-27, citing 77 Fed. Reg. 39943 (July 6, 2012). If petitioners receive a variance in this case, the Agency will submit it, too, to USEPA for approval as a SIP revision. *Id.* at 26-27.

Compliance Plan

The Agency recounts petitioners' compliance plan as initially proposed in the petition as providing: (1) compliance with an overall SO₂ annual emission rate of 0.35 lb/mmBtu through 2019; (2) continued cessation of operations at Meredosia and Hutsonville, with the exception of the FutureGen 2.0 project at the Meredosia plant; (3) maximized performance of the FGDs at the Duck Creek and Coffeen stations; (4) use of low sulfur PRB coal at E.D. Edwards, Joppa, and Newton Energy Centers; (4) management of generation as necessary to maintain compliance; and (5) continued construction for the Newton FGD project on the schedule set forth in the variance granted in PCB 12-126. Agency Rec. at 13-14. The Agency notes that petitioners' plan would position the MPS plants to comply with the MPS final overall SO₂ annual emission rate of 0.23 lb/mmBtu beginning in 2020. *Id.* at 14.

Regarding the MOA, the Agency requests that IPH's commitment to permanently retire E.D. Edwards Unit 1 as soon as MISO allows be included as a condition to the variance. Agency Rec. at 29.

Suggested Variance Conditions

The Agency notes its position that it neither supports nor objects to the Board's granting the requested variance is "subject to the terms and conditions contained herein." Agency Rec. at

1. The Agency believes that the net environmental benefit under AER's variance would continue if the Board grants the proposed variance in this case with the conditions the Agency has proposed and to which petitioners have agreed. *Id.* at 17. The Agency summarizes these conditions as follows:

- 1) Petitioner IPH must operate the existing FGD systems at Duck Creek and Coffeen Energy Centers at an SO₂ removal rate of at least 98 percent;
- 2) Petitioner IPH must continue to burn low sulfur coal (no more than 0.55 lb sulfur/mmBtu) from the PRB at the E.D. Edwards, Joppa and Newton Energy Centers; and
- 3) Petitioner IPH must permanently retire E.D. Edwards Unit 1 as soon as MISO allows that unit to be taken out of service (as early as 2017). Agency Rec. at 30.

Conclusion

The Agency concludes that granting the variance would produce a net environmental benefit through 2020, provided that petitioners meet an overall SO₂ annual emission rate of 0.35 lb/mmBtu through December 31, 2019 and continue to keep the Meredosia and Hutsonville Energy Centers closed. Agency Rec. at 29. The Agency states that it "does not believe that any environmental harm would result therefrom." *Id.*

The Agency adds that it

recognizes that the economic viability of the Energy Centers is essential to the citizens of the local communities, school districts, and units of local government and acknowledges the adverse impact that plant closures would have upon the local communities, the local economies, and the State's economy." Agency Rec. at 30.

CITIZENS GROUPS' OBJECTION AND COMMENT

On August 15, 2013, the Board received an objection to the petition (Obj.) filed by the Citizens Groups. The Citizens Groups also filed a post-hearing comment on September 24, 2013 (PC#2337). Both filings are summarized below.

The Citizens Groups' objection and post-hearing comments make four principal arguments. The Citizens Groups contend that: (1) IPH and Medina Valley cannot receive relief from MPS requirements because they are not subject to those requirements; (2) granting the requested variance would amount to an improper advisory opinion; (3) any hardship on IPH is self-imposed and not a basis for a variance; and (4) petitioners fail to acknowledge the harm to the environment and public health that granting the requested variance would cause. Obj. at 1-9; PC#2337 at 2-23.

Petitioners' Eligibility for Variance Relief

The Citizens Groups argue, first, that IPH and Medina Valley are ineligible to receive variances because they do not own plants subject to the MPS. The Citizens Groups contend that Ensign-Bickford, PCB 02-159 (Apr. 3, 2003) clearly articulates that “an entity cannot be granted a variance before it legally owns the facilities subject to regulation.” Obj. at 2. Specifically, the Citizens Groups emphasize the Board’s discussion of Section 104.202(a), which provides that “[a]ny person seeking a variance from any rule or regulation, requirement or order of the Board *that would otherwise be applicable to that person* may file a variance petition.” 35 Ill. Adm. Code 104.202(a) (emphasis added). According to the Citizens Groups, this means “there must be a ‘rule or regulation, requirement or order of the Board’ that would be ‘applicable’ to the petitioner if variance relief is not granted.” *Id.* at 3; PC#2337 at 20-21. In addition, the Citizens Groups point out that under Section 104.230 of the Board’s procedural rules (35 Ill. Adm. Code 104.230(d)), a variance petition must be dismissed if the Board determines that “the petitioner is not subject to the rule or regulation, requirement, or order of the Board at issue.” Obj. at 4.

The Citizens Groups also maintain that, contrary to petitioners’ claim, Ensign-Bickford was a final rather than interim order even though the parties later moved to reopen the docket. Obj. at 3 n.1. The Citizens Groups add that, also contrary to petitioners’ position, the language in Ensign-Bickford regarding the appropriate timing of a variance petition was not dicta but decided a “pertinent question” presented by the case, based on Section 104.202 of the Board’s procedural rules. *Id.*

The Citizens Groups further argue that the single case petitioners cite to show that the Board may grant a variance to a non-owner of the facilities at issue does not actually reflect that the variance was granted before the new owner acquired the facilities. Obj. at 4 n.2, citing Allied Chemical, PCB 80-92 (June 12, 1980).

Further, the Citizens Groups claim that granting the petition would result in an advisory opinion because petitioners present a purely hypothetical issue. Obj. at 4. Essentially, according to the Citizens Groups, the petition asks the Board whether IPH and Medina Valley would be entitled to a variance “if a number of other conditions precedent are satisfied and the proposed transaction between IPH, Medina Valley, and AER actually occur[s].” *Id.* at 4. The Citizens Groups contend that in addition to obtaining the variance they seek, petitioners must secure approval by FERC for the transfer of the plants to occur. *Id.* at 4 n.3, Exh. A (application seeking FERC approval of transfer); PC#2337 at 20 n.13. According to the Citizens Groups, as of the filing of the post-hearing comments, FERC had still not approved the transaction, but instead had requested additional information from petitioners. Obj. at 4 n.3; PC#2337 at 20 n.13. The Citizens Groups state that under petitioners’ interpretation of the Act and Board regulations, any entity could “seek a binding [Board] order on potential variance relief that may or may not ultimately be necessary, based on the petitioner’s representation of what conditions are likely to be present at the time of the transaction.” Obj. at 5. That, petitioners continue, is “bad policy,” would set a “terrible precedent, and is inconsistent with the Board’s regulations and precedent.” *Id.*; PC#2337 at 20-21.

In their post-hearing comments, the Citizens Groups observe that that the Agency has “not endorsed” petitioners’ approach in seeking a variance that would apply to facilities they have not yet purchased. PC#2337 at 21, citing Agency Rec. at 6 n.2. The Citizens Groups point to the Agency’s remark that the Board’s ruling on this issue should be limited to “the unique facts of the situation presented,” noting this is a cautionary note that the Board should not “regard such advisory variances as generally acceptable.” *Id.*

The Citizens Groups further argue that even if the IPH-Ameren transaction closes, Medina Valley still would not be subject to the MPS because it would acquire only the shuttered Meredosia and Hutsonville stations, which are not subject to the MPS. This is because, according to the Citizens Groups, to meet the definition of an “EGU” to which the MPS applies, a plant must actually produce electricity for sale. Obj. at 5, citing 35 Ill. Adm. Code 225.130; PC#2337 at 18-19, citing Proposed New 35 Ill. Adm. Code 225, Control of Emissions from Large Combustion Sources, R06-25, Tr. at 350-51 (Aug. 15, 2006) (testimony of Agency witness). Thus, the Citizens Groups reason, Meredosia and Hutsonville “are no longer EGUs subject to regulation under the MPS” since they have not produced electricity for sale in the wholesale marketplace since 2011. Obj. at 5; PC#2337 at 18-19.

Self-Imposed Hardship

Regarding hardship, the Citizens Groups argue that any claimed hardship is entirely self-imposed, purely the result of IPH’s voluntary business decision. Obj. at 7-9; PC#2337 at 2-8. Prior Board decisions establish that such hardships are not a basis for variance relief. Obj. at 8-9, citing Ekco Glaco, PCB 87-41, slip op. at 6. According to the Citizens Groups, any hardship to IPH is attributable to “a lack of capital to simultaneously service” the \$825 million debt acquired from GENCO, “operate the MPS plants, and make the capital investments necessary to comply with Illinois law.” Obj. at 8. The Citizens Groups add that any such hardship would not exist if IPH were “properly capitalized in the first place.” Obj. at 7. The Citizens Groups emphasize that IPH is poised to acquire the operating MPS plants with a clear understanding of the ensuing financial obligations. *Id.* Nor, according to the Citizens Groups, are petitioners entitled to a variance “just because the preceding owner of the facility had been granted that same relief.” *Id.* at 8. Rather, the Citizens Groups insist, regulators should reasonably assume that regulated entities like IPH “will not voluntarily enter into business transactions under terms that would hobble them from complying” with Illinois law.” *Id.*

Citing Mr. Johnson’s written statement (PC#3162a), the Citizens Groups claim that the projected financial hardship is “the direct result of an intentional business strategy being pursued by IPH and its corporate parent, Dynegy.” PC#2337 at 4-5. This is the “*exact* situation” that the “self-imposed hardship” cases are designed to prevent, according to the Citizens Groups. *Id.* at 6 (emphasis in original). Granting the petition would set an “extremely dangerous precedent,” the Citizens Groups continue, allowing a company trying to acquire “distressed assets” to do so through an insufficiently capitalized “shell entity,” while seeking advance approval of a variance to “remove the burden of environmental compliance.” *Id.* According to the Citizens Groups, the “baseline rule should be that environmental requirements be factored into transaction prices,” adding that variances are for companies attempting to comply with environmental requirements but which, through no fault of their own, have “run short of time or money.” PC#2337 at 22.

The Citizens Groups characterize petitioners' attempt to distinguish cases finding claimed hardships self-imposed as "both misleading and inaccurate at multiple levels." PC#2337 at 6. Even the cases petitioners cite to support that attempt, according to the Citizens Groups, make clear that a hardship resulting from an "affirmative business decision cannot form the basis for a variance." *Id.*, citing Ekco Glaco, PCB 87-41; Marathon Oil Co. v. IEPA, PCB 95-150 (May 16, 1996). And petitioners' asserted factual distinctions, which itself are a "stretch," according to the Citizens Groups, do not undermine the fundamental principles for which this case law stands. *Id.*

Moreover, the Citizens Groups argue, petitioners fail to address Willowbrook Motel Partnership v. PCB, 135 Ill. App. 3d 343, 481 N.E.2d 1032 (1st Dist. 1985), even though it is "on point factually and legally." *Id.* The Citizens Groups add that there, as here, a prospective purchaser formed an entity to acquire property, on the condition that the entity (a partnership) receive a variance. *Id.* In other words, the Citizens Groups continue, the purchaser was willing to proceed "on the economic terms proposed" only if a variance was granted. *Id.* The Board found that the partnership failed to show an "arbitrary or unreasonable hardship" and denied the variance petition. *Id.* at 7, citing Willowbrook Motel Partnership v. IEPA, PCB 81-149 (July 14, 1983), *aff'd*, 135 Ill. App. 3d 343, 481 N.E.2d 1032 (1st Dist. 1985). The Citizens Groups recite that the appellate court affirmed the variance denial, holding the alleged hardship was self-imposed because the prospective purchaser knew about the environmental restrictions from which relief was sought, and "its development plans constituted a gamble to obtain permits" in spite of the restrictions. *Id.*, citing Willowbrook Motel, 135 Ill. App. 3d at 345, 481 N.E.2d at 1034.

The Citizens Groups point out that the appellate court in Willowbrook Motel cited IEPA v. Lindgren Foundry Co., PCB 70-1 (Sept. 25, 1970), where, according to the Citizens Groups, purchasers of a foundry argued they faced a hardship without a variance because they could not profitably operate the foundry without a variance from certain emission standards. PC#2337 at 7, citing Willowbrook Motel, 135 Ill. App. 3d at 348, 481 N.E.2d at 1036. The Citizens Groups add that the Willowbrook Motel court stated that

[t]he Board [in Lindgren Foundry] stated that the new owners had reason to know when they invested that they could not operate the foundry without a favorable decision on their petition for a variance, and so their loss of investment was a self-imposed hardship. The Board considered the losses to creditors and former employees more sympathetically, but concluded that it was fair that the hardship be borne by those who would benefit from the operation. PC#2337 at 7, citing Willowbrook Motel, 135 Ill. App. 3d at 348, 481 N.E.2d at 1036.

According to the Citizens Groups, Lindgren Foundry and Willowbrook Motel make clear that companies cannot "structure an acquisition so as to require a variance," because that amounts to creating a self-imposed hardship. PC#2337 at 7. In this case, the Citizens Groups claim, Dynegy and IPH have intentionally structured the proposed transaction to create an argument that IPH will not be able to operate profitably without a variance. *Id.* The IPH-Ameren transaction does not have to be structured that way, the Citizens Groups maintain, because

Dynegy, if it “really thought this was a good bet,” has the resources to adequately capitalize IPH to timely comply with the MPS. *Id.* at 7-8.

The Citizens Groups further argue that IPH’s structure—*i.e.*, that it will be “undercapitalized from the start,” that Dynegy has set it up as a “bankruptcy remote” subsidiary, and that Dynegy is not investing any of its own capital in IPH and has told investors it does not intend to support IPH in the future—undercut IPH’s hardship claim. PC#2337 at 8 n.7. The Citizens Groups again analogize this case to Lindgren Foundry, in which, they assert, the purchasers of the foundry “put in little of their own money” and structured the acquisition so that they could “easily dump the investment” if it failed. *Id.* The Board took account of this in denying the variance in that case, according to the Citizens Groups, stating that the Board was “not greatly impressed by the owners’ own alleged losses,” and that the petitioners would “lose, at most, \$70,000 by their own evidence.” *Id.*, citing Lindgren Foundry, PCB 70-1 (Sept. 25, 1970).

Alternatively, the Citizens Groups continue, if the MPS fleet is so “over-leveraged” that it cannot be operated profitably and in compliance with applicable regulations, GENCO’s debt could be restructured such that bondholders would take a “haircut” as part of a transaction to create a “viable company.” PC#2337 at 8. The Citizens Groups add that Mr. Johnson concluded such a restructuring likely is only being postponed by the IPH-Ameren deal. *Id.* at 8 n.8. The Citizens Groups further claim that Dynegy is asking the public to “subsidize the transaction” so that it and the debt-holders do not have to face up to “the compliance obligations associated with the assets.” *Id.* In any event, the Citizens Groups conclude, petitioners’ “business decision” to structure the acquisition as they have—*i.e.*, without assuming the environmental obligations that go with it—gives rise to a hardship “of their own making.” *Id.*

Environmental and Health Impacts

The Citizens Groups contend that petitioners have “grossly understated” the harm to the environment and public health if a variance is granted. Obj. at 9; PC#2337 at 9. Air quality would indisputably be better, the Citizens Groups continue, if IPH were required to install pollution controls by 2015 rather than 2020. Obj. at 9. The Citizens Groups state that operating an “unscrubbed” coal-fired plant for five more years will cause tens of thousands of excess tons of SO₂ to be emitted over the variance term. *Id.*, citing Pet. at 5; PC#2337 at 10. These emissions have significant public health consequences for surrounding communities, according to the Citizens Groups, as demonstrated by both USEPA’s recent designation of Hollis Township, Peoria County as nonattainment for the 1-hour SO₂ NAAQS, as well as Mr. Klafka’s dispersion model analyses in his written statement (PC#113). Obj. at 9; PC#2337 at 10. The Citizens Groups add that subsequent nonattainment areas will be designated using computer modeling and additional monitoring data for areas that lack air quality monitors, such as where the Newton and Joppa plants are located. Obj. at 10.

In their post-hearing comments, the Citizens Groups contend petitioners wrongly question whether “direct SO₂ exposure” has any demonstrable health impact. PC#2337 at 11. USEPA has concluded that direct short-term exposure to SO₂ is linked to an “array of adverse respiratory effects including bronchoconstriction and increased asthma symptoms.” *Id.*, citing

<http://www.epa.gov/airquality/sulfurdioxide/health/html>. To address this problem, the Citizens Groups add, USEPA in 2010 promulgated a new primary NAAQS limiting hourly ambient air concentrations for SO₂ at 75 parts per billion. *Id.*, citing 75 Fed. Reg. 35520 (June 22, 2010). USEPA set this standard based on a “broad range of scientific information,” which led it to conclude the standard was necessary to increase public health protection for at-risk populations. *Id.*, citing 75 Fed. Reg. at 35541. The Citizens Groups point out that the CAA’s legislative history indicates that a primary standard is to be set at the maximum permissible ambient air level . . . which will protect the health of any sensitive group of the population.” *Id.*, citing S. Rep. No. 91-1196, 91st Cong., 2d Sess. 10 (1970); Coalition of Battery Recyclers Ass’n v. USEPA, 604 F.3d 613, 618 (D.C. Cir. 2010) (NAAQS must protect not only average health individuals, but also “sensitive citizens” such as children).

Petitioners, according to the Citizens Groups, fail to grasp the significance of the promulgation of the 2010 1-hour SO₂ NAAQS. PC#2337 at 12. The Citizens Groups cite the hearing testimony of petitioners’ witness Dr. Lisa Bradley that USEPA’s scientific assessment that was the basis for the new NAAQS concluded that studies do not provide “sufficient evidence to infer a causal relationship between long-term exposure to SO₂” and negative health outcomes. *Id.*, citing Tr. at 79-80. However, the Citizens Groups continue, Dr. Bradley admitted that USEPA’s scientific assessment had also addressed impacts of *short-term* exposure to SO₂, the subject of the 2010 NAAQS. *Id.*, citing Tr. at 80-81. Even then, the Citizens Groups continue, Dr. Bradley “implied” the NAAQS was based on only a single epidemiological study showing a statistically significant correlation between SO₂ exposure and health impacts, and further claimed that later epidemiological studies had correlated the health effects with other pollutants. *Id.* at 12-13, citing Tr. at 80-81. The Citizens Groups claim this testimony is factually inaccurate and legally irrelevant. *Id.* at 13. The Citizens Groups explain that the Federal Register notice adopting the NAAQS refers to “numerous” epidemiological and other studies and sources considered by USEPA. *Id.*, citing 75 Fed. Reg. at 35525. The notice also states USEPA concluded that the available evidence “supports the conclusion that there is an independent effect of SO₂ on respiratory morbidity,” according to the Citizens Groups. *Id.* Petitioners cannot “relitigate” the merits of the 2010 SO₂ NAAQS, the Citizens Groups argue, for a federal court has already rejected similar challenges and upheld the NAAQS. *Id.*, citing National Environmental Development Assoc.’s Clean Air Project v. USEPA, 686 F.3d 803, 805 (D.C. Cir. 2012). Given USEPA’s statutory mandate to set an SO₂ standard “requisite to protect the public health,” the Citizens Groups add, exceedances of the 2010 hourly limit of 75 parts per billion must be regarded as threatening public health. *Id.* at 13-14.

Further, the Citizens Groups state that in prior variance cases the Board has relied on air quality modeling to assess environmental impact in connection with NAAQS compliance. PC#2337 at 14, citing Central Illinois Light Co. v. IEPA, PCB 99-80 (Apr. 15, 1999). In that case, the Board found, based on an air quality modeling analysis provided by the petitioner, that SO₂ emissions under the variance would result in a total concentration of SO₂ that was still “well below” the 1-hour SO₂ NAAQS, and that the proposed variance would not have any negative health impact. *Id.* Accordingly, the Citizens Groups continue, it is significant that Mr. Klafka predicted that AER’s three “unscrubbed plants” all cause NAAQS exceedances, and that the area surrounding AER’s E.D. Edwards generating station—Hollis Township, Peoria County—has already been designated as a nonattainment area. *Id.* at 14-15. The Citizens Groups note Mr.

Klafka's conclusion that the three plants' permitted as well as actual emissions are predicted to cause NAAQS exceedances "throughout their respective regions." *Id.* at 15, citing PC#113 at 2. Moreover, the Citizens Groups add, Mr. Klafka's modeling analysis is relevant here because compliance with the MPS's lower annual fleetwide emission limits will require "significant reductions in SO₂ emissions" from one or more of the three "unscrubbed" MPS plants. *Id.* According to the Citizens Groups, delaying MPS compliance would allow "localized NAAQS exceedances" at those three plants. *Id.* at 15-16. NAAQS exceedances are a "touchstone of environmental impact in variance proceedings," according to the Citizens Groups. *Id.* at 16.

Additionally, the Citizens Groups emphasize that SO₂ is a precursor to PM, which is associated with a number of "serious health effects . . ." PC#2337 at 16, citing 76 Fed. Reg. 48,208, 48218 (Aug. 8, 2011). *Id.* The Citizens Groups add that the MPS were adopted in part to address PM formed by SO₂ emissions at Illinois coal-fired plants. *Id.* USEPA has found that Illinois coal plants' emissions of SO₂ and NO_x contribute to "PM_{2.5} issues" throughout the Midwest and as far south as Alabama and Georgia. *Id.*, citing 76 Fed. Reg. at 48241-45. And in Illinois, the Agency has concluded that the MPS supports continued attainment of the 1997 PM_{2.5} NAAQS in the Chicago region. *Id.* at 16-17, citing 78 Fed. Reg. 48103, 48119 (Aug. 7, 2013). Thus, the Citizens Groups continue, beyond "localized impacts," it is important for the Board to also consider fleetwide emissions, as the Board has done in prior MPS variance proceedings. *Id.* at 17. The Citizens Groups note that while petitioners assert, and the Agency agrees, that the variance would yield a net environmental benefit, petitioners' analysis includes factors that overstate baseline MPS fleet emissions. *Id.* Collectively, according to the Citizens Groups, these factors "disguise a significantly negative environmental impact." *Id.*

In fact, the Citizens Groups continue, petitioners are able to claim a net environmental benefit only by relying on "irrelevant factors," including "AER's emissions [in 2013] and a supposed benefit from the shutdown of Meredosia and Hutsonville almost two years ago." Obj. at 10. The Citizens Groups state that the Board held in PCB 12-126 that "pre-variance emissions" are irrelevant in determining a proposed variance's environmental impact. *Id.*, citing Ameren Energy Resources, PCB 12-126, slip op. at 57 (Sept. 20, 2012); PC#2337 at 17-18. In their objection, the Citizens Groups argue that because IPH and AER do not expect to close on the proposed transaction until the end of 2013, the starting point for the emissions assessment should be 2014. Obj. at 10. In their post-hearing comments, the Citizens Groups adjust this starting point slightly, to be consistent with the implication in the September 12, 2013 questions to petitioners that the Board "views the fourth quarter of 2013" as a proper beginning date for the emissions analysis. PC#2337 at 17. The Citizens Groups reiterate that petitioners' original analyses in the petition, which started with 2010 and 2013, start the analysis too early, before IPH even owns the plants. Obj. at 10; PC#2337 at 17.

Emissions Analysis

As to the shuttered plants, the Citizens Groups argue they should not be considered in the analysis of SO₂ emissions because they no longer "produce electricity for sale." Obj. at 5; PC#2337 at 18-19. The Citizens Groups state that the Agency's MPS rulemaking testimony cited by petitioners actually confirms that a shutdown plant no longer has to "worry about" complying with the MPS, and that power plants do not "usually shut down for ten years and start

back up.” Obj. at 6, citing Control of Emissions from Large Combustion Sources, R06-25, Tr. at 350-51 (Aug. 15, 2006); PC#2337 at 18-19. The Citizens Groups further note the Agency’s statement in releasing draft construction permits for the FutureGen 2.0 project that federal regulations for major new projects affecting air quality were not triggered because of the “permanent” shutdown of Meredosia’s existing boilers. PC#2337 at 19, citing <http://www.epa.state.il.us/public-notices/2013/ameren-futuregen-meredosia/project-summary.pdf>.

The Citizens Groups add that the Board’s order in PCB 12-126 denying the motion to substitute IPH for AER as variance holder recognized that any variance request relating to the five operating MPS plants IPH proposes to acquire would require a “new analysis specifically related” to just those facilities. Obj. at 10; PC#2337 at 18, citing Ameren Energy Resources, PCB 12-126, slip op. at 11 (June 6, 2013). Accordingly, the Citizens Groups continue, the proposed variance’s environmental impact “must be assessed on its own merits, based on the five plants that IPH would operate.” Obj. at 10; PC#2337 at 18.

In their post-hearing comments, the Citizens Groups find further fault with petitioners’ emissions analysis because it relies on average heat inputs at the AER plants that are “now far outdated.” PC#2337. The Citizens Groups state that petitioners’ baseline heat input for the fleet (including the Meredosia and Hutsonville plants) is 340,446,252 mmBtu annually, and 312,003,694 mmBtu annually (excluding the closed plants). These figures, the Citizens Groups add, were taken from AER’s analysis of fleetwide emissions in the Board’s 2009 rulemaking to amend the MPS, Proposed Amendments to 35 Ill. Adm. Code 225: Control of Emissions from Large Combustion Sources (Mercury Monitoring), and represent the average heat input at the MPS plants from 2006-08. *Id.* at 18. The Citizens’ Groups note that AER also used this number in seeking a variance in PCB 12-126, but that these average heat inputs “no longer reflect reality for the AER plants.” *Id.* Rather, the Citizens Groups urge, the Board should instead follow its approach in Midwest Generation, LLC v. IEPA, PCB 13-24 (Apr. 4, 2013), which also involved a requested variance for coal-fired plants from certain emission standards. *Id.* There, the Citizens Groups continue, the Board evaluated environmental impact based on the four most recent full years of data available when the petition was filed. *Id.*, citing Midwest Generation, PCB 13-24, slip op. at 66. Based on USEPA Air Markets data, the Citizens Groups assert that the average heat input for the five active MPS plants is 283,259,518 mmBtu. *Id.*; *Id.* at Exh. C (2009-12 AER fleet emissions).

The Citizens Groups performed their own analysis of emissions under the proposed variance, examining fourth quarter 2013 through 2020, using an average heat input of 283,259,518 mmBtu, accounting for E.D. Edwards Unit 1’s retirement and the opening of the FutureGen 2.0 project. PC#2337 at 19-20. The analysis, according to the Citizens Groups, projects SO₂ emissions to be 279,179 tons through 2020—48,227 tons below the petitioners’ proposed fleetwide emission cap of 327,996 tons. *Id.* at 20. The insufficiency of the emissions cap, the Citizens Groups add, is clear when considered alongside the MPS plants’ 2012 emissions, which were only 45,711 tons. Over seven-and-a-quarter years, the Citizens Groups assert, this would amount to 331,404 tons. *Id.* Thus, according to the Citizens Groups, IPH’s commitment to a fleetwide cap of 327,996 tons would allow it to emit SO₂ at “nearly the same rate” that AER did in 2012—even though, the Citizens Groups add, IPH claims it will be

installing an FGD system at the Newton station and closing E.D. Edwards Unit 1 in the same period. *Id.* The Citizens Groups conclude that whether based on “localized impacts at unscrubbed plants,” or at the fleetwide level, the requested variance will have a “negative environmental impact” that outweighs IPH’s self-imposed hardship. *Id.*

Conclusion

The Citizens Groups conclude it is “troubling” that just months after claiming in PCB 12-126 that it was not “ready to give up” on the Newton FGD project and the MPS plants in general, AER announced its intention to exit the Illinois merchant generation business. *Id.*, citing Ameren Energy Resources, PCB 12-126, AER post-hearing comments at 55; PC#2337 at Exh. D. IPH now makes the “same arguments that AER did last year” about the economic impacts of the affected plants, according to the Citizens Groups. *Id.* The Citizens Groups urge the Board to “closely examine” petitioners’ claims, adding that “IPH will not provide the stability that Dynegy has represented to Illinois communities.” *Id.*

Finally, the Citizens Groups add that Dynegy has contested the amount of back taxes Dynegy owes for a closed New York coal-fired power plant, based on “Dynegy’s claimed devaluation of the plant.” PC#2337 at 23 & PC#2337 Exh. E. The Citizens Groups question how Dynegy would contend the AER MPS fleet should be valued, given that IPH “would pay nothing for it.” *Id.* at 23.

ILLINOIS ATTORNEY GENERAL’S POSITION (PC#2336)

The Office of the Attorney General, on behalf of the People of State of Illinois (People), voices strong support for the Board’s decision in PCB 12-126 to deny the motion to substitute parties and to require IPH to demonstrate independently its need for a variance. PC#2336 at 1; see Ameren Energy Resources v. IEPA, PCB 12-126 (June 6, 2013). The People state that the decision did not clearly address “the procedural question of whether it is appropriate for the Board to consider requests for variances from entities, such as IPH, who are not yet actually subject to the regulations from which they seek relief.” PC#2336 at 1-2.

Analysis of Emissions

Medina Valley

The People state that, when the Board denied the motion to substitute parties in PCB 12-126, it noted “that IPH was proposing to acquire only five out of the seven plants that the Board had analyzed in granting the variance to AER.” PC#2336 at 2, citing Ameren Energy Resources v. IEPA, PC 12-126, slip op. at 11 (June 6, 2013). The People add that the Board stated that reviewing IPH’s requested variance would necessitate a new analysis limited to the five facilities. PC 2336 at 2, citing Ameren Energy Resources v. IEPA, PC 12-126, slip op. at 11 (June 6, 2013).

The People claim IPH has failed to present such a new analysis, but instead joined with Medina Valley as co-petitioner, and “repackage[d] the same set of pollution calculations

involved in PCB 12-126.” PC#2336 at 2. However, the People assert, there is no indication that Medina Valley intends to resume generation at either the Hutsonville or Meredosia plant, so there is nothing Medina Valley would need to do to comply with the MPS and no basis for it to receive a variance. *Id.* The People add that, to the extent the FutureGen 2.0 project is built at the Meredosia site, its expected low emission rate and small size would actually “assist IPH with MPS compliance obligations.” *Id.* The “simplest and most straightforward” approach to FutureGen is for IPH, as part of the proposed transaction, to agree to indemnify Medina Valley in the event that the Future Gen plant is claimed to be in violation of the MPS. *Id.* In any event, the People recommend that the Board deny Medina Valley’s requested variance. PC# 2336 at 3.

The People also argue that any SO₂ emissions analysis should exclude the Hutsonville and Meredosia stations “because they have zero impact on the fleet-wide emission rate” and are not relevant to IPH’s compliance with the MPS. PC#2336 at 3. The People add that “IPH’s insistence” that it get emissions credit for the closures of Hutsonville and Meredosia—plants “it never owned and will never own”—“obscure[s] the question of harm to public health and the environment and represents a fiction that should be rejected by the Board.” *Id.*; *see also id.* at 2.

Closing Date of Transaction

The People state that the Board found in PCB 12-126 that “the beginning of AER’s commitment under the proposed variance conditions” was the proper starting point for analyzing environmental impact under AER’s proposed variance. PC#2336 at 4, citing Ameren Energy Resources, PCB 12-126, slip op. at 56 (June 6, 2013). The People argue that the beginning of IPH’s commitment under this proposed variance “is unclear because of the contingent nature of the proposed transaction.” *Id.* The People assert that IPH cannot “prove when it will assume ownership of the plants,” which, the People add, because of various contingencies including the need for FERC approval, may not occur until as late as April 2014. *Id.* at 4-5. Given that the closing could be that delayed, the People continue, “the calculation of differences between mass SO₂ emissions under the MPS and under the requested variance would need to be adjusted.” *Id.* at 5. The People recommend that the Board “examine a range of emission scenarios,” including the analysis the Board has already requested (fourth quarter 2013 through 2020) up to and including April 2014 through 2020. *Id.*

In addition, the People state that they support mass emission caps as a condition of any variance that the Board may grant IPH. PC#2336 at 5, 7. But, the People continue, “[t]o address the uncertainty of the actual closing date in this case,” the Board could require, as a condition to the variance, that IPH provide a “re-calculation of the emission cap(s) needed” based on the actual closing date and submit it with its certification of acceptance. *Id.* at 6.

1-Hour SO₂ Modeling

The People cite Mr. Klafka’s written statement (PC#113), stating that the results of his modeling analyses indicate that the E.D. Edwards, Joppa, and Newton stations “are estimated to be causing violations” of the 1-hour SO₂ NAAQS. PC#2336 at 6. The People note that MPS compliance would require IPH to reduce SO₂ emissions at one or more of these three plants, and that, depending on the specific compliance method, this reduction would “help eliminate or

reduce” exceedances of the 1-hour SO₂ NAAQS at one or more of the three plants. *Id.* at 6. However, the People add, under the variance, “IPH can operate the three plants as they are being operated today, likely continuing to cause exceedances of the 1-hour SO₂ standard,” until such issues are addressed in a SIP revision, which may not happen until 2018 in the case of the E.D. Edwards plant, and “even later” for the Joppa and Newton stations, depending on when USEPA completes attainment designations for those respective areas. *Id.*

Further, the People contend the Board should consider Mr. Klafka’s analyses in evaluating potential harm to public health under the proposed variance. PC#2336 at 6. The People note that, in PCB 12-126, the Board accepted that SO₂ emission reductions under the variance in 2012-14 would offset greater SO₂ emissions from 2015-20 as compared to the MPS. *Id.* The People argue that when the Board reached this result it did not have the benefit of Mr. Klafka’s modeling analyses, which, the People add, “support the view that citizens could be exposed to unsafe levels of air pollution longer under the proposed variance than they otherwise would be if IPH was required to comply with the MPS—and that this is true regardless of offsetting emission reductions in the earlier years.” *Id.* at 6-7.

Additional Conditions

The People argue that while they support, and petitioners seem willing to accept, a cap on mass SO₂ emissions over the variance term, “annual caps would be preferable as a safeguard against pollution spikes occurring in one or more particular years during the variance.” PC#2336 at 7. The People further support inclusion of the additional conditions to which the Agency and IPH have agreed—“scrubber efficiency, sulfur content of fuel, and the commitment not to operate Edwards Unit 1 upon approval” by MISO. *Id.*

WRITTEN STATEMENTS

Prior to the hearing, the Sierra Club and ELPC submitted “written statements” by two consultants. PC#113; PC#3162a. They indicated that these commenters would provide sworn testimony at the hearing and would be available for cross-examination. The statements were docketed both in the main docket for this case (PCB 14-10) as well as the public comment docket (PCB 14-10PC).

David Johnson, ACM Partners, on behalf of Sierra Club and ELPC (PC#3162a)

Background

On September 13, 2013, the Sierra Club and ELPC submitted to the Board a written statement by Mr. David Johnson of ACM Partners entitled “Expert Commentary Report: An Economic and Financial Analysis of the proposed acquisition of Ameren coal plants by Illinois Power Holdings” (PC#3162a). *See* Tr. at 91, 92. Mr. Johnson also testified at the hearing on September 17, 2013 (*id.* at 91-94), although his testimony did not generate cross-examination (*see id.* at 94).

Mr. Johnson is a founding partner of ACM Partners, a financial advisory firm “providing due diligence, performance improvement, restructuring and turnaround services.” PC#3162a at 32; *see* Tr. at 92. Mr. Johnson reports that he has written more than 20 articles that appeared in trade publications, has routinely spoken to management and professional groups, and has lectured frequently at business schools. PC#3162a at 32.

Mr. Johnson first states that “IPH has chosen to make its obligation to move forward with the transaction contingent on it being able to obtain a variance” from otherwise applicable regulations. PC#3162a at 2. Mr. Johnson addresses petitioners’ arguments that “IPH will not have sufficient financial resources” to meet upcoming compliance deadlines, “IPH cannot obtain financing” from third parties, Dynegy cannot as IPH’s parent supply its capital needs, and “IPH’s claimed financial hardship is not ‘self-imposed’ or a ‘quagmire of its own making.’” *Id.* at 3.

Financial Structure of Transaction

Mr. Johnson states that one of the chief objectives of the IPH-Ameren transaction is for Ameren to divest itself of its generation business. PC#3162a at 4, 6. Second, he states that it offers Dynegy an investment opportunity involving minimal costs. *Id.* Finally, he states that it offers Dynegy an investment opportunity with little risk, as Dynegy will not be liable for the obligations of IPH if it fails. *Id.* at 5-6. In effect, Mr. Johnson maintains, the proposed transaction involves Ameren’s indirect payment of over \$200 million to induce Dynegy to acquire through IPH some of Ameren’s underperforming assets. *Id.* at 7.

Specifically, Mr. Johnson states that under the transaction, Ameren will pay \$133 million “to satisfy an intercompany put option.” PC#3162a at 6, 8-9, 12. Second, Mr. Johnson states that Ameren will provide \$60 million “to AER for general corporate purposes.” *Id.* at 6, 12. Third, Mr. Johnson states that Ameren agrees “to leave \$25 million in excess cash balances at AER, as well as \$8 million in proceeds from a property sale at AER.” *Id.* at 6, 12. Fourth, he states that Dynegy will provide indemnity support of \$25 million for IPH for a two-year period. *Id.* at 6. Finally, he states that the proposed transaction includes “\$825 million of debt remaining at AER (essentially moving the debt from Ameren’s consolidated balance sheet to Dynegy’s).” *Id.* at 6, 8, 12.

Mr. Johnson opines that “a buyer would ordinarily seem to have no appetite for assuming \$825 million in debt to acquire assets that are losing money and require substantial capital to comply with both existing environmental regulations . . . and anticipated regulations. . . .” PC# 3162a at 11. However, Mr. Johnson elaborates that Dynegy has emphasized four aspects of the proposed transaction that Dynegy has touted as favorable to its shareholders. *Id.* at 9 (citations omitted). According to Mr. Johnson, the transaction assumes the plants will continue to benefit from regulatory relief; the transaction involves limited risks to Dynegy because it is providing little support to IPH and will not be liable if IPH fails; the transaction will situate Dynegy to benefit from any increase in power prices; and the transaction gives Dynegy “flexibility in allocating capital to other projects.” *Id.* at 7-11. Mr. Johnson adds that “the operations IPH is seeking to purchase have struggled with poor capital availability, escalating costs, and growing losses.” *Id.* at 13. Mr. Johnson projects that “absent considerable improvements New AER will be challenged to operate at break-even cash flow, let alone generate cash.” *Id.* (citation omitted).

Post-Transaction Issues

Mr. Johnson suggests that access to capital is crucial to “[t]he ability to hedge exposure to volatile input prices, and thereby lock in the gross margins necessary to generate an adequate level of profitability.” PC#3162a at 14. However, he projects that IPH’s weak capital structure raises the possibility that “it will be severely hampered in its ability to generate adequate profitability absent a substantial increase in electricity prices in its market.” *Id.* He argues that Ameren “clearly made a determination that a gamble on a substantial increase in electricity prices was unjustified based on current trends and forecasts by government agencies and others.” *Id.* at 15, 28. Mr. Johnson states that upon closing of the transaction IPH “will be dangerously undercapitalized, as it will consist of loss-making operations that are burdened with \$825 million in debt.” *Id.* at 16 (citation omitted). He concludes that, “[g]iven that IPH will be severely undercapitalized from the start and Dynegy is obviously unwilling to risk its own assets in support of IPH, a bankruptcy is very likely.” *Id.* at 17.

Dynegy Finances and Experience

Mr. Johnson states that Dynegy emerged from bankruptcy with a strong financial position, with an “impressively profitable” last year. PC#3162a at 18-20. He adds that Dynegy’s recent refinancing campaign indicates “that Dynegy has the financial resources necessary to properly capitalize IPH in connection with its acquisition of the Coal Plants if it chooses to.” *Id.* at 18. He concludes that, “[g]iven Dynegy’s strength, any claim of financial hardship by IPH, a subsidiary Dynegy is setting up for this purpose, must be viewed as self-imposed.” *Id.*

Mr. Johnson states that Dynegy operates in the same areas of Illinois as AER and “is not unfamiliar with the challenges coal operations face in the current climate.” PC#3162a at 21. He suggests Dynegy has met these challenges of negative profitability by “minimizing capital expenditures as it hopes for an improvement in power pricing.” *Id.* at 21, 24-25. He states that Dynegy’s readiness to complete the proposed transaction “contrasts sharply with the uninspiring performance of Dynegy’s own coal operations.” *Id.* at 21. He opines that “this looks more like a leveraged gamble on future price increases—with Dynegy bearing no real risk, and the public (and to some degree Ameren) subsidizing the deal—than a transaction based on a rational belief that IPH will actually be able to sustain itself.” *Id.*

Power Prices

Mr. Johnson argues that IPH’s successful operation of the active MPS plants depends on future increases in power prices, which Dynegy expects will result from “a combination of natural gas price increases, the closure of marginal power plants due to financial and regulatory burdens, and the impact of economic growth.” PC#3162a at 26. Mr. Johnson notes, however, that renewable energy resources “have a number of potential structural advantages over fossil fuels in terms of cost structure,” and the advent of fracking makes counting on increases in natural gas prices premature. *Id.* In addition, Mr. Johnson states that “IPH itself only projects prices moving from \$31.85 to \$34.47 by 2017, with a *drop* in process over the next two years.”

Id. (emphasis in original). Mr. Johnson also questions whether IPH's proposed structure will enable it to survive the very elimination of marginal power generators on which Dynegy is relying. *Id.* at 27, 31. Finally, he contends it is risky to forecast and rely upon economic growth. *Id.* at 27.

Compliance Costs

Mr. Johnson asserts that by making a variance a condition to the MPS plant transfer, IPH is "seeking a subsidy in the form of long-term relief from existing environmental compliance costs." PC#3162a at 29. He questions how IPH will finance the cost of complying with anticipated regulations. He adds that

[a] coal plant operator unable to purchase raw material or pay employees would be considered unfit for the market. Likewise, a coal plant operator with a balance sheet that has intentionally been structured so that it lacks the minimal financial resources to comply with existing and future environmental regulations is also unfit. PC#3162a at 29; *see also* Tr. at 94.

Conclusions

Mr. Johnson states the ACM Partners' conclusions as follows. First, he states that "Dynegy has purposefully structured this transaction to minimize its risks and maximize future gains. It is further clear that while Ameren is clearly anxious to divest the assets of New AER, Dynegy is viewing the opportunity as little more than a highly leveraged bet on rapid improvement in power prices." PC#3162a at 31; *see id.* at 4; Tr. at 92-93. Mr. Johnson opines that if this improvement occurred, Dynegy would earn a windfall profit, but if it did not, IPH would likely face bankruptcy. PC#3162a at 31.

Second, Mr. Johnson states that "Dynegy has sufficient resources to properly capitalize" IPH or could have "acquired that assets in a more traditional manner (*i.e.*, through a restructuring, which absent the structure agreed to here, would likely be needed)." PC#3162a at 31; *see id.* at 5; Tr. at 93. But given IPH's undercapitalization, he views "all projected claims of post-acquisition financial hardship as self-imposed." PC#3162a at 31; *see* Tr. at 93. Mr. Johnson argues that "to allow a variance under the circumstances would set a very troubling precedent. It would in essence give future buyers of environmentally problematic assets a 'blueprint' for how to structure the acquisition so as to manufacture a perception of 'financial hardship' and thereby avoid environmental compliance costs." PC#3162a at 30.

Finally, Mr. Johnson opines that, "[d]espite the financial strength of its parent, the acquisition of New AER by IPH will do nothing to strengthen the balance sheet of the underlying assets, and in fact post-transaction IPH will face the same balance sheet challenges that those same operations did under the ownership of Ameren." PC#3162 at 31; *see id.* at 5; Tr. at 93-94. Mr. Johnson adds that "[t]he operations of the new AER are heavily indebted and supported by money-losing operations. This is generally an indication that a restructuring is in order." PC# 3162a at 31.

Steven Klafka, Wingra Engineering, on behalf of Sierra Club and ELPC (PC#113)

Steven Klafka is an environmental engineer and an Illinois registered professional engineer with Wingra Engineering, a company he founded. Tr. at 83. Mr. Klafka, on behalf of Sierra Club and ELPC, provided a written statement (PC#113), testified at hearing (Tr. at 83-88), and submitted post-hearing responses to petitioners' hearing questions (Klafka Post Resp.).

Mr. Klafka testified regarding his analysis of compliance with the 1-hour SO₂ NAAQS for the Edwards, Joppa, and Newton stations presented in his written statement. Tr. at 85-86. PC 113. Using dispersion modeling (AERMOD, AERMET, AERMINUTE), Mr. Klafka predicted that each of these three power stations would violate the new 1-hour SO₂ NAAQS based on either their currently approved emissions or actual historical emissions. PC#113; Tr. at 84, 87. Mr. Klafka stated that both USEPA and the Agency consider dispersion modeling a suitable method for supporting state implementation of the new 1-hour SO₂ NAAQS. Tr. at 85-86.

For the modeling, Mr. Klafka used information from the Agency and public databases as well as a number of conservative assumptions. Tr. at 86. Based on the 1-hour SO₂ NAAQS of 75 ppb being equivalent to 196 micrograms per cubic meter ($\mu\text{g}/\text{cm}^3$), Mr. Klafka compared results of his modeling to the 1-hour SO₂ NAAQS to assess potential compliance. Tr. at 85.

For the E.D. Edwards plant, Mr. Klafka predicted that the maximum concentration based on currently allowed emissions would be 1,524 $\mu\text{g}/\text{cm}^3$ SO₂, and the 1-hour SO₂ NAAQS would be exceeded as far out as 31 miles (50 kilometers) from that station. To comply with the 1-hour SO₂ NAAQS of 196 $\mu\text{g}/\text{cm}^3$, Mr. Klafka calculated that the maximum allowed emissions at the E.D. Edwards facility would need to be reduced by 89 percent. Based on actual historical emissions for 2011, Mr. Klafka then predicted the maximum concentration at the E.D. Edwards station would be 271 $\mu\text{g}/\text{cm}^3$ SO₂. PC#113; Tr. at 87.

For the Joppa station, Mr. Klafka predicted the maximum concentration based on currently allowed emissions would be 1,136 $\mu\text{g}/\text{cm}^3$ SO₂, and the 1-hour SO₂ NAAQS would be exceeded as far out as 31 miles. Mr. Klafka calculated allowable emissions would need to be reduced by 85 percent to meet the 1-hour SO₂ NAAQS. When using actual emissions data from 2012, Mr. Klafka predicted the maximum concentration at the Joppa station would be 361 $\mu\text{g}/\text{cm}^3$. PC#113; Tr. at 87-88.

For the Newton station, Mr. Klafka predicted the maximum concentration based on currently allowed emissions would be 318 $\mu\text{g}/\text{cm}^3$, and the 1-hour SO₂ NAAQS would be exceeded as far out as 5 miles. To meet the 1-hour SO₂ NAAQS, Mr. Klafka stated allowable emissions would need to be reduced by 41 percent. Based on actual emissions from 2012, Mr. Klafka stated the maximum concentration would be 238 $\mu\text{g}/\text{cm}^3$ SO₂. PC#113; Tr. at 88.

At the hearing, petitioners asked Mr. Klafka about the relevance of his analysis to the MPS; what modeling guidance and meteorological data he used; what stack height, temperatures, and exit velocities were used; and the location of the modeling receptors Mr. Klafka chose. Tr. at 89-90. In response to petitioners' first question, Mr. Klafka states that if a source is currently not capable of complying with the 1-hour SO₂ NAAQS, then delays in implementing emission

reductions would delay compliance. Mr. Klafka added that regulatory agencies rely on air dispersion modeling to determine if an exceedance of a newly adopted NAAQS can be attributed to a particular source. Klafka Post Resp. at 2-3. As to modeling guidance, Mr. Klafka states that he used the most current guidance available when the analyses were performed. *Id.* at 3.

Regarding meteorological data for the E.D. Edwards station modeling, Mr. Klafka states that he used Peoria Airport data, and that the Agency confirmed this was appropriate. *Id.* For the stack height, temperatures, and exit velocities he used, Mr. Klafka states that he obtained these from modeling files provided by the Agency or the United States Energy Information Administration. *Id.* at 4-5. As to the location of the modeling receptors chosen, Mr. Klafka notes that most of the receptors located on-site at the power plants showed compliance with the 1-hour SO₂ NAAQS, and that the maximum impacts based on allowable emissions occurred off-site. *Id.* at 4.

HEARING

The Board held the public hearing on September 17, 2013 in Springfield. The Agency did not present any testimony. Petitioners presented sworn testimony from three witnesses: Dan Thompson, Vice President and General Manager of IPH and Coal Coke; George Bilicic, Vice Chairman at Lazard Freres; and Dr. Lisa Bradley, Vice President and Senior Toxicologist with AECOM. As noted above, the Citizens Groups presented Mr. Johnson's and Mr. Klafka's sworn testimony, which was consistent with their respective written statements. One hundred forty-eight individuals provided comments at the hearing.

Testimony

Dan Thompson, IPH and DMG

Mr. Thompson testified that IPH, as a Dynegy subsidiary, is committed to environmental progress and improvement and to running the MPS plants in an environmentally responsible way, which, he explained, includes completing the Newton FGD project. Tr. at 18. Mr. Thompson noted the terms of the MOA between the Agency, Dynegy, and IPH executed in September 2013, which, he noted, would reduce overall emissions in Illinois by permanently retiring E.D. Edwards Unit 1 as soon as MISO allows, which could be as soon as 2017; permanently withdraw the air permits for DMG's Stallings and Oglesby combustion turbine facilities; and to implement Advanced Gas Path technology at DMG's Kendall Station. *Id.* at 20. Mr. Thompson further testified that IPH has agreed to accept as additional variance conditions all three of the Agency's recommended conditions, including: use of low sulfur coal at the Joppa, E.D. Edwards and Newton stations; operation of the Duck Creek and Coffeen scrubbers at greater than 98 percent removal efficiency; and closure of E.D. Edwards Unit 1 as soon as allowed by MISO. Tr. at 21-22.

In response to questions from the Board, Mr. Thompson stated that IPH has committed to an overall cap on SO₂ emissions which, during the period when IPH assumes ownership through 2020, would yield SO₂ emissions more than 7,700 tons lower than if the MPS applied. Tr. at 22. Mr. Thompson added that SO₂ emissions under the proposed variance would not exceed those

under the variance granted in PCB 12-126, and would therefore continue to provide a net environmental benefit. *Id.* at 29.

Mr. Thompson further testified that SO₂ emissions from the MPS plants have declined 79 percent since 1990, and 23 percent in the last four years, with operating costs for the SO₂ control equipment totaling over \$7 million per year. Tr. at 21. Mr. Thompson also stated that most of the MPS generating units are very close to meeting federal mercury standards (*i.e.*, MATS), and that IPH is committed to continuing environmental improvements at the MPS plants. *Id.*

Mr. Thompson further testified that “Dynergy is committed to Illinois and its workforce.” Tr. at 22. Mr. Thompson add that Dynergy’s direct investments in Illinois totaled over \$261 million in 2012, and Dynergy’s Illinois subsidiaries employ approximately 600 full-time employees. *Id.* Mr. Thompson stated that the IPH transaction was intended to provide continued economic stability to the communities and employees supported by AER’s power stations, as well as protecting the pension obligations. *Id.* at 23-24. Mr. Thompson testified that the proposed variance is “the best opportunity for continued operation of these plants and preserving high paying jobs and economic investments for the communities each of these plants support[s].” *Id.* at 24.

Regarding IPH’s financial condition, Mr. Thompson stated that IPH will have approximately \$220 million in cash and \$160 million in “networking capital” at closing. In addition, Mr. Thompson continued, IPH will realize the majority of more than \$75 million in expected annual synergies to be implemented in the first quarter of 2014. Tr. at 24-25. Mr. Thompson stated that the IPH transaction was structured to ensure adequate liquidity for continued operation of the MPS plants while the wholesale power market improves. *Id.* According to Mr. Thompson, these resources will result in IPH’s being better capitalized at closing and more financially stable than AER currently is and was when it received the variance in PCB 12-126. *Id.* at 25.

Mr. Thompson explained that “IPH has been structured to [succeed] based upon informed views of the market and our understanding of the power generation market in Illinois and the adjacent markets.” *Id.* at 26. Mr. Thompson stated that IPH will have a “unique advantage” and will be able to operate the MPS plants more “cost effectively” than any other owner because Dynergy owns other coal-fired plants in Illinois. *Id.* Mr. Thompson added that “among the most compelling reasons for the Board to grant this variance is . . . that IPH can actually finish construction of the Newton [FGD project].” *Id.* at 26-27. Mr. Thompson stated that \$254 million has already been spent on that project, and that IPH has budgeted \$263 million more to complete it. *Id.* Mr. Thompson emphasized that IPH is “seeking the same path of compliance” that AER is following under its variance, and that IPH has “agreed to additional commitments” if it receives a variance. *Id.* at 27-28.

Finally, Mr. Thompson testified that “the very same hardship factors” the Board considered in PCB 12-126 remain relevant in this proceeding. Tr. at 28. He stated that if any of the MPS plants were forced to close, there would be a “significant economic hardship” on the State as well as the “communities these plants support.” *Id.* Mr. Thompson further testified that the same “economic and market factors” that necessitate a variance in this case supported the

existing AER variance. *Id.* Mr. Thompson testified that to achieve completion of the Newton FGD project, the plants will need to have positive cash flow, and the transaction would place the plants in the MPS Group in a position to comply with the existing variance and to continue to provide a net environmental benefit. *Id.* at 29.

George Bilicic, Lazard Freres, on Behalf of Petitioners

George Bilicic is employed by Lazard Freres, an independent financial advisory and asset management firm. Mr. Bilicic heads the firm's Midwest investment banking business and global efforts in power energy and infrastructure. Tr. at 32. Mr. Bilicic testified regarding IPH's corporate structure and in response to Mr. Johnson's conclusions on behalf of the Sierra Club and ELPC. *Id.* at 33. Mr. Bilicic described IPH as "a non-recourse entity or entity legally separate from Dynegy for credit purposes," and explained that IPH intends to acquire Ameren's equity interest in "New AER." *Id.* at 34. Mr. Bilicic added that "Dynegy structured the acquisition such that New AER would be independent, self-sustaining, self-funding and economically viable on its own." *Id.* He stated that "[r]equiring businesses to stand on their own is common practice in the power and utility industry," explaining that doing so separates the risks and benefits of the acquired business from the parent company. *Id.* Mr. Bilicic asserted that the structure of the IPH-Ameren transaction is akin to a traditional project financing structure, where a separate holding company is created for a project with its own cash flows and credit profile to protect the project developer's other assets from risks associated with the project. Tr. at 35.

Mr. Bilicic further testified that IPH's structural separateness from Dynegy is important to credit rating agencies and equity analysts in evaluating the merits of the transaction and the impact on Dynegy's own credit and valuation. Tr. at 35. Mr. Bilicic explained that subjecting Dynegy's balance sheet to additional risks would negatively impact Dynegy's credit rating and access to capital. *Id.* According to Mr. Bilicic, this, in turn, would have "significant" adverse consequences, particularly given the current challenging commodity price environment. *Id.* at 35-36. Mr. Bilicic stated that AER is increasingly being viewed negatively by credit rating agencies, Ameren shareholders, current bondholders, and equity research analysts. This limits AER's access to third party capital and "inhibits" Ameren from investing in AER because of negative investor reaction, which could further limit access to capital. *Id.*

Mr. Bilicic testified that the IPH transaction would "make[] the business stronger and more resilient relative to AER under Ameren." *Id.* at 37. He stated that the transaction would provide "New AER" with sufficient liquidity to fund its needs, including operations, over the next several years. *Id.* He explained that IPH would have \$220 million in cash at closing along with savings of approximately \$75 million from operational synergies. *Id.* Mr. Bilicic stated that Dynegy's expectation that there will be a power market recovery "in the 2016 to 2017 timeframe" is reasonable, because MISO projects that a growth in demand and the retirement of coal-burning plants from 2013-2016 will create a capacity shortfall and, thus, higher power prices. *Id.* at 37-48.

In response to Mr. Johnson's conclusion that Dynegy has the financial resources to adequately capitalize IPH, Mr. Bilicic pointed out that Dynegy just emerged from bankruptcy

and actually generated negative net income in 2012, and will continue to face a “challenging commodity price environment.” Tr. at 39-40. Mr. Bilicic stated that Dynegy’s decision not to provide significant financial support to IPH is primarily based on Dynegy’s own need to maintain liquidity and its credit rating during a critical time in Dynegy’s recovery. *Id.* at 40. Mr. Bilicic added that both of the main credit rating agencies agreed that the IPH transaction would be a “credit neutral event” because of “the non-recourse nature of IPH.” *Id.* at 41. He noted that if Dynegy’s credit were downgraded, Dynegy would face higher interest rates and reduced access to capital. *Id.* A stronger Dynegy, according to Mr. Bilicic, would benefit IPH through Dynegy’s ability to provide workforce stability and secure better terms in the supply chain for the entire enterprise. *Id.* at 40-41.

As for third-party financing for IPH, Mr. Bilicic noted that GENCO is contractually prohibited from incurring additional debt until 2015. Tr. at 42. Additionally, Mr. Bilicic testified that none of the financial institutions that Dynegy contacted were willing to extend credit to New AER. *Id.* The financial institutions noted the “low cash flow profile, limited lien capacity of the assets, existing debt, and the weak credit profile of New AER.” *Id.* Mr. Bilicic stated that IPH’s prospects for obtaining third-party financing should improve once the power market recovers. *Id.* at 42.

Lisa Bradley, Ph.D., DABT, AECOM, on Behalf of Petitioners

Dr. Lisa Bradley has a Ph.D. in toxicology and is vice president and senior toxicologist with AECOM Technical Services, where she has been employed since October 1991. She is also a Diplomat of the American Board of Toxicology (DABT). Tr. at 72-73. Dr. Bradley’s testimony is summarized above in connection with her report concerning health effects of SO₂ emissions under the proposed variance (Pet. Exh. 12), *supra* at pp. 22-24.

Public Comments at Hearing

In addition to hearing testimony, the Board received 148 oral public comments during the hearing.

Hearing Comments in Support of Granting the Variance

The Board received 106 comments in support of granting the variance petition during the hearing. *See* Attachment A – Hearing Commenters in Support of Requested Variance.

Among these commenters were Senators Gary Forby, 59th District (Tr. at 46) and Andy Manar, 48th District (*id.* at 50); and Representatives Brandon Phelps, 118th District (*id.* at 43), Wayne Rosenthal, 95th District (*id.* at 47), Brad Halbrook, 110th District (*id.* at 54), and David Reis, 109th District (*id.* at 57). The Board also received comments from the Mayors of Newton (*id.* at 59) and Robinson (*id.* at 67) and from the Jasper County Board (*id.* at 62). The Board received other public comments ranging from representatives of the Illinois AFL-CIO (*id.* at 95) and the Jasper County Board (*id.* at 81) to current employees of AER (*see, e.g., id.* at 164) and Dynegy (*see, e.g., id.* at 210), and residents of communities surrounding the MPS plants (*see, e.g., id.* at 285). The Board also received comments from educators including the Jasper County

School Board (*id.* at 65), as well as comments from business groups including the Illinois Chamber of Commerce (*id.* at 148), the Illinois Manufacturers Association (*id.* at 155), the Illinois Energy Association (*id.* at 152), and labor groups such as the Southwestern Illinois Buildings and Construction Trades Council (*id.* at 145).

In general, the commenters emphasized that the Board found the AER variance would provide a net environmental benefit, and IPH seeks to maintain the same compliance terms. *See, e.g.*, Tr. at 44 (noting requested variance is “materially the same” as the AER variance), *id.* at 50 (noting Board found last year that AER variance provides environmental benefits and urging Board to “do the same for IPH’s petition”), *id.* at 121 (asking Board to “grant the variance transfer that they have already determined will result in a net environmental benefit”). Commenters also focused on the impact to power plant employees and surrounding areas that would result from the shutdown of plants if the variance is not granted. *See, e.g., id.* at 47 (stating that “to put . . . people out of work in the highest unemployment part of the state would be terrible”), *id.* at 61 (asking the Board to “support this variance request to preserve jobs, families, and our community”), *id.* at 97 (emphasizing that the “economic benefits” that MPS plants provide “are critical during this current economic downturn”). Commenters also noted how the plants pay taxes that support “local schools, emergency response organizations, and city governments across the state.” *Id.* at 78, *see also id.* at 117. Jasper County Board Chairman Ed Mitchell noted that the Newton facility is the second largest employer in the county and it “generate[s]” about \$55 million and “represents a little over 51 percent of the total tax revenue for the county,” and predicted that denying the requested variance would be “devastating and destabilizing to the entire community.” *Id.* at 63-64.

AER and Dynege employees emphasized the companies’ and their focus on the plants’ environmental compliance and stewardship. *See, e.g.*, Tr. at 121, 132-33, 175, 200-01, 208, 232-34. Jim Marshall, an employee at the Newton station, stated that employees try to be “good environmental stewards,” and stressed that the “loss of any of these facilities, especially in the rural areas, would have a very significant impact on the economic viability” of the surrounding communities. *Id.* at 230. Bruce Parker, employed at the Joppa station, emphasized that the AER plants

[h]ave an excellent record for compliance with environmental regulations. My sole job at the Joppa station is to ensure we meet all environmental regulations. We’ve spent millions of dollars at the Joppa station alone to comply with the MPS rule and have achieved significant reductions in SO₂ and mercury emissions. Tr. at 242-43.

Joppa plant employee Lucas Schneider also agreed with petitioners' position that granting the variance would produce a "net reduction in SO₂ emissions, so we reduce emissions right off the bat." Tr. at 283, *see also id.* at 114. Kathy Roemmel, employed at Dynegey's Wood River generating station, feels "very proud" to have been a Dynegey employee for 34 years and "truly believe[s] these plants can be and will be successful under Dynegey." *Id.* at 203; *see also id.* at 201. Commenters also expressed concern that closure of the MPS plants could negatively affect the reliability of electric power supply in Illinois and lead to higher power prices. *Id.* at 154-55; *see also id.* at 250. In addition, commenters echoed petitioners' concerns about the current economic state of Illinois, especially central and southern parts of the State (*id.* at 97), as well as the negative implications of a variance denial for Illinois' business climate (*id.* at 52-53). Lastly, AER employees raised concerns over losing their source of income if any of the MPS plants were to shut down. *See id.* at 243, 255-56.

Hearing Comments Opposing Granting the Variance

At hearing, the Board received 42 public comments objecting to granting the variance petition. *See* Attachment B – Hearing Commenters Opposing Requested Variance.

A number of environmental groups presented comments at the hearing, including the Sierra Club (Tr. at 122, 178, 180, 186, 271, 276), the Illinois Environmental Council (*id.* at 307), Prairie Rivers Network (*id.* at 302), the Heart of Illinois Sierra Club (*id.* at 165), the Citizens Climate Lobby (*id.* at 197), and ELPC (*id.* at 317, 321). The Board also heard statements from representatives of health groups, including RHA (*id.* at 309) and the American Lung Association (*id.* at 99).

The Citizens Groups Representatives. The Citizens Groups were represented at hearing by members of Sierra Club (*id.* at 122, 178, 180, 186, 271, 276), RHA (*id.* at 97), and ELPC (*id.* at 317, 321).

Teri Treacy, representing Sierra Club, stated that in a place like Joppa, air quality should be "great," but it is not because the "unscrubbed Joppa plant is polluting [the] air with sulfur dioxide and other pollutants." Tr. at 122. Ms. Treacy claimed that in the seven years since the MPS was adopted, the Joppa plant has emitted 182,000 tons of SO₂. *Id.* at 122-23. Under the proposed variance, Ms. Treacy continued, the Joppa station would emit an additional 182,000 tons of SO₂, over 3,900 tons of NO_x, over 230 pounds of mercury and fine PM that the "low income communities of southern Illinois must breathe." *Id.* at 123. Ms. Treacy also noted that Dynegey knew about the MPS and compliance problems associated with an "aging fleet" of coal-fired plants when it agreed to acquire the plants and is seeking a variance before the deal has even closed. *Id.* Ms. Treacy added that Joppa plant employees are not to blame for pollution from the plant and that their livelihoods "must be secured when it is retired." *Id.* at 124. Ms. Treacy called on Dynegey to "ensure that this transition is done the right way," and urged the Board to deny a variance. *Id.*

Joyce Blumenshine, chair of the Heart of Illinois Sierra Club, expressed concern over the potential issuance of a variance to "a company that does not yet own the plants," which, she noted, could set a "disturbing precedent" of "questionable legality." Tr. at 166. Second, Ms.

Blumenshine pointed to “site specific impacts, harmful impacts to areas like Peoria,” which she claimed has “wors[e] SO₂ pollution” than Chicago and St. Louis. *Id.* In addition, Ms. Blumenshine stated that the industry knew “regulations were coming” in 2006, and that Dynegy is financially able “to do the right thing” for the environment. *Id.* at 167. Ms. Blumenshine stated that, at a minimum, Dynegy should be obligated to adhere to a timeline and “benchmarks to meet compliance” to ensure they invest in the plants and do “not mislead everyone,” “drop a plant,” or lay off employees. *Id.* Ms. Blumenshine advocated a “just transition for the workers, a fair future for the environment and those of us who breathe the air.” *Id.* at 168.

Brian Urbaszewski, RHA’s director of environmental health programs, characterized the MPS as setting “strong and comprehensive emission rate reduction requirements” rather than “emission totals.” Tr. at 309-10. Given that air pollution can “damage lung tissue” and exacerbate lung disease, Mr. Urbaszewski underscored RHA’s interest “in seeing the lowest possible SO₂ and NO_x emission rates be a part of the state air pollution prevention rule.” *Id.* at 310. Mr. Urbaszewski noted that for asthma sufferers, higher levels of air pollution mean increased need for medication, doctor and emergency room visits, and hospitalizations. *Id.* Mr. Urbaszewski emphasized that asthma rates in Illinois are “significantly above” the national average, and air pollution from power plants also increases the rate of heart attacks, strokes, and premature deaths. *Id.* According to Mr. Urbaszewski, “[h]undreds of people in Illinois die every year from what comes out of coal power plant stacks.” *Id.* Despite the “strong MPS standards in 2006,” Mr. Urbaszewski added, “the need for tighter SO₂ emission limits has only gotten stronger.” *Id.*

Mr. Urbaszewski pointed out that USEPA has set a “tighter [SO₂] air quality standard” and has designated one of the plants as “causing unhealthy air quality” and “contributing to the violation of its health standard in the Pekin area.” Tr. at 312. Mr. Urbaszewski added that USEPA “most definitely disagrees” with “Dynegy’s technical consultants’ claims that breathing SO₂ does not cause respiratory problems.” *Id.* at 313. While he acknowledged “a lack of clarity on why individuals get or develop asthma,” Mr. Urbaszewski insisted USEPA has concluded that SO₂ exposure poses risks to individuals afflicted with a respiratory illness. *Id.* at 313-14. Mr. Urbaszewski further stated that USEPA has recognized that the available evidence indicates an “independent effect of SO₂ on respiratory morbidity.” *Id.* at 314. USEPA, Mr. Urbaszewski added, found it necessary to provide increased public health protection for at-risk populations against respiratory health effects of short-term SO₂ exposure. *Id.* at 315. Mr. Urbaszewski also noted that USEPA has tightened the PM_{2.5} health standard, and that state data showed violations of that standard. Tr. at 315. Because coal-fired power plants are the largest sources of PM_{2.5}-forming pollution, Mr. Urbaszewski added, further reductions to SO₂ and NO_x emissions will be required. *Id.*

Mr. Urbaszewski insisted that Dynegy is “simply attempting to browbeat” the public and shift the public health burden to Illinois residents away from Dynegy shareholders, “where it belongs . . .” Tr. at 316. Mr. Urbaszewski warned that granting the variance would set an “awful policy precedent that would open the floodgates for other corporate attempts at environmental extortion that would only further erode public health and safety.” *Id.* at 316-17.

Faith Bugel, appearing on behalf of ELPC, remarked that Ameren has twice “already asked this Board” to choose between avoiding job losses on the one hand and preventing adverse health effects on the other. *Id.* Ms. Bugel explained that the first time was in 2009, and the second, last year, when granting the variance was “supposed to allow the plants to stay open,” a claim that some disputed then, too. *Id.* at 319. Ms. Bugel questioned whether, if the Board grants the variance, Dynegy or Ameren will “be back” in a year claiming it “needs yet another variance to keep the plants open.” *Id.* She also asked “how many times” the Board will be called upon to “bail out what appears to be a failing industry,” whose problems the Board may not be able to fix. *Id.* at 319-20. Ms. Bugel also asserted that any hardship from Dynegy’s “voluntary” business decision to acquire the plants is self-imposed. *Id.* at 320-21. Ms. Bugel asserted that Dynegy has “created an undercapitalized or uncapitalized independent subsidiary” for the express “purpose of holding these plants.” *Id.* at 320. Ms. Bugel added that Dynegy has thus positioned itself to “get all the profits” if the venture succeeds but bear none of the risks if it fails, which Illinois’ citizens will instead bear. *Id.* at 320-21.

Andrew Armstrong, also appearing on behalf of ELPC, contended that petitioners have not provided “an honest accounting on both sides of the ledger.” Tr. at 322. Mr. Armstrong stated that “[o]perating an unscrubbed coal plant without modern pollution controls” threatens public health. *Id.* Mr. Armstrong noted that Mr. Klafka’s modeling analyses demonstrate that permitted and actual emissions from the “unscrubbed plants” caused exceedances of the 1-hour SO₂ NAAQS. *Id.* at 323. Mr. Armstrong added that “throughout the Board’s history” air quality monitoring that shows a violation of the NAAQS “has been a touchstone of a negative public health impact.” *Id.* On the “economic side of the ledger,” Mr. Armstrong stated that ELPC is “raising the same concerns . . . about the financial feasibility” of the compliance plan as it did in PCB 12-126. *Id.* at 324-25. Mr. Armstrong asserted that he had been told “Dynegy has already distributed 35 prospective layoff notices” at one of the plants, and questioned whether analyses of economic impact and community impact took into account planned layoffs at the MPS plants upon IPH’s purchase of them. *Id.* at 326. Mr. Armstrong also questioned whether Dynegy intends to pay the full amount of property taxes owed on the MPS plants or will instead argue that their valuation should be reduced because “Dynegy . . . paid zero dollars” for the plants. *Id.* Mr. Armstrong closed by urging the Board to “send a consistent message” that “if you do business in Illinois, you should follow Illinois law,” in this case, the law Dynegy “helped negotiate” and defended in opposing Midwest Generation’s recent variance request. *Id.*

Other Organizations and Individuals. The Board received comments at hearing opposing granting the variance request from a number of other organizations and individuals.

Michael Beyer, President and CEO of Foresight Energy, LLC (Foresight), the owner and operator of four large Illinois underground coal mines, stated that Illinois power consumers spend “hundreds of millions of dollars” paying for coal from Wyoming because the 1990 CAA amendments “created a market for their coal” in Illinois. Tr. at 162. Mr. Beyer added that Foresight currently sells more coal to Indiana and China than to Illinois merchant generators, a situation he proposed to change. *Id.* Mr. Beyer added that transporting Wyoming coal to Illinois power plants results in over 1,100 miles worth of carbon emissions per trainload, on top of the higher SO₂ emissions under the proposed variance. *Id.* at 163. Mr. Beyer asserted that to avoid

these problems the Board should deny the variance and IPH should install scrubbers on the Newton station so that it can burn Illinois coal. *Id.*

Specifically, Mr. Beyer proposed that Foresight “provide the funding for the scrubber at Newton and recoup the investment with an embedded cost in the coal price with a long-term coal supply agreement.” Tr. at 163. Mr. Beyer added that Foresight’s analysis showed that even with this embedded cost, the delivery cost of Foresight’s coal “should be lower” than that of “imported Wyoming coal.” *Id.* at 164. Alternatively, Mr. Beyer continued, Foresight could acquire the active MPS plants and “construct the scrubbers” itself. *Id.* at 164. Either way, according to Mr. Beyer, his proposed solution would keep the MPS plants open, support job growth in the Illinois coal industry, “advance the cause of cleaner air,” and lower power prices in Illinois. *Id.*

Other commenters emphasized there is no guarantee that granting the variance would save jobs, at least more than temporarily, and that fostering a clean energy economy instead would create new jobs. *See, e.g.*, Tr. at 169-70, 176, 183-84, 188, 198-99. Patty Rhykus stated that “[a]ny company with the intent of purchasing and operating a fleet of antiquated coal-fired power plants needs to bring more to the table upfront.” *Id.* at 194. Many commenters were aware of the financial implications that the plants and their employees were facing. *See, e.g., id.* at 124, 168, 187-88, 196.

However, commenters also focused on the health effects of exposure to higher levels of SO₂, contending that granting the variance would have an increased impact on health throughout Illinois. *See, e.g.*, Tr. at 122-23, 166, 188, 252-53. Dan Dolan-Laughlin, a lung transplant recipient, pointed out that “air pollution is a major trigger for asthma attacks” and asserted that a variance would cause “irreparable harm . . . far greater” than any “possible benefit to Dynegy’s corporate shareholders in Texas.” *Id.* at 101. Bob Jorgensen wants to “increase [the] odds of seeing [his] grandchildren graduate from college to be healthy, nonasthmatic, [and] productive” citizens. *Id.* at 191-92. Alyssa McMillen stated that the Board should not grant a variance that would “cause an estimated 2,000 asthma attacks and 125 premature deaths.” *Id.* at 254.

Commenters also raised concerns that Dynegy has chosen not to bring the MPS plants into compliance and is putting profits before public health. *See, e.g.*, Tr. at 167, 252. Amy Allen asserted that Dynegy has a “toxic legacy in Illinois” because of contamination of the Middle Fork River from coal ash generated by its closed Vermilion power plant. *Id.* at 185. Drew O’Bryan questioned why the Board would “provide concessions to a dying industry and look back instead of looking forward” for future generations. *Id.* at 168-69. Nels Leutwiler stated that the Board’s role is to enforce environmental laws, not to “preserve the jobs of those industries that violate these laws.” *Id.* at 176.

Traci Barkley, appearing on behalf of Prairie Rivers Network, contended that IPH’s request is improper because IPH does not own any of the plants, and that granting a variance would provide a model for “how to structure acquisitions to avoid environmental compliance costs under the guise of financial hardship.” Tr. at 304. Ms. Barkley also questioned how IPH will be able to comply with future environmental regulations such as “the recently introduced federal power plant wastewater rules, ELG rules, and greenhouse gas regulations set to be

proposed in 2014.” *Id.* Ms. Barkley further expressed concern over Dynegy’s and some AER plants’ noncompliance with existing standards, citing the coal ash contamination from the Vermillion plant and similar issues at the Duck Creek and Newton plants. *Id.* at 304-05.

Ms. Barkley also maintained that Dynegy failed to demonstrate that “installing scrubbers is technically infeasible and economically unreasonable,” and that IPH “hasn’t even committed to a definite plan” to ensure MPS compliance. Tr. at 306. And, Ms. Barkley continued, “Dynegy’s plan to finish installing scrubbers is based on a speculative improvement in the market for coal generation.” *Id.* Ms. Barkley characterized the variance request as an attempt to secure public subsidization of Dynegy’s “profit-seeking,” with local residents bearing the burden of increased pollution levels. Ms. Barkley also noted that Dynegy has installed scrubbers at some of its other generating stations and argued “against the variance to be approved for Ameren” last year. *Id.*

Tamika Gibson, appearing on behalf of the Illinois Environmental Council, asserted Dynegy “has a history of slash and burn tactics that have hurt workers and left communities in debt.” Tr. at 308. Ms. Gibson noted that the Agency has cited Dynegy “major toxic coal ash contamination issues” at its closed Vermillion plant. *Id.* Ms. Gibson further claimed that “state air quality would be better if Dynegy is required to install pollution controls by 2015 instead of by 2020.” *Id.* at 309. Ms. Gibson concluded that Dynegy reached the agreement with Ameren “with eyes wide open, and any financial hardship they are claiming as a result of having to install proper pollution controls is self-inflicted.” *Id.*

FILED PUBLIC COMMENTS

Comments Filed on or Before September 24, 2013

In addition to the 148 oral public comments during the hearing, the Board received 5,667 written public comments prior to the deadline for such comments on September 24, 2013.⁴ These public comments have been made available on the Board’s website.

Public Comments in Support of Petitioners’ Variance Request

The Board received 2,366 written public comments in support of granting petitioners’ variance request. These include comments filed by: State Representatives Norine K. Hammond, 93rd District (PC#1), Jerry F. Costello II, 116th District (PC#4), David B. Reis, 109th District (PC#6), Pam Roth, 75th District (PC#8), Dan Beiser, 111th District (PC#15), Brad Halbrook, 110th District (PC#19), Jay Hoffman, 113th District (PC#22), Louis I. Lang, 16th District (PC#26), Charlie Meier, 108th District (PC#29), Brandon W. Phelps, 118th District (PC#30 and 2335), Raymond Poe, 99th District (PC#31), Wayne A. Rosenthal, 95th District (PC#33), Michael Unes, 91st District (PC#3 and 2334), C.D. Davidsmeyer, 100th District (PC#38), John D. Cavalletto, 107th District (PC#53), and Michael W. Tryon, 66th District (PC#80); and by State Senators Dale A. Righter, 55th District (PC#5 and 2333), Wm. Sam McCann, 50th District (PC#12), James F. Clayborne, Jr., 57th District (PC#16), Gary Forby, 59th District (PC#17),

⁴ The Board notes that three public comments (PC#5647, PC#5648, and PC#5649) were erroneously included.

William R. Haine, 56th District (PC#18), Mike Jacobs, 36th District (PC#24), David Koehler, 46th District (PC#25), David Luechtefeld, 58th District (PC#27), Andy Manar, 48th District (PC#28 and PC#3163), Sue Rezin, 38th District (PC#32), John Sullivan, 47th District (PC#35), and Darin LaHood, 37th District (PC#47). The Board also received a joint comment filed by United States Congressmen John Shimkus, Aaron Schock, Rodney Davis, William Enyart, and Adam Kinzinger (PC#42).

The Board received public comments from the Mayors of Joppa (PC#2), Metropolis (PC#3), Effingham (PC#7), Peoria (PC#13), Pekin (PC#14), Spring Valley (PC#51), Hennepin (PC#71), Havana (PC#82), Robinson (PC#85), Newton (PC#92), and Baldwin (PC#108). Additionally, the Board received public comments in support of granting the variance request from a number of other public offices, *e.g.*, the Jasper County Board (PC#94), the Putnam County Board (PC#95), and the Peoria County Board (PC#111).

The Board also received comments in support from various trade and union organizations (*see, e.g.*, PC#9, PC#39), businesses (*see, e.g.*, PCB#61, PCB#103), and numerous individuals (*see, e.g.*, PC#10, PC#5667).

Commenters generally noted the benefits of property taxes and well-paying jobs at the plants (*see, e.g.*, PC#17), and other economic benefits that the plants provide to local communities and institutions (*see, e.g.*, PC#54). Commenters emphasized that the Board granted AER's variance petition in September 2012, that IPH is seeking similar relief and will comply with the conditions in the prior variance, and that denial of a variance would create uncertainty about the plants' future. *See, e.g.*, PC#54. Commenters also stressed that

A vibrant employer climate is essential for the residents in our communities, and even the prospect of potential shutdowns would stifle economic growth and development in Central and Southern Illinois. A successful transfer of the plants to IPH offers the best opportunity for the workers, their families and for our communities, a stable tax base that provides critical support for our local schools, emergency response organizations and countless local governments. PC#27.

The Board also received a number of letters in support of the variance stating that Dynegy "has stepped up" to support jobs and economic activity, and that Dynegy is a "responsible neighbor and major employer" that plans to double its operations and investment in Illinois through the IPH-Ameren transaction. *E.g.*, PC#70.

Public Comments Opposing Petitioners' Variance Request

The Board received 3,310 written public comments opposing granting the variance request.⁵ These include a post-hearing comment filed by the Citizens Groups (PC#2337). The Board also received the Johnson and Klafka written statements summarized above (PC#3162a

⁵ Like the filed comments supporting the requested variance, the written comments opposing a variance include submissions signed by more than one individual. For example, PC#114, submitted through the Sierra Club, is a petition signed by 4,518 people.

and PC#113, respectively), as well as comments from Foresight (PC#2000), and concerned individuals (*see, e.g.*, PC#688).

Commenters generally noted the adverse health impacts of air pollution and stated that the MPS plants should not be permitted not to comply with the law for five years. *See, e.g.* PC#617. Commenters asserted that petitioners should not be allowed to “put[] the State of Illinois in the position” of having to choose between “supporting corporations to provide workers jobs” and looking after the “health of those same workers, their families and their neighbors.” PC#5666. Other commenters contended that

[i]f the out of state corporate powers don’t want to hire people to clean up emissions from these plants, then others should be found who will run the plants properly. Capitalism says that a profit should be made, but these corporations demand that they be permitted to maximize their profit by despoiling the commons. PC#5670.

Commenters also emphasized that Dynegy can afford to “clean up” the plants if it wanted to, and that any claimed hardship is self-imposed. *See, e.g.*, PC#5669. Commenters urged the Board to take responsibility for the plants’ future by denying the requested variance. *See, e.g.*, PC#5666.

Foresight Proposal (PC#2000)

Foresight’s filed comment reiterates Mr. Beyer’s hearing comment that the variance should be denied because Foresight can fund timely completion of the Newton FGD project. PC#2000 at 1. Alternatively, Foresight repeats that it could acquire the plants and install the Newton FGDs itself. *Id.* Foresight believes that the Newton plant, with the scrubbers that are being installed, would produce lower SO₂ emissions from burning Illinois coal (supplied by Foresight) than from burning PRB coal without the scrubbers. *Id.* at 1-2. Installing the Newton scrubbers and switching to Illinois coal at the Coffeen, Duck Creek, and Newton stations, according to Foresight, would increase demand for Illinois coal by over 8 million tons annually and create 900 coal-mining jobs and 2,700 related jobs. *Id.* at 2.

Foresight also asserts that switching to Illinois coal would benefit the environment because it would eliminate greenhouse gas emissions required to transport the PRB coal to Illinois. PC#2000 at 2. In addition, Foresight maintains, Illinois coal is mined underground rather than in deep surface mines, as it is in the PRB, so the “large diesel trucks and shovels” required for underground mining are not needed to mine Illinois coal, further reducing carbon emissions. *Id.*

Over time, Foresight adds, using Illinois coal could also lower electricity costs for consumers. PC#2000 at 2. Wyoming coal has a lower heat content than Illinois coal, according to Foresight, so the “delivered cost” of Wyoming coal is actually higher than that of Illinois coal. *Id.* Foresight claims that for this reason, it can fund completion of the Newton plant scrubber, by “embedd[ing]” the cost in a long-term supply contract for Illinois coal, at an “attractive” price compared to that of PRB coal. *Id.* PRB coal also exposes electricity consumers to “single state

coal source risk,” which can be avoided if the Newton FGDs are installed, allowing for coal to be procured from “numerous” coal producing regions rather than just one. *Id.* at 2-3.

Foresight dismisses Dynegy’s claim that switching the MPS plants to Illinois coal is not feasible operationally or financially, asserting the plants were “designed to burn Illinois coal” and did so “almost exclusively” prior to the 1990 CAA amendments. PC#2000 at 3. In addition, Foresight asserts that although Dynegy has maintained that a test of Illinois coal at the Coffeen plant failed, resulting in “costly repairs,” the test was small and flawed and did not take place at the Newton station, “where the scrubber is proposed.” *Id.*

As to financial obstacles, Foresight contends that because Dynegy did not issue any “widespread” requests for proposal for “coal or transportation,” it is impossible to know the cost of “various solutions.” PC#2000 at 3. In addition, according to Foresight, while Dynegy asserted that existing rail transportation agreements make switching to Illinois coal expensive, Dynegy could “negotiate an assignment” to another power plant, “require Ameren to retain the contract,” or “embed the [contractual] liquidated damages” in a new contract with Foresight. *Id.* The “best solution” for the MPS plants, the Illinois coal industry, the environment, and power consumers, is to deny the requested variance, Foresight concludes. *Id.*

Comments Filed After September 24, 2013

The Board received nine public comments following the public comment filing deadline, which have been made available on the Board’s website. All but one of these comments oppose the request.

PETITIONERS’ RESPONSE TO FORESIGHT PROPOSAL

Petitioners have examined and respond in their respective briefs to Foresight’s proposals to fund completion of the Newton FGD project without a variance, or, alternatively, to acquire the MPS plants and install the Newton FGDs itself. Although Foresight characterizes its proposal as “win-win” for Illinois, the Illinois coal industry, and the MPS Group, petitioners assert that the proposal is not a viable compliance alternative. Petitioners cite operational, environmental, commercial, and financial reasons, each of which is discussed below. Pet. Br. at 34-35; AER Br. at 12-13.

Petitioners point out that the Newton FGD project will take approximately two years to complete, even without considering delays needed to redesign the scrubber system to use Illinois coal. According to petitioners, this delay would mean that the MPS Group would not be able to meet the 2015 MPS SO₂ rate and therefore the E.D. Edwards and Joppa stations would need to be shut down for all or part of 2015, *i.e.*, until the Newton FGD project is complete and operational. Even when the Newton FGD project is complete, petitioners continue, Foresight’s proposal to use Illinois coal at the Newton, Coffeen, and Duck Creek plants would require the shutdown or significant curtailment of either or both the E.D. Edwards and Joppa stations. Pet. Br. at 35; Pet. Exh. 3 at 15.

Petitioners explain that Illinois coal has a higher sulfur content (6.3 lbs/mmBtu based upon an assumed heat content of 10,800 Btu/lb) than the low sulfur coal petitioners plan to use (1.3 lb/mmBtu). Petitioners point out that burning Illinois coal would produce nearly five times the amount of SO₂ and that the current configuration of the Newton FGD does not contemplate using higher sulfur Illinois coal. According to petitioners, the Newton FGD would be rated for 98% SO₂ removal using low sulfur coal, but would have only a 20% SO₂ removal rate with Illinois coal. Petitioners maintain that to achieve a 98% removal rate with Illinois coal, the Newton scrubber system would need to be significantly modified, including the addition of

two complete absorber vessels (including agitators, slurry nozzles, mist eliminators, jet air spargers, absorber bleed pumps, absorber transfer pumps, emergency quench system, outlet hoods, and associated piping and electrical); a new absorber building (including recycle pumps and motors, and associated piping, valves, and electrical); booster fans; additional ductwork with modifications to existing ductwork; oxidation air blowers; gypsum slurry feed pumps; expansion of the existing dewatering system (including belt filters, and vacuum pumps); additional limestone storage tanks with associated equipment (including rotary feeders, limestone conveying blowers, limestone feed screw pumps, and air compressors); an additional gypsum storage tank; water treatment facility; new electrical building including all switchgear; transformers; and new power feed from the switchyard; miscellaneous valves; and modifications to the distributed control system control logic; and additional landfill gypsum storage. AER Br. at 15-16.

Petitioners estimate that the cost for constructing the towers would be \$150 million, plus the costs of materials and operations (*e.g.*, limestone storage systems, gypsum handling and disposal). Petitioners also state that even if the reconfiguration were undertaken, there would be costs associated with escalating engineering design and construction to meet the 2015 MPS compliance date. Pet. Br. at 35-36; Pet. Br. Exh. 3 at 6-7. AER states that under the existing scrubber design, the Newton FGD project is 59.3% complete, with engineering 90.5% complete. AER estimates that with the changes needed to accommodate Illinois coal, Newton FGD project costs would approach over \$1 billion. AER Br. at 13-16.

Petitioners note that although they were originally designed to operate on bituminous coal, the boilers at the Coffeen, Newton, and Duck Creek stations have undergone equipment changes to burn low sulfur coal. These changes, along with scrubber installations at the Duck Creek and Coffeen plants, have contributed to an 87% decline in SO₂ emissions from AER's fleet since 1990. Petitioners state that to use Illinois coal, the boilers would require lengthy outages and significant upfront capital. Plus, the scrubbers at these three plants would require larger quantities of limestone to remove the higher sulfur content, resulting in increased expenses for annual operations and maintenance, according to petitioners. Pet. Br. at 36-37; Pet Br. Exh. 3 at 7, 9; AER Br. at 14.

From an environmental perspective, AER examined the impact that converting to Illinois coal would have on NO_x emissions at the Newton facility. Using low sulfur coal, the Newton Energy Center's NO_x emission rate is typically 0.10 lb/mmBtu, according to AER. However,

when Newton Unit 1 used Illinois coal from 1994 to 1997, continues AER, the NO_x emission rate was approximately 0.30 lbs/mmBtu. AER states that even optimizing the existing pollution control equipment across the MPS fleet would only bring the NO_x emission rate down to about 0.133lb/mmBtu. That emissions rate, AER continues, is inadequate to maintain compliance with the MPS, absent a regulatory change or installation of NO_x control equipment at either the Joppa or Newton station. According to AER, based upon early estimates for an SCR system, such control equipment would cost in excess of \$150 million, plus \$20 million and a two-month outage per unit to modify the low NO_x burners. AER Br. at 16-17.

Petitioners state that from a commercial perspective, under current market conditions, the delivered low sulfur PRB coal is cheaper than Illinois coal, even with the additional costs of transportation and delivery. According to petitioners, Illinois coal would cost about 20% or \$4.13 per megawatt hour more than the low sulfur coal. Pet. Br. at 37; Pet. Br. Exh. 3 at 11, 14.

Financially, petitioners represent, they are obligated under several coal-supply contracts for low sulfur PRB coal, as well as multi-year rail agreements for transport. Petitioners assert that these contracts and agreements would need to be terminated to accept Foresight's proposal, which would result in petitioners' incurring significant financial penalties. Additionally, according to petitioners, Foresight's proposal to fund the Newton FGD project would amount to a loan to GENCO. GENCO already has debt covenants that prohibit additional borrowing, continue petitioners, so accepting Foresight's proposal would put GENCO into default. Pet. Br. at 37 & Exh. 3 at 10, 13. Petitioners further state that AER and IPH entered into a formal transaction agreement, and to negotiate with third parties now would breach that agreement. AER states that the agreement came about after three months of negotiation, following Ameren's decision to exit the merchant business, and Foresight did not indicate any desire to begin formal negotiations with AER during that time. AER Br. at 13.

BOARD ANALYSIS AND 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). Petitioners seek relief from the requirements in Sections 225.233(e)(3)(C)(iii) and (iv) to comply with an overall SO₂ annual emission rate limit of 0.25 lb/mmBtu in 2015 and 2016 and 0.23 lb/mmBtu in 2017 and thereafter. Pet. at 1. Petitioners request a variance for five years beginning January 1, 2015 and ending December 31, 2019 from Section 225.233(e)(3)(C)(iii) for the overall SO₂ annual emission rate limit of 0.25 lb/mmBtu and a variance for three years beginning January 1, 2017 and ending December 31, 2019 from Section 233.255(e)(3)(C)(iv) for the overall SO₂ annual emission rate limit of 0.23 lb/mmBtu. *Id.*

To obtain a variance, petitioners must establish that the hardship from denying the variance from Sections 225.233(e)(3)(C)(iii) and (iv) "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 petitioners only show 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 will analyze the injury to the public and the environment from granting the requested variance, the hardship to petitioners from compliance with the rule, and weigh the hardship against the injury to determine whether petitioners have demonstrated that they would suffer an arbitrary or unreasonable hardship if the variance is not granted.

As discussed below, the Board finds, as a threshold matter, that petitioners are eligible to receive a variance. Next, the Board turns to the merits and finds that petitioners have adequately addressed their alternatives for complying with the current MPS requirements; that petitioners have demonstrated that the requested variance will result in a net benefit to the environment; that IPH would suffer an arbitrary or unreasonable hardship if forced to comply with the deadlines in Sections 225.233(e)(3)(C)(iii) and (iv); that granting petitioners’ petition for variance with the conditions in the order below would be within the State’s current obligation under the Illinois SIP to attain and maintain compliance with the NAAQS; that granting petitioners a variance from the rule is consistent with federal law; and that petitioners’ compliance plan is sufficiently definite to support granting the variance.

Petitioners’ Eligibility for Variance Relief

The Citizens Groups claim IPH and Medina Valley are ineligible to receive variances because they do not own plants subject to the MPS. Obj. at 2, citing Ensign-Bickford Co., PCB 02-159 (Apr. 3, 2003); Ameren Energy Resources, PCB 12-126, slip op. at 10-11 (June 6, 2013). The Citizens Groups argue that under the Board’s procedural rules, only persons to whom a regulation, requirement or Board order “*would otherwise be applicable*” may petition for a variance. *Id.* at 3-4, citing 35 Ill. Adm. Code 104.202(a) (emphasis added); 35 Ill. Adm. Code 104.230(d) (variance petition is subject to dismissal if Board finds “the petitioner is not subject to the rule or regulation, requirement, or order of the Board at issue”). Further, the Citizens Groups contend, reaching the merits of the petition would amount to an improper advisory opinion. *Id.* This is because, according to the Citizens Groups, IPH and Medina Valley will not come to own the MPS Group unless FERC approves transfer of the plants and the IPH-Ameren transaction actually closes. *Id.* at 4; PC#2337 at 20 n.13.

At the outset, the Board notes that, as petitioners state, FERC approved the transfer of the MPS plants to IPH and Medina Valley on October 11, 2013. Pet. Mot. at 2, citing Order Authorizing Disposition of Jurisdictional Facilities and Acquisition of Securities, EC13-93-00 (FERC Oct. 11, 2013). Nonetheless, the question remains whether the Board has authority to rule on the petition given that IPH and Medina Valley do not yet own any generating stations in the MPS Group.

The Citizens Groups do not address the Board’s authority under the Act, but its provisions are controlling because the Board is a creature of statute, *i.e.*, the Act. *See, e.g.*, Granite City Division of National Steel Co. v. PCB, 155 Ill. 2d 149, 171, 613 N.E.2d 719, 729 (1993). Title IX of the Act (415 ILCS 5/35-38 (2012)) governs variances and specifies the process for resolving variance petitions. As noted above, Section 35(a) of the Act authorizes the

Board to grant a variance upon finding that compliance with a regulation or Board order “would impose an arbitrary or unreasonable hardship.” 415 ILCS 5/35(a). The Board finds nothing in this enabling provision that limits the Board’s authority to entertain a variance based on the identity of the petitioner, and specifically, whether the petitioner owns or operates the facility at issue. Rather, Section 35(a) limits the scope of the Board’s authority to *grant* a variance to instances in which an arbitrary or unreasonable hardship has been shown. As for other relevant provisions of the Act, Section 37(a) sets out the filing and notice procedures “any person seeking a variance” under Section 35(a) must follow. *Id.* at 5/37(a). Neither this nor any other section of Title IX expressly limits the class of persons who may apply for, and, on a proper showing of hardship, obtain a variance.

The question accordingly becomes whether the Board has imposed its own limits on the persons who may seek a variance. Section 104.202(a) of the Board’s procedural rules, on which the Citizens Groups rely, specifies that any person seeking a variance from a Board regulation, requirement, or order that “would otherwise be applicable to that person” may file a variance petition. 35 Ill. Adm. Code 104.202(a). The Board notes that this provision only recognizes the persons who may petition for variance relief and does not provide that others not identified may under no circumstances do so. Moreover, Section 104.202(a) does not specify *when* the regulation or order at issue must “otherwise be applicable” for a person to be eligible to apply for a variance. Accordingly, the Board finds that the regulation does not expressly bar variance petitions from persons in petitioners’ situation here.

Similarly, Section 104.230(d) of the Board’s procedural rules (35 Ill. Adm. Code 104.230(d)) does not specify the period when a petitioner must be “subject to” the regulation for its petition to survive dismissal. Of course, there may be sound reasons in particular cases to dismiss a variance petition where the petitioner is not reasonably expected to become subject to a Board regulation or order within some period. The Board retains discretion to determine which cases fall within a reasonable range, and need not delineate the limit in this case. But the Board does not read Section 104.230(d) as a limit on the Board’s authority to entertain any petition. Construing the rule otherwise would be inconsistent with the lack of a statutory provision expressly limiting that authority.

Further the Board finds that neither the Board’s June 6, 2013 order in PCB 12-126 nor Ensign-Bickford holds that the Board lacks authority to reach the merits in this case. In both cases, the parties sought a transfer of a variance from the original grantee to the grantee’s prospective successor in interest as owner or operator of the facility to which the variance applied. In PCB 12-126, the Board denied the motion to substitute IPH for AER as variance grantee because, the Board concluded,

[t]he Board’s [prior] finding [of an arbitrary or unreasonable hardship] was based on specific evidence presented by AER in its petition, other filings, and testimony at hearing. The Board’s arbitrary or unreasonable hardship finding is specific to AER based on the evidence AER presented. The Board is not persuaded that, as movants request, IPH can be substituted for AER in AER’s variance proceeding. For IPH to obtain a variance, IPH must file a petition and demonstrate that IPH’s

compliance with [the MPS] would impose an arbitrary or unreasonable hardship on IPH. Ameren Energy Resources, PCB 12-126, slip op. at 10 (June 6, 2013).

The problem in PCB 12-126 was that transfer of a variance is not contemplated by the Board's procedural rules, and the Act and the Board's rules effectively require a particularized showing of hardship by any person seeking variance relief. The Board did not address in PCB 12-126 whether IPH was eligible to obtain a variance before it actually acquired the active MPS plants—that question was not presented. And the Board stated that IPH could “file a variance petition consistent with Section 104.202(a) of the Board's regulations,” without adding that IPH could not do so until the Ameren transaction closed. Ameren Energy Resources, PCB 12-126, slip op. at 11 (June 6, 2013).

The Board denied the request for a variance transfer in Ensign-Bickford on similar grounds, namely, that the Board's procedural rules do not provide for such relief and variances are granted to specific individuals or entities. *See* Ensign-Bickford, PCB 02-159, slip op. at 2. The Board stated that the Board's

procedural rules do not provide for a third party to seek a variance or have a variance transferred on Dyno Nobel's behalf. If in fact the . . . closing [of the transaction by which Dyno Nobel would operate the facility] occurs, consistent with Section 104.202(a), Dyno Nobel may file a variance petition or other appropriate filing concerning [the] facility. Ensign-Bickford, PCB 02-159, slip op. 2.

It is true that in Ensign-Bickford, unlike in PCB 12-126, the Board gave some indication that Dyno Nobel's entitlement to file its own variance petition was limited by whether and when the closing of the transaction would take place. This was not the holding in that case, however, but was akin to guidance in anticipation of future proceedings. Nor did the Board state that it could not or would not under any circumstances accept a variance petition from Dyno Nobel filed before Dyno Nobel became operator of the facility at issue.

This case, by contrast, does not involve a requested transfer of a variance but a petition for variance. In addition, in Ensign-Bickford, the prospective variance transferee, Dyno Nobel, was not even a party to the motion to transfer; only the original variance grantee, seeking relief on Dyno Nobel's behalf, was. Thus, as petitioners assert, a material impediment to granting the relief requested there was that the prospective variance holder was not even before the Board, such that the Board could ensure Dyno Nobel would assume “the obligations and liabilities” under the variance. Pet. Br. at 9. In this case, the entities that would actually hold the requested variance are parties, along with the current variance holder. The Board finds that all necessary parties are before the Board, and that the Board has authority to reach the merits of the variance petition.

Nevertheless, the Board appreciates the Citizens Groups' precedential concerns about an unqualified eligibility ruling in this case. *See, e.g.*, Obj. at 3-4. The Agency echoes those concerns, asking that the Board's ruling on this issue be “specifically limited to the unique facts of the situation presented.” Agency Rec. at 6 n.2. Consistent with that request, the Board holds

here only that, on this record, petitioners are eligible to apply for and, on a proper showing, obtain a variance. The prospect that IPH and Medina Valley will come to jointly own the MPS Group is not highly contingent or remote, particularly given FERC's recent approval of the plant transfer. As a further assurance against issuance of a variance to entities that may never come to own the facilities at issue, petitioners state they will not execute the certificate of acceptance for the requested variance if the IPH-Ameren transaction does not close. Pet. Second Resp. at 6. In the event that they do not do so, petitioners recognize that AER, as continuing owner of the MPS Group, would remain subject to the variance granted in PCB 12-126. *Id.* This ensures that any variance granted in this case would take effect only if IPH and Medina Valley actually came to own the MPS plants.

In accordance with standard practice, to the extent the proposed variance is granted, the Board requires petitioners, should they choose to accept a variance with conditions, to file the certificate of acceptance within 60 days after the date of this opinion and order. This requirement will ensure that a Board-issued variance would not remain available for months or even years while the IPH-Ameren transaction proceeds to consummation. Under the Board's procedural rules, failure to timely file an executed certificate with the Board and serve the Agency renders the variance void. 35 Ill. Adm. Code 104.240. Moreover, the Board adopts, with a minor modification to the title of the document, petitioners' proposed certificate of acceptance, which requires petitioners to identify the date on which the IPH-Ameren transaction closed before execution of the certificate.

The People and the Citizens Groups further argue Medina Valley is not eligible to petitioner for a variance because it would take ownership only of the shuttered Meredosia and Hutsonville stations. PC#2336 at 3; Obj. at 5; PC#2337 at 18-19. They claim the MPS does not apply to these plants because they were closed in 2011 and have not produced electricity for sale since. PC#2336 at 3; Obj. at 5, citing 35 Ill. Adm. Code 225.130 (defining "EGU" as a boiler or turbine serving a generator that "produces electricity for sale"). They also point out that in the June 6, 2013 order in PCB 12-126, the Board stated that "any new variance request that omits these two [shuttered] facilities could not be subject to the same analysis" but would require a new analysis specifically related to the five facilities in the requested variance. Ameren Energy Resources, PCB 12-126, slip op. at 11 (June 6, 2013).

The Board is not persuaded that Medina Valley, as petitioner along with IPH, is ineligible to apply for and receive a variance. As the Board noted in PCB 12-126, the "AER MPS Group includes seven facilities, including Meredosia and Hutsonville," and the annual SO₂ emission rates in the MPS apply to "all facilities" in the MPS Group. Ameren Energy Resources, PCB 12-126, slip op. at 56 (Sept. 20, 2012). Moreover, the Agency states that the composition of the MPS Group will not change if the Board grants the requested variance, and also describes as "system-wide" the MPS annual SO₂ emission rates. Agency Rec. at 4. This is consistent with the history of Ameren's decision to opt in to the Ameren MPS Group Multi-Pollutant Standard (*see* 35 Ill. Adm. Code 225.233(e)(3)), which made the MPS applicable to the "Ameren MPS Group as described in the notice of intent Ameren submitted to opt in to the MPS" (35 Ill. Adm. Code 225.233(e)(3)(A)). Ameren's notice of intent, filed in 2007, included the Meredosia and Hutsonville stations in addition to AER's five other coal-fired plants. Ameren Energy Generating Co. v. IEPA, PCB 09-21, Pet. at 6-7 n.7 & Exh. 2 (Oct. 1, 2008).

In addition, the MPS makes clear that once an owner has opted in an EGU, the EGU is subject to the MPS unless the unit is “scheduled for permanent shutdown that the owner so designates in its CAAPP permit application” 35 Ill. Adm. Code 225.233(a)(3)(B). No party or commenter suggests Ameren has taken steps to exclude the Meredosia and Hutsonville stations from the MPS. In fact, petitioners represent that both shuttered plants have valid operating permits and could resume operation if the AER variance did not require them to stay closed. Pet. Post. Br. 13-14. Thus, the shuttered plants are permitted to “produce[] electricity for sale,” even if they currently are not in operation. Given that all seven Ameren plants are currently part of the MPS Group, the Board finds that all seven plants are eligible for variance relief, on a proper showing.

As in PCB 12-126, absent a contrary variance condition, IPH and Medina Valley could re-start the Meredosia and Hutsonville plants, as no regulatory provision requires them to remain closed. The Board finds that, as the plants’ prospective owner, Medina Valley is a necessary party. And because the proposed variance includes the Meredosia and Hutsonville stations, the Board’s observation in PCB 12-126 that a variance petition omitting these facilities would be subject to a “new analysis” is inapplicable here.

Relatedly, the Board finds that SO₂ emission reductions achieved through continuing to not operate the Meredosia and Hutsonville stations are properly credited to the variance here. The Board noted in PCB 12-126 that the MPS “does not restrict the AER MPS Group from employing any specific method to reach the required emission rates.” Ameren Energy Resources, PCB 12-126, slip op. at 56 (Sept. 20, 2012). And the Board has previously permitted another owner of coal-fired generating plants to take emissions credit under a variance for agreeing not to operate one of the plants, even though the owner had already begun dismantling the facility’s stack. See Midwest Generation, LLC v. IEPA, PCB 13-24, slip op. at 79-80 (Apr. 4, 2013).

Compliance Alternatives

Petitioners evaluated several alternatives to comply with the MPS emission rates, including curtailing generation, using low sulfur coal, and converting to natural gas. The Citizens Groups did not raise specific concerns regarding compliance alternatives. The People urge the Board to ensure that petitioners take all necessary steps to minimize the impact of deviating from the MPS. PC#2336 at 6-7.

As detailed below, the Board finds that petitioners have adequately examined compliance alternatives. Further, the Board agrees with petitioners that completing the Newton FGD Project continues to be the most prudent and cost-effective control technology to comply with the MPS. Pet. at 48. The Agency does not question petitioners’ conclusions on the availability of other compliance technologies. Rather, the Agency supports the proposed alternative SO₂ emission rate of 0.35 lb/mmBtu and the proposed compliance plan, along with variance conditions requiring permanent retirement of E.D. Edwards Unit 1, use of low sulfur coal, and optimizing of FGD equipment. Agency Rec. at 29-30. Below, the Board briefly discusses the alternatives considered by petitioners to comply with the MPS.

Curtailing Generation

To meet the MPS SO₂ emission rates, petitioners considered reducing power ratings (*i.e.*, “derating”) and operating only seasonally. Petitioners state that curtailing operations would not be economically feasible because operating costs would remain the same but revenue would fall. Petitioners claim curtailment would defeat IPH’s ability to generate the financial resources necessary to complete the Newton FGD project according to the schedule imposed in the PCB 12-126 variance. Pet. at 49; Pet. Exh. 8 at 6.

Although curtailing operations is not viable, according to petitioners, petitioners agree to retire E.D. Edwards Unit 1 as soon as MISO allows under the terms of the MOA executed with the Agency. Pet. First Resp. at 3. The Agency states that retiring E.D. Edwards Unit 1 would result in a number of environmental benefits, such as decreasing the intake of cooling water and service water from the Illinois River, eliminating National Pollutant Discharge Elimination System permitted discharges (including thermal discharges) to the Illinois River associated with Unit 1, and reducing emissions for multiple air pollutants (including SO₂, NO_x, carbon monoxide, carbon dioxide, and PM). Agency Rec. at 18; Agency Rec. Exh. 2. To ensure this benefit is realized, the Agency proposes, and petitioners agree to, an additional variance condition requiring the retirement of E.D. Edwards Unit 1 as soon as MISO allows. Agency Rec. at 29-30. The Board includes that condition in the order below.

Low Sulfur Coal

Petitioners state that IPH would continue the use of low sulfur coal (0.55 lbs sulfur/mmBtu) at the E.D. Edwards, Newton, and Joppa stations through December 31, 2019, after which the MPS 2017 SO₂ emission rate would apply. According to petitioners, IPH will inherit AER’s binding contracts to purchase the 0.55 lb/mmBtu low-sulfur coal. To ensure compliance with the SO₂ variance emission rate, however, IPH anticipates that it may also need coal with sulfur content even lower than 0.55 lb/mmBtu. IPH is considering purchasing such PRB coal, which is available from one supplier. Pet. at 22-23, citing Pet. Exh. 8.

IPH emphasizes that it cannot commit to purchasing only this coal with sulfur content less than 0.55 lb/mmBtu because the quantities needed are not yet known, the dependence upon a single supplier carries increased risks, and the acquired operating stations will face financial liquidity challenges. IPH states, however, that it will continue to use 0.55 lb SO₂/mmBtu coal as AER has done. Pet. at 23. To this end, the Agency proposes, and petitioners agree to, a variance condition, one not included in the PCB 12-126 order, requiring use through December 31, 2019 of low sulfur coal (not to exceed 0.55 lb SO₂/mmBtu) at the E.D. Edwards, Joppa, and Newton stations. Agency Rec. at 30.

Natural Gas Conversion

IPH examined AER’s assessment and conducted its own review of using natural gas to comply with the MPS. IPH found that natural gas conversion at the Newton and E.D. Edwards stations would require \$170 million to construct natural gas pipelines to these facilities and then

“tens of millions of dollars” to convert the existing coal-fired boilers. Pet. at 52, citing Pet. Exh. 8. For the Joppa station, IPH estimates that natural gas conversion would cost about \$25 to \$38 million for a 50% to 100% capacity conversion, plus \$4.5 million for improvements in the gas supply pipeline and equipment. *Id.* at 53. IPH represents that it will not have sufficient liquidity to fund any such large-scale capital projects over the next several years.

IPH also considered production levels and revenues associated with natural gas firing as compared to coal. IPH cites the price difference between natural gas and coal, explaining that dispatch and production costs are greater for natural gas than PRB coal. Based upon 2012 power prices, IPH found that during peak days, the Newton station, fired on natural gas, would have been dispatched only 2% of the time. Pet. at 52, citing Pet. Exh. 8. IPH also determined that natural gas conversion at Joppa would reduce operations to a seasonal basis only, resulting in reduced revenue and lost jobs. Additionally, according to IPH, converting the Newton units to natural gas instead of completing the Newton FGD project would “waste the several hundred million [dollars] spent, to date, on the Newton FGD project,” and lead to lower production, reduced revenues to cover capital expenditures and fixed operating costs, and job losses. *Id.* at 52-53; Pet. Exh. 8 at 9-10.

Emissions Control Equipment

IPH reviewed AER’s previous assessment of emissions control equipment and arrived at the same conclusion: alternative technologies for emissions control equipment would cost more than the Newton FGD project and would be infeasible, particularly because the Newton FGD project is already underway. Pet. at 51. Specifically, IPH surveyed other coal-fired plants to estimate potential costs for using DSI at the Joppa and E.D. Edwards stations.

IPH estimates the capital cost of installing DSI at \$60 million for Joppa (all six units) and \$30 million for the E.D. Edwards station (Units 2 and 3). Because DSI would increase PM emissions, petitioners state that the costs of PM control technologies, such as baghouses, must be considered. Petitioners estimate that this additional cost would bring the total to approximately \$433 million at the Joppa station and \$280 million at the E.D. Edwards plant. Beyond these costs, petitioners continue, would be the annual cost of DSI (ranging from \$15 million to \$44 million) and the cost for disposing of the reacted DSI material, which “would not be insignificant.” Pet. Exh. 8 at 9. IPH reiterates that it will not have sufficient liquidity to fund this type of large-scale capital project over the next several years. Pet. at 50-51; Pet. Exh. 8 at 8-9.

Financing

Petitioners also address the prospect of IPH’s seeking financing from Dynegy. In responding to the ACM report claiming that Dynegy has the financial resources to capitalize IPH, Mr. Bilicic, testifying on behalf of petitioners, stated that Dynegy emerged from bankruptcy in 2012. Tr. at 39. Although Dynegy has strengthened its balance sheet after emerging from bankruptcy, Mr. Bilicic continued, its decision against providing financial support to IPH is based upon the need for Dynegy itself to maintain liquidity and its own credit rating during a critical time in its recovery. *Id.* at 40. According to Mr. Bilicic, if Dynegy’s credit were to be

downgraded, Dynegy would face higher interest rates and reduced access to capital. *Id.* at 41. Mr. Bilicic testified that the IPH transaction was therefore structured to provide New AER with sufficient liquidity to fund its own needs over the next several years, including the Newton FGD project. *Id.* at 36-37. Although none of the financial institutions Dynegy contacted were currently willing to extend credit to New AER, Mr. Bilicic concluded, once the market recovers, IPH's prospects of obtaining third-party financing should improve. *Id.* at 42; *see also* Pet. Br. Exh. 2 at 5-6.

Foresight Proposal

As noted above, Foresight proposed to fund completion of the Newton FGD project to timely comply with the MPS and to recoup the investment through an embedded cost in a long-term contract to supply Illinois coal (from Foresight) to the Newton, Duck Creek, and Coffeen Energy Centers. Tr. at 161-63; PC#2000. Foresight alternatively proposed that it "assume Dynegy's role in the proposed acquisition, acquire the assets as structured and construct the scrubbers." Tr. at 164; *see also* PC#2000 Att. A at 2.

Because they arose for the first time at hearing, petitioners' petition did not examine Foresight's proposals as compliance alternatives. In their briefs, however, petitioners counter that Foresight's primary proposal is not a viable compliance alternative for operational, environmental, commercial, and financial reasons, and that its alternative proposal is not a compliance alternative at all.

First, petitioners state that even if Foresight were to fully fund the Newton FGD project, completion would still take approximately two years, not including the extra time needed to redesign the scrubber system to utilize Illinois coal. This would not complete the FGDs in sufficient time to meet the 2015 MPS SO₂ rate. Pet. Br. at 35. Thus, petitioners contend that in order to comply with the MPS, the E.D. Edwards and Joppa Energy Centers would need to be shut down until the Newton FGD project was complete and operational. Even after that, the E.D. Edwards and/or Joppa plants would need to remain shut down or significantly curtailed for the Newton, Coffeen, and Duck Creek plants to use Illinois coal. Pet. Br. at 35 & Exh. 3 at 15.

Petitioners add that, from an operational perspective, the Newton FGD would require significant modifications such that the cost of the new system would approach more than \$1 billion. AER Br. at 13-16. The Board notes that this figure is roughly double the \$500 million estimated cost of the Newton FGD project. Pet. at 24-25; Pet. Exh. 8 at 12-13. Petitioners point out that even though, as Foresight asserts, the boilers were originally designed to utilize bituminous coal, the boilers at the Coffeen, Newton, and Duck Creek stations have already been modified to burn low sulfur coal, and switching back would require lengthy outages and equipment changes, all at a significant cost. Pet. Br. at 36-37 & Exh. 3 at 7, 9; AER Br. at 14.

AER considered the environmental impact of burning Illinois coal on NO_x emissions at the Newton station. Based on experience, AER found that the NO_x emission rate from Illinois coal was higher than from low sulfur coal. AER predicts that even after optimizing the existing pollution control equipment across the MPS Group to use Illinois coal, the NO_x emission rate would not be low enough to maintain compliance with the MPS. AER states that compliance

with the MPS NO_x emission rates using Illinois coal would require a regulatory change or installation of NO_x control equipment at either the Joppa or Newton plants, at a cost of \$150 million for control equipment and \$20 million to modify the low NO_x burners. AER Br. at 16-17.

Petitioners further contend Foresight's proposal is not financially feasible. Petitioners point to "significant" financial penalties associated with breaching existing long-term coal supply contracts and multi-year rail agreements. Pet. Br. at 37. Petitioners also characterize Foresight's proposed funding of the Newton FGD project as essentially a loan, to be repaid through "above market coal prices." *Id.* Petitioners note, however, that GENCO's debt covenants prohibit such a "borrowing activity," which would, therefore, put GENCO into default. *Id.*; Pet. Br. Exh. 3 at 10, 13.

Finally, from a commercial perspective, petitioners state that low sulfur PRB coal is still, despite the additional transportation and delivery costs as compared to Illinois coal, more economical than Illinois coal under current market conditions. To be commercially viable, petitioners add, any increased costs under Foresight's proposal to be embedded in a coal supply contract would need to be competitive. Petitioners question how such additional costs could "improve the economics of the Newton Energy Center." AER Br. at 14. Petitioners conclude that when the additional capital and operational expenses described above are added to the overall costs, Foresight's proposal to fund completion of the Newton FGD project is not viable. Pet. Br. at 37; Pet. Br. Exh. 3 at 11, 14.

As to Foresight's alternative proposal, AER states that at no time during the three months of negotiations between Dynegy and Ameren that culminated in the agreement for IPH to acquire the active MPS plants did Foresight seek to initiate "formal negotiations" with Ameren. AER Br. at 13. More important, AER adds, now that that agreement is in place, negotiations with a third party to "assume Dynegy's role in the proposed transaction" would constitute a breach of the agreement. *Id.*

Board Findings

Petitioners have adequately addressed alternatives for complying with the MPS. Based upon a review of compliance alternatives discussed above, the Board finds that completing the Newton FGD project is the most prudent and cost-effective control technology to comply with the MPS emission rates. Further, the Board agrees with petitioners that Foresight's primary proposal is not a viable compliance alternative, and that its alternative proposal is not a compliance alternative.

Additionally, the Board finds that the following conditions will ensure and enhance the net environmental benefit under the requested variance during the variance period. These are that petitioners: (1) maintain the schedule for completion of the FGD project; (2) maintain closure of the Hutsonville and Meredosia stations; (3) retire E.D. Edwards Unit 1 as soon as allowed by MISO; (4) burn low sulfur coal at the E.D. Edwards, Joppa, and Newton stations; (5) optimize operation of the FGDs at the Duck Creek and Coffeen stations; (6) comply with the

interim SO₂ emission rate; and (7) comply with an overall mass SO₂ emissions cap. The Board imposes these measures as variance conditions below.

Environmental Impact of Requested Variance

Environmental Net Benefit

Petitioners state that “the environmental benefits recognized by the Board in granting the variance to the MPS Group in PCB 12-126 would continue under IPH’s ownership of the five operating plants in the MPS Group. . . .” Pet. Second Resp. at 2. In addition, petitioners note the new commitments to which IPH has agreed that would further reduce SO₂ emissions as well as reduce the environmental footprint of Dynegy subsidiaries’ power plants in Illinois during the variance period. *Id.* at 3. These new commitments include (1) the permanent shutdown of E.D. Edwards Unit 1 as soon as allowed by MISO; (2) the additional variance conditions suggested by the Agency; and (3) the imposition of an overall SO₂ mass emissions cap accompanied by annual reporting of mass emissions. The Board discusses these additional variance conditions in turn before reaching its conclusions on environmental impact.

MOA. In the MOA, IPH agreed to retire E.D. Edwards Unit 1 as soon as MISO allows. Additionally, although subject to closing of the IPH transaction but not proposed as conditions to the requested variance, the MOA includes requirements for Dynegy to (1) permanently retire the air permits at the Stallings (Madison County) and Oglesby (LaSalle County) combustion turbine facilities, and to (2) install Advanced Gas Path Technology at Kendall Power Station (Kendall County). Pet. First Resp. at 3, 6.

Agency-Recommended Conditions. The additional variance conditions suggested by the Agency were agreed to by petitioners and supported by the People. Pet. Second Resp. at 5; Pet. Br. Att. A; PC#2336 at 7. These additional variance conditions would require IPH to (1) operate the existing FGD systems at the Duck Creek and Coffeen stations at a 98% SO₂ removal efficiency; (2) burn low sulfur coal at the E.D. Edwards, Joppa, and Newton stations; and (3) retire E.D. Edwards Unit 1 as soon as MISO allows. Agency Rec. at 30.

Overall Emissions Cap. Imposing an overall SO₂ mass emissions cap, as petitioners propose, would limit total SO₂ emissions from the MPS Group from fourth quarter 2013 through the end of 2020 to 327,996 tons. This cap would be 7,778 tons below the MPS baseline of 335,774 tons of SO₂ emitted over the same time period. Pet. Second Resp. at 3.

In the petition, petitioners presented table 2 in Exhibit 10 to demonstrate a “net benefit to the environment” of 7,778 tons in reduced SO₂ emissions from the *beginning* of 2013 through 2020. Pet. Exh. 10. However, the petition also states that IPH and Ameren do not anticipate closing on the transaction until the fourth quarter of 2013. Pet. at 31. In response to questions posed in the hearing officer order of September 12, 2013, petitioners revised the emissions table, taking into account only emissions attributable to the fourth quarter of 2013 through the end of 2020. Further, as requested in the hearing officer order, petitioners also included in the table emission reductions attributable to retiring E.D. Edwards Unit 1 as early as 2017. Pet. Second Resp. at 1-2.

In revising the table, petitioners maintain that focusing solely on the period of IPH's ownership of the MPS plants is the wrong regulatory analysis, because the net environmental benefit "recognized by the Board" in PCB 12-126 would continue under IPH's ownership of the active MPS plants. Pet. Second Resp. at 2. Even so, petitioners agree to the imposition of a cap on mass emissions to ensure the proposed "net benefit" is realized during IPH's ownership. Petitioners state:

in furtherance of its environmental commitment, IPH would agree to accept as an additional condition of the variance order a cap on tonnage SO₂ emissions over the period fourth Quarter 2013 - 2020 to ensure that the environmental benefit identified in the Petition (*i.e.*, a reduction of SO₂ emissions of 7,778 tons) is achieved solely during the IPH ownership period. Pet. Second Resp. at 2.

Specifically, IPH will accept a cap of 327,996 tons of SO₂ from fourth quarter of 2013, when IPH expects to take ownership of the operating MPS plants, through the end of 2020. Comparing this to the MPS baseline SO₂ emissions for the same time period, petitioners state the cap would ensure variance emissions would be at least 7,778 tons less than what was anticipated under the MPS. Petitioners stress that "[s]uch a cap is significantly more stringent than the terms of the existing variance." Pet. Second Resp. at 2-3.

Based upon a baseline for MPS compliance and the proposed cap, petitioners present the following table:

Pet. Second Resp., table 1(a).

Year	Baseline Heat Input (mmBtu)	MPS SO ₂ Rate (lb/mmBtu)	MPS Baseline SO ₂ (tons)	Variance SO ₂ Rate (lb/mmBtu)	Variance SO ₂ (tons)	SO ₂ Reduced (tons)	Net Variance SO ₂ (tons)	Cumulative Reductions in SO ₂ Variance (tons)
4 th Q 2013	83,443,376	0.50	20,861	0.35	14,603	2,032	12,571	8,290
2014	340,446,252	0.43	73,196	0.35	59,578	8,289	51,289	30,197
2015	340,446,252	0.25	42,556	0.35	59,578	8,289	51,289	21,464
2016	340,446,252	0.25	42,556	0.35	59,578	8,289	51,289	12,730
2017	340,446,252	0.23	39,151	0.35	59,578	9,792	49,786	2,096
2018	340,446,252	0.23	39,151	0.35	59,578	9,792	49,786	(8,539)
2019	340,446,252	0.23	39,151	0.35	59,578	9,792	49,786	(19,174)
2020	340,446,252	0.23	39,151	0.23	39,151	9,792	29,359	(9,382)
Total			335,774			66,067	345,155	(9,382)
Net Total with IPH Emissions Cap			335,774				327,996	7,778

The “MPS Baseline SO₂” and “Variance SO₂” annual emissions were calculated by multiplying the “Baseline Heat Input” by the “MPS SO₂ Rate” and “Variance SO₂ Rate,” respectively, and converting pounds to tons. The “SO₂ Reduced Tons” column accounts for the following: (1) not operating the Hutsonville and Meredosia stations from 2013 through 2020; (2) retiring E.D. Edwards Unit 1 as early as 2017; and (3) operating FutureGen 2.0 beginning mid-2017 through 2020, with 1.8 times the worst-case potential SO₂ emissions.⁶ Pet. Second Resp., table 1(a).

Petitioners note that the 7,778 tons shown in the “Cumulative Reductions in SO₂ Variance” column is a positive number, reflecting, as a “benefit,” cumulative reduced SO₂ emissions projected under the variance as compared to under the MPS. Petitioners stress that the net reduction of 7,778 tons is greater than what was projected under PCB 12-126 for 2013 through 2016. Petitioners explain that under the PCB 12-126 variance, emissions from FutureGen 2.0 of 590 tons SO₂ per year were deducted from the net benefit beginning in 2012 through 2020. However, because the startup of FutureGen 2.0 has now been pushed back to September 2017, the projections reflect fewer emissions from 2013 through 2016 by 590 tons per year. Pet. at 59; Pet. Exh. 10.

Board Analysis of Net Environmental Impact. Considering only the tons of “Cumulative Reductions in SO₂ Variance” in petitioners’ revised table (table 1(a)), the Board observes that there would be a net emissions increase of 9,382 tons of SO₂ under the proposed variance as compared to the MPS by the end of 2020. Pet. Second Resp., table 1(a). However, to ensure that the petition’s claimed environmental benefit of 7,778 fewer tons of SO₂ is realized during IPH’s ownership period, petitioners propose an overall cap of 327,996 tons of SO₂ from fourth quarter of 2013 through 2020, making the tons of “Cumulative Reductions in SO₂ Variance” match the 7,778 tons reduced SO₂ emissions cited in the petition.

Petitioners state that IPH would use a variety of methods to meet the overall cap on SO₂ mass emissions, including the additional conditions suggested by the Agency. Pet. Second Resp. at 3. As noted, according to petitioners, “[s]uch a cap is significantly more stringent than the terms of the existing variance.” *Id.* at 2-3. Petitioners do not quantify the SO₂ emission reductions specifically attributable to each additional commitment that exceeds the conditions imposed under the AER variance, but the Board provides such a comparison below.

In PCB 12-126, the Board compared AER’s projected emissions from 2012 through 2020 under the MPS and the variance. AER projected “Net Variance SO₂” emissions of 51,879 tons for the year 2013. Ameren Energy Resources, PCB 12-126, slip op. at 54 (Sept. 20, 2012). Taking one-fourth of 51,789 tons to represent the fourth quarter of 2013, and adding it to the “Net Variance SO₂” emissions for the years 2014 through 2020, the resulting “Net Variance SO₂” emissions, under the AER variance conditions, would total 355,696 tons.⁷ Subtracting the

⁶ AER stated that this value (nearly twice the worst-case potential SO₂ emissions) is 590 tons SO₂ per year. Ameren Energy Resources, PCB 12-126, slip op. at 17 (Sept. 20, 2012).

⁷ ($\frac{1}{4} \times 51,879$ for fourth quarter 2013) + (51,879 x 6 for years 2014-2019) + (31,452 for year 2020) = 355,696. Ameren Energy Resources, PCB 12-126, slip op. at 54 (Sept. 20, 2012).

cap of 327,996 tons proposed here from the 355,696 tons under the AER variance yields a difference of 27,700 tons SO₂.⁸ Therefore, to meet the 327,996-ton cap for the fourth quarter of 2013 through 2020, petitioners must reduce emissions by 27,700 tons SO₂ beyond those projected under PCB 12-126 for the same time period. Under the proposed cap, then, not only would 7,778 fewer tons of SO₂ be emitted than anticipated under the MPS, but 27,700 fewer tons of SO₂ would be emitted than were projected under the variance granted in PCB 12-126. Accordingly, the Board finds that the overall SO₂ mass emissions cap petitioners have agreed to accept as a variance condition will provide SO₂ emission reductions beyond those required in PCB 12-126.

The Citizens Groups present a different analysis. They compare projected SO₂ emissions under the proposed variance from fourth quarter 2013 through 2020 to AER's actual emissions for 2012 extrapolated over the same time period. The Citizens Groups argue that based upon AER's *actual* 2012 emissions, 45,711 tons SO₂, cumulative emissions from fourth quarter 2013 through 2020 would total 331,404 tons. The Citizens Groups claim the proposed cap is almost the same as this total, even though IPH represents that it will be completing the Newton FGD project and retiring E.D. Edwards Unit 1. According to the Citizens Groups, the proposed cap is, therefore, insufficient. PC#2337 at 20.

The Board notes, however, that petitioners do not rely on 2012 emissions data, but on 2006, 2007, and 2008 emissions and a "Baseline Heat Input" of 340,446,252 mmBtu to calculate the proposed net benefit. The Citizens Groups criticize this approach, claiming the emissions data is "now far outdated." PC#2337 at 17. Using the four most recent full years of data, the Citizens Groups add, the average input for the active MPS plants is 283,259,518 mmBtu. *Id.* at 18.

The Board does not agree that it was improper for petitioners to rely on such emissions data in addressing environmental impact. AER used the same baseline heat input a little more than a year ago in PCB 12-126, and the Board "accept[ed] the validity" of that use. Ameren Energy Resources, PCB 12-126, slip op. at 56 (Sept. 20, 2012). As the Board explained there, 340,446,252 mmBtu, the average of the 2006, 2007, and 2008 heat inputs, is the annual heat input AER used in 2009 during the R09-10 rulemaking proceeding that culminated in revision of the MPS to, among other things, add Section 225.233(e)(3), concerning the AER MPS Group, to the Board's regulations. *Id.*; see also Ameren Energy Resources, PCB 12-126, AER's Responses to the Illinois Pollution Control Board Technical Unit's Questions at 8 (July 30, 2012); Proposed New 35 Ill. Adm. Code 225 Control of Emissions from Large Combustion Sources (Mercury Monitoring), R09-10, Post-Hearing Comments of Ameren Companies, Att. C (Mar. 6, 2009).

The Board recognizes that Midwest Generation, LLC used a more recent baseline heat input period, 2008-11, in seeking a variance in 2012. Midwest Generation, PCB 13-24, slip op. at 65. However, while that baseline period may have fit the particulars of that case—although commenters in that case relied on different data (*id.*)—the Board finds that this case calls for use of the same heat inputs as in PCB 12-126, which, again, were used in developing the standard from which petitioners here seek a variance. Moreover, petitioners state, and the Citizens

⁸ 355,696 - 327,996 = 27,700.

Groups do not refute, that the four most recent years of heat inputs are not representative because recent years “reflect depressed market conditions in which the units did not achieve typical levels of operations.” Pet. Post. Br. at 43.

The People support capping mass SO₂ emissions as a condition of the IPH variance but would do so differently than petitioners propose. The People suggest that “because IPH is requesting prospective variance relief to begin on an uncertain date, the Board should examine a range of emission scenarios and consider the use of adjustable emission caps based on the actual date of the closing before determining that a variance is warranted.” PC#2336 at 2. It is true petitioners have not identified a specific date on which the IPH transaction will close, although they state that if the transaction goes forward, it is expected to close “shortly after the Board issues its order.” Pet. Second Resp. at 5. Regardless, the Board finds adjustment of the emissions cap based up on the actual closing date unnecessary. As the above table reflects, to achieve a 7,778-ton net reduction in SO₂ emissions, IPH will have to comply with the SO₂ emissions cap of 327,996 tons from October 1, 2013 through 2020. As such, the Board imposes an SO₂ emissions cap as a variance condition that applies from fourth quarter 2013 (*i.e.*, October 1, 2013) through December 31, 2020. Further, the Board also imposes a variance condition requiring IPH to report to the Agency the active MPS plants’ mass SO₂ emissions beginning fourth quarter 2013 and for each year through 2020 that can be used to determine compliance with the emissions cap at the close of 2020. These conditions will ensure achievement of the emission reductions on which petitioners rely.

The People also suggest capping emissions annually as “a safeguard against pollution spikes occurring in one or more particular years during the variance.” PC#2336 at 7. When asked about including annual caps as a variance condition based upon projections in table 2 (Pet. Exh. 10) that used a heat input of 340,446,252 mmBtu/year, petitioners responded that actual heat inputs will depend upon the market. Petitioners maintain that imposing annual emission caps would eliminate operating flexibility that is inherent in the MPS, which imposes “annual system-wide emission rates” rather than annual mass emission limits. Pet. First Resp. at 4-5. Petitioners elaborate that this regulatory approach allows “affected units to operate more or less” in a given year in response to market demand and other factors such as weather and EGU availability, as long as the MPS SO₂ emissions rate is “achieved at the end of the calendar year.” Pet. Br. at 41. Petitioners add that an annual emission cap could “significantly curtail” plant operations and thus restrict IPH’s ability to generate sufficient revenues to fund timely completion of the Newton FGD project. *Id.* at 41-42.

In addition, the Agency stated in response to questions posed in a hearing officer order that it would assess annual mass SO₂ emissions in a SIP revision for the requested variance. The Agency added that annual mass emissions caps would not be needed for approval of a SIP revision because the requested variance would not increase emissions over what is currently allowed under PCB 12-126. Agency Second Resp. at 1-2. The Agency noted that despite delaying the effective date of the 2015 and 2017 MPS SO₂ annual emission rates, petitioners have “voluntarily offered to meet an earlier more stringent SO₂ emissions rate in mitigation resulting in total SO₂ mass emissions lower than the projected emissions under the current MPS overall SO₂ annual emission rates.” Agency Rec. at 14.

As discussed above, USEPA did not identify any adverse issues with the PCB 12-126 variance, and due to its greater SO₂ reductions, the current request is not expected to pose any adverse issues in terms of USEPA approval of a SIP revision. Agency First Resp. at 3; Agency Second Resp. at 1-2. The Board further notes that USEPA has already approved previous revisions to the Illinois SIP addressing regional haze, finding that

reductions from Illinois' plan, including reductions from the MPS, the CPS [Combined Pollutant Standard], and the permits for [City Water Light and Power] and Kincaid Generation, provide significantly greater emission reductions, especially for SO₂ but also for NO_x, than even very conservative definitions of BART for the BART-subject units. 77 Fed. Reg. 39943, 39946 (July 6, 2012).

The Board agrees with the Agency and petitioners that an annual cap is not necessary because IPH will be subject to the variance SO₂ emission rate limits during the variance period. Further, as the above table reflects, to comply with the overall SO₂ emissions cap, IPH will need to operate the MPS plants at a rate below its own projected rate. That is because, without the cap, IPH's projections show a cumulative increase in SO₂ emissions under the variance as compared to the MPS of 8,539 tons by the end of 2018 and 9,382 tons by the end of 2020. Pet. Second Resp., Att. A. Therefore, the Board finds that the proposed overall SO₂ mass emissions cap, along with the SO₂ variance emission provides adequate protection against pollution spikes in particular years that the People fear.

The Board notes that certain provisions of the MOA apply to Dynegy facilities not in the MPS Group. Neither petitioners nor the Agency suggest incorporating such terms as conditions of the requested variance. Rather, only the commitment to retire E.D. Edwards Unit 1 as soon as MISO allows is proposed as a variance condition. Accordingly, the Board's analysis does not take into account any other emission reductions that may result from the MOA.⁹

The Agency states that it agrees that petitioners' compliance plan shows "a net environmental benefit consistent with previous net environmental benefit determinations." Agency Rec. at 17. Moreover, the Agency maintains there will be no environmental harm or injury to the public if the variance were granted, subject to the additional conditions proposed by the Agency and accepted by IPH. *Id.*

The Board finds petitioners have demonstrated that by complying with an SO₂ annual emission rate of 0.35 lb/mmBtu in 2013 through 2019, and 0.23 lb/mmBtu thereafter, and an overall SO₂ mass emissions cap of 327,996 tons from fourth quarter 2013 through 2020, the MPS Group will emit 7,778 fewer tons of SO₂ than it would emit under the MPS. The Board recognizes that in years 2015 through 2019, petitioners' estimates show IPH would emit 251,936

⁹ According to the Agency, the MOA will result in the following: (1) decreases in the intake of cooling water and service water from the Illinois River; (2) elimination of NPDES-permitted discharges (including thermal discharges); and (3) emission reductions for multiple air pollutants, including SO₂, NO_x, carbon monoxide, carbon dioxide, and PM due to the permanent retirement of units and the implementation of the Advanced Gas Path project. Agency Rec. at 18.

tons of SO₂ under the variance but 202,565 tons of SO₂ under the MPS, *i.e.*, 49,371 more tons of SO₂ during these years under the variance.¹⁰ The additional 49,371 tons is, however, 7,459 tons less than the 56,830 tons projected in PCB 12-126 for the same time period, because of emission reductions for the retirement of E.D. Edwards Unit 1 and the delayed startup of the FutureGen project. *See Ameren Energy Resources*, PCB 12-126, slip op. at 54 (Sept. 20, 2012).

The Board finds that although there will be additional emissions from 2015 through 2019 under the requested variance, these are offset by the variance's more stringent SO₂ emission rate during the fourth quarter of 2013 and the year 2014, and the overall mass emissions cap. Specifically, for the fourth quarter of 2013 and the years 2014 and 2020, petitioners' table 1(a) shows MPS plant emissions of 93,219 tons of SO₂ under the variance as compared to 133,208 tons of SO₂ under the MPS. Accordingly, without taking the cap into account, under the proposed variance IPH projects emission of 39,989 fewer tons of SO₂ over those two and one-quarter years.¹¹ Accounting for the cap results in a net reduction of 7,778 tons in SO₂ emissions from fourth quarter 2013 through 2020 compared to projected emissions under the MPS.¹² Further, the cap would require IPH to reduce emissions by 27,700 tons of SO₂ more than projected under the PCB 12-126 variance for the same time period, meaning IPH will need to operate below its own emissions projections to comply with the proposed overall cap. The Board finds that the overall SO₂ mass emissions cap will provide additional SO₂ emission reductions beyond what the Board required in PCB 12-126. The Board also notes that even if MISO does not permit retirement of E.D. Edwards Unit 1 as early as 2017, as petitioners anticipate, under the proposed variance the MPS Group will still have to comply with the 327,996-ton cap on overall SO₂ emissions, which according to petitioners will produce a 7,778-ton net reduction in projected SO₂ emissions.

Meredosia and Hutsonville and E.D. Edwards Unit 1 Closures

The People argue that “the Board should reject IPH’s attempt to claim credit for not operating plants that it will not acquire.” PC#2336 at 2. According to the People, Medina Valley is irrelevant to IPH’s variance request because the Meredosia and Hutsonville plants “have zero impact on the fleet-wide emission rate (no heat input, no [SO₂] emissions)” *Id.* at 3.

The Citizens Groups argue that there is “no legitimate reason” for Medina Valley to obtain a variance and no reason for those shuttered plants to “factor into the analysis of IPH’s proposed variance.” PC#2337 at 18. According to the Citizens Groups, excluding the Meredosia and Hustonville stations from the emissions analysis shows the variance would actually have a negative environmental impact. *Id.* at 19-20. The Citizens Groups present an analysis of projected emissions that (1) uses a starting heat input of 283,259,518 mmBtu per year

¹⁰ (Net Variance SO₂ Tons (51,289 x 2 years) + (49,786 x 3 years)) - (MPS Baseline SO₂ Tons (42,556 x 2 years) + (39,151 x 3 years)) = 49,371

¹¹ (MPS Baseline SO₂ Tons (20,861 + 73,196 + 39,151)) - (Net Variance SO₂ Tons (12,571 + 51,289 + 29,359)) = 39,989

¹² (MPS Baseline SO₂ Tons 335,774) - (Net Variance SO₂ Tons 327,996) = 7,778

based upon 2008-2011 emissions, (2) disregards the Meredosia and Hutsonville plants, and (3) adjusts for the 2017 retirement of E.D. Edwards Unit 1 and startup of FutureGen 2.0. Based upon this analysis, the Citizens Groups assert projected SO₂ emissions under the MPS would be 279,719 tons, *i.e.*, 48,227 tons less than under the proposed cap. *Id.* at 19-20 & Exh. A.

Petitioners also project SO₂ emissions resulting from the variance using an adjusted annual heat input to reflect closure of the Meredosia and Hutsonville stations from 2013 through 2020 and the closure of E.D. Edwards Unit 1 as early as 2017. Petitioners again rely upon heat inputs based on 2006-08, which, as noted above, were used in the R09-10 revisions to the MPS as well as PCB 12-126. Ameren Energy Resources, PCB 12-126, slip op. at 56 (Sept. 20, 2012). Petitioners present the following table:

Year	Baseline Heat Input (mmBtu)	MPS SO₂ Rate (lb/mmBtu)	MPS Baseline SO₂ (tons)	Variance SO₂ Rate (lb/mmBtu)	Adjusted Heat Input (mmBtu)	Variance SO₂ (tons)	Cumulative Reductions in SO₂ Variance (tons)
4 th Q 2013	83,443,376	0.50	20,861	0.35	76,472,105	13,383	7,478
2014	340,446,252	0.43	73,196	0.35	312,003,694	54,601	26,074
2015	340,446,252	0.25	42,556	0.35	312,003,694	54,601	14,029
2016	340,446,252	0.25	42,556	0.35	312,003,694	54,601	1,984
2017	340,446,252	0.23	39,151	0.35	302,724,215	52,997	(11,842)
2018	340,446,252	0.23	39,151	0.35	302,724,215	52,997	(25,667)
2019	340,446,252	0.23	39,151	0.35	302,724,215	52,997	(39,492)
2020	340,446,252	0.23	39,151	0.23	302,724,215	34,813	(35,154)
Total			335,774			370,928	(35,154)
Net Total with IPH Emissions Cap			335,774			327,996	7,778

Pet. Second Resp., table 1(b).

Petitioners note that the “Adjusted Heat Input” and “Cumulative Reductions in SO₂ Variance tons” reflect totals without the Hutsonville and Meredosia plants or E.D. Edwards Unit

1 after 2017. The table shows that even with a lower adjusted heat input and not taking credit for reductions associated with these three sources, because of the emissions cap, petitioners continue to show 7,778 fewer tons of SO₂ under the variance than under the MPS.

The Board accepts the validity of petitioners' projections using both the baseline and adjusted heat inputs. However, as in PCB 12-126, the Board agrees with the Agency that "providing credit for actions (*e.g.*, unit shutdowns) that result in emission reductions is an acceptable part of the regulatory process" and that such "emission reduction offsets . . . are creditable and allowable." Ameren Energy Resources, PCB 12-126, slip op. at 56 (Sept. 20, 2012). The Board takes into account SO₂ emission reductions from not operating the Meredosia and Hutsonville stations through 2020, as well as the retirement of E.D. Edwards Unit 1 as early as 2017, and finds that the requested variance would produce a net benefit to air quality. Regarding the shuttered plants, they remain part of the MPS Group, as discussed above. *See supra* at pp. 70-71. The Board's finding on this subject in PCB 12-126 remains relevant here:

The AER MPS Group includes seven facilities, including Meredosia and Hutsonville, and the overall SO₂ annual emission rates in the MPS apply to all the facilities in the AER MPS Group. It is significant to note the MPS does not restrict the AER MPS Group from employing any specific methods to reach the required emission rates. Furthermore, there is no current regulatory requirement that these facilities must remain closed so granting this variance with such a condition would ensure that these two stations remain closed during the term of the variance. Ameren Energy Resources, PCB 12-126, slip op. at 56-57 (Sept. 20, 2012).

Moreover, the Board agrees with the Agency and petitioners that the proposed variance would, if granted, supersede AER's variance granted in PCB 12-126. *See* Agency First Resp. at 4; Pet. First Resp. at 8. Thus, absent a condition in an IPH/Medina Valley variance requiring the Meredosia and Hutsonville stations to remain closed through 2020, there would be no regulatory requirement that these facilities remain out of operation, with the exception of the FutureGen project. Petitioners make clear that the Meredosia and Hutsonville stations must remain shuttered during the variance period for the MPS Group as a whole to comply with the proposed variance emission rates and overall emissions cap, and thus to achieve the net environmental benefit of 7,778 tons in SO₂ reductions as compared to projected emissions under the MPS. Pet. Second Resp. at 2-3.

The Board finds that the Meredosia and Hutsonville stations are relevant to IPH's compliance with the MPS because they are a part of the MPS Group. This will give IPH the opportunity to meet the proposed variance emissions rate and overall cap to achieve the net emissions reduction set forth in the petition. Similarly, the retirement of E.D. Edwards Unit 1 when permitted by MISO would not otherwise be required, so including a variance condition requiring that step would ensure the benefit of taking that unit out of service.

1-hour SO₂ NAAQS

USEPA issued its initial 1-hour SO₂ air quality designations on August 5, 2013, *Final Rule, Air Quality Designations for the 2010 SO₂ Primary NAAQS*, 78 Fed. Reg. 47191 (Aug. 5, 2013). Agency First Resp. at 3 & Exh. 4. The E.D. Edwards station is located in one of the designated nonattainment areas for the new 1-hour SO₂ NAAQS. 78 Fed. Reg. at 47199.

The Citizens Groups presented Mr. Klafka's written statement (PC#113) and hearing testimony (Tr. 83-88), in which Mr. Klafka predicted that the three "unscrubbed" MPS plants—that is, the E.D. Edwards, Newton, and Joppa stations—would each cause violations of the new 1-hour SO₂ NAAQS based on either currently approved emissions or actual historical emissions. PC#113; Tr. at 84, 87. The Citizens Groups also underscore that the location of the E.D. Edwards generating station—Hollis Township, Peoria County—has already been designated as a nonattainment area. PC#2337 at 14-15. The Citizens Groups claim Mr. Klafka's modeling analysis is relevant here because compliance with the MPS's lower annual fleetwide emission limits would require "significant reductions in SO₂ emissions" from one or more of the three "unscrubbed" MPS plants. *Id.* NAAQS exceedances are a "touchstone of environmental impact in variance proceedings," according to the Citizens Groups. *Id.* at 16.

The People also suggest the Board take Mr. Klafka's analysis into account. PC#2336 at 6. According to the People, his modeling analysis "support[s] the view that citizens could be exposed to unsafe levels of air pollution longer under the proposed variance than they otherwise would be if IPH was required to comply with the MPS—and that is true regardless of offsetting emission reductions in earlier years." *Id.* at 7.

The Board notes that the Agency addressed as follows whether the requested variance would jeopardize the State's obligation to attain and maintain the new 1-hour SO₂ NAAQS:

The [Agency] believes the granting of this variance will not jeopardize the State's obligations to attain and maintain the 1-hour SO₂ NAAQS. This variance deals only with the requirements in question at the current time. Any new rules mandating reductions in SO₂ will be addressed in a separate rulemaking proceeding before the Board. Variances for existing requirements do not affect any future rules. Agency First Resp. at 2.

USEPA's adoption of the new 1-hour SO₂ NAAQS addresses short-term exposure and sets in motion requirements for the states to assess attainment and propose SIP revisions to attain and maintain the new NAAQS. 77 Fed. Reg. 46295 (Aug. 3, 2012). USEPA made the initial attainment area designations for Illinois effective October 4, 2013. 78 Fed. Reg. 47191 (Aug. 5, 2013). Within 18 months of the initial designation, USEPA will require states with areas designated as nonattainment to develop a SIP providing for attainment no later than 5 years after the initial designation. 75 Fed. Reg. 35553, 35577 (June 22, 2010); 42 U.S.C. §§ 7514(a), 7514a.

Mr. Klafka's modeling results concern compliance with the new 1-hour SO₂ NAAQS. As the Agency stated in PCB 12-126, "[t]he MPS was not designed to address the new 2010 1-

hour SO₂ [NAAQS], which was not proposed at the time the MPS was being negotiated.” Ameren Energy Resources, PCB 12-126, slip op. at 57 (Sept. 20, 2012). The Board notes that Mr. Klafka’s modeling approach and conclusions have not gone unchallenged. *See, e.g.*, Pet. Br. at 44-46 & Exh. 6, Att. A (claiming that, among other things, Mr. Klafka’s modeling used maximum allowable and peak actual emission rates rather than actual hourly emissions data at the three MPS plants). Moreover, Ameren has objected to USEPA’s designation as nonattainment with the 1-hour SO₂ NAAQS of the area where the E.D. Edwards plant is located. AER Br. at 11-12 & Exhs. 2 and 4.

The Board finds that resolving competing claims about the MPS plants’ compliance with the 1-hour SO₂ NAAQS is beyond the proper scope of this proceeding, which concerns a distinct regulatory standard that imposes system-wide annual SO₂ emission rate limits rather than a rule addressing the new 1-hour SO₂ NAAQS. The Board further finds, consistent with its finding in PCB 12-126, that granting the variance petitioners request with the conditions imposed in the order below would be within the State’s current obligation under the Illinois SIP to attain and maintain compliance with the NAAQS. Any new rules mandating reductions in short-term SO₂ emissions will be addressed in a separate rulemaking proceeding before the Board, as the Agency states. Agency First Resp. at 2. At that time, all interested persons will have an opportunity to reassess the MPS Group’s environmental and health impacts in light of the new regulatory requirements. Petitioners properly recognize that the variance would not exempt the MPS plants from compliance with any federal CAA requirements, including the new 1-hour SO₂ NAAQS and any associated future emission reduction obligations. Pet. Br. at 46; *see also* Pet. at 67.

Health Effects

A number of commenters raise concerns about the health impact of granting the requested variance. *See, e.g.*, Tr. at 100, 122-23, 166, 188, 252-253. The Citizens Groups emphasize that thousands of tons of additional SO₂ will be emitted during certain years of the variance term. *See, e.g.*, Tr. at 123. Mr. Urbaszewski, appearing on behalf of RHA, cited several health concerns allegedly associated with air pollution from coal-fired power plant stacks, including increasing rates of asthma, heart attacks, strokes, and premature deaths. Tr. at 310. He strongly disagreed with the position of petitioners’ technical consultant, Dr. Bradley, that SO₂ exposure does not cause respiratory problems. Tr. at 313.

Mr. Klafka, who presented air quality modeling results on behalf of the Sierra Club and ELPC (PC#113), notes that USEPA’s new 1-hour SO₂ NAAQS is expected to “improve public health protection of groups that are susceptible to health problems associated with SO₂, especially children, the elderly, and people with asthma” (Tr. at 84). Further, Mr. Klafka stated that the dispersion modeling of three MPS plants (E.D. Edwards, Joppa, and Newton) indicates that each one was predicted to exceed the new 1-hour SO₂ NAAQS based upon currently approved and historical emissions. Tr. at 84-87; *see also* PC#113. Andrew Armstrong, also appearing on behalf of ELPC, commented that operating coal plants without modern pollution controls threatens public health. Tr. at 322. He argued that because Mr. Klafka’s modeling of “unscrubbed” power plant emissions demonstrates exceedances of the 1-hour SO₂ NAAQS, such emissions negatively impact public health. *Id.* at 323-25.

Dr. Bradley, on behalf of petitioners, reviewed the variance request for potential health effects from SO₂ emissions. Pet. Exh. 12; Tr. at 73. Dr. Bradley notes that since the issuance of NAAQS in 1971, there have been significant decreases in SO₂ emissions in the United States by the electric power sector, and yet also a rise in asthma cases reported over the last 30 years. Tr. at 76-77; Pet. Exh. 12 at 8-9. Dr. Bradley contends:

[T]he increase in asthma in the U.S. at the same time that SO₂ emissions dramatically decreased, the increase in asthma globally, including areas remote from industrial and urban areas, and the change in activity patterns where our children are spending much more time in indoor environments in the presence of known allergens, coupled with the low levels of ambient SO₂ in Illinois under conditions of SO₂ emissions at rates higher than those in the MPS variance, all support a conclusion of a lack of adverse health effects, including asthma, under the MPS variance. Pet. Exh. 12 at 7.

Further, Dr. Bradley disputes the relationship established between respiratory symptoms and SO₂ exposure in epidemiological studies. She asserts that none of the studies isolated the effects from SO₂ or properly accounted for external factors such as smoking or allergens. Dr. Bradley maintains that because epidemiological studies cannot control or isolate all of the factors influencing a health outcome, their results are conflated. Pet. Exh. 12 at 10-12. Additionally, Dr. Bradley notes that USEPA's Integrated Science Assessment for Sulfur Oxides¹³ concluded that epidemiological studies do not provide sufficient evidence to suggest a causal relationship between long-term exposure to SO₂ and asthma, bronchitis, or respiratory systems. Tr. at 79-80. Dr. Bradley concludes that there would be "no adverse health impact as a result of implementing the requested variance and proposed compliance plan." Tr. at 80. The Board finds nothing in the record to undercut this assessment.

Petitioners' emission calculations, along with the proposed system-wide cap on mass emissions of SO₂, show a net reduction in SO₂ emissions under the requested variance, resulting in a net benefit to the environment. The Agency agrees with petitioners that the requested variance, with the continued cessation of operations at the Meredosia and Hutsonville stations, will result in a net environmental benefit through 2020. Agency Rec. at 29. Like the PCB 12-126 variance, the proposed variance, if granted, will be submitted to USEPA for approval as a SIP revision. *Id.* at 26-27. Although the Agency has not discussed this variance with USEPA, the Agency states that in previous discussions with USEPA regarding PCB 12-126, USEPA did not indicate any adverse issue. Agency First Resp. at 3. Because allowable emissions under this variance are not changing from allowable emissions under PCB 12-126, and in fact are projected to be lower than if the AER variance remained in place, the Agency does not expect USEPA to find any adverse issues here either. *Id.* Moreover, below, the Board finds that granting the requested variance, subject to the conditions imposed in this decision, would be consistent with current Illinois SIP obligations to attain and maintain NAAQS compliance. *See infra* at p. 99.

¹³ *Integrated Science Assessment for Sulfur Oxides-Health Criteria*, EPA-600/R-08/047F (Sept. 2008).

Hardship to Petitioners from Timely Compliance With MPS

Petitioners assert that compliance with the 2015 and 2017 overall SO₂ annual emission rates in Sections 225.233(e)(3)(C)(iii) and (iv) creates an arbitrary or unreasonable hardship on IPH and Medina Valley and on the communities and regions surrounding the plants, as well as the State. Pet. at 25-45; Pet. Br. at 22-26. Petitioners contend that the following events were not foreseen when Sections 225.233(e)(3)(C)(iii) and (iv) were adopted and AER opted into the MPS, and therefore impose an undue hardship on any owner of the MPS plants: (a) continuing uncertainty about the future of proposed federal regulations underpinning the MPS; and (b) persistently depressed power prices. Pet. at 25-45; Pet. Br. at 17-18, 27.

Federal Regulatory Uncertainty

Petitioners recite that AER opted into the MPS in 2007 with the expectation that future federal regulatory requirements for its EGUs were imminent. Pet. at 25. Petitioners point out that the federal rules (CAIR, CAMR, and CSAPR) have been stayed and successfully challenged in various federal court proceedings, that the United States Supreme Court is reviewing a decision vacating CSAPR, and that a challenge to MATS is pending in federal court. *Id.* at 26-27. Adding to this uncertainty, petitioners claim, President Obama has directed USEPA to issue final carbon pollution reduction standards for existing power plants no later than June 1, 2015. *Id.* at 27. Petitioners argue that, in the face of this continuing regulatory uncertainty, Illinois-specific MPS requirements will cause IPH, as prospective owner of the active MPS plants, an arbitrary and unreasonable hardship. *Id.* at 36-37.

Competitive Disadvantages

Petitioners further assert, as AER did in PCB 12-126, that absent federal regulations applicable nationwide, and with no counterpart emission standards in surrounding states as stringent as the MPS, the MPS will put any owner of the MPS plants at a competitive disadvantage compared to non-Illinois generators. Pet. at 28-29. According to petitioners, Illinois merchant generators must compete to sell power to MISO with out-of-state generators that have not had to invest in capital-intensive projects to comply with state standards like the MPS. *Id.* at 29, 36-37. Moreover, petitioners argue, out-of-state generators are able to recover compliance costs from captive customers through base rates because other states have not deregulated their power markets. *Id.* Illinois merchant generators, continue petitioners, do not have a captive customer base and must recover such costs through competitive power prices. *Id.*

Depressed Power Prices

Petitioners claim IPH will not be able to complete construction of the Newton FGDs or otherwise timely comply with the MPS 2015 and 2017 SO₂ emission rates. Pet. at 39. IPH estimates AER has spent approximately half the roughly \$500 million cost of installing the two FGD units at the Newton station. *Id.* at 24-25. Petitioners assert that the lack of financial resources to fund timely completion of the Newton FGD project is the direct result of “severely depressed power prices,” which, petitioners add, fell from approximately \$60 per megawatt hour in 2006-7 to around \$31.85 per megawatt hour when their petition was filed. *Id.* at 35. IPH

states that natural gas prices remain at “distressed levels,” and independent observers expect power prices to remain depressed for “the next several years.” *Id.* at 35-36. Petitioners attribute the price declines to “game-changing” new methods of gas extraction and general recessionary conditions. *Id.* at 29. Petitioners claim these price declines were not foreseeable when Illinois deregulated its electric power market or when the MPS was adopted in 2006. *Id.* In addition, petitioners claim that, even if IPH could afford upon closing to immediately ramp up construction on the Newton FGD project, IPH could not complete construction in time to comply with the MPS 2015 SO₂ emission rate because construction activities are expected to take up to 24 months. *Id.* at 34-35.

While Dynegy expects power prices to begin to recover in mid-2015, it anticipates the recovery of prices and associated cash flow to IPH will be gradual, allowing IPH to complete construction of the Newton FGDs by the end of 2019, but not earlier. Pet. at 40, citing Pet. Exh. 2. Petitioners claim Dynegy has neither the financial resources nor the time necessary to ensure completion of the Newton FGDs in time to meet the MPS SO₂ emission rates. *Id.* at 44, citing Pet. Exh. 2; *id.* at 34-35, citing Pet. Exh. 8.

Petitioners contend that, with power prices remaining at depressed levels, IPH will continue to face the same financial pressures that AER did when it petitioned for a variance in PCB 12-126. Pet. at 36. Low power prices have “severely eroded operating margins” of the MPS plants, according to petitioners. *Id.* Further, petitioners emphasize that AER’s financial outlook, credit profile, and access to third-party capital have worsened since AER received the variance in PCB 12-126. *Id.* at 37, citing Pet. Exh. 9. And, petitioners claim, IPH will not at closing have sufficient financial resources to timely complete construction on the Newton FGD project to comply with the MPS. Petitioners explain that because AER does not have such resources and IPH will step into AER’s shoes upon closing, IPH will in the near term face “almost the identical balance sheet challenges” as AER does. *Id.* at 37-38, citing Pet. Exh. 2; Pet. Br. at 18.

At closing, petitioners state, IPH will have approximately \$220 million in cash, the “vast majority” of which will likely be used to fund operations, potential losses, and interest payments on GENCO’s debt, and \$160 million in working capital, needed for day-to-day business expenses. Pet. at 38-39. These amounts will not be enough to fund completion of the Newton FGD units or any other alternatives to timely MPS compliance, petitioners assert. *Id.* at 39. Petitioners further claim that IPH has not been able to obtain financing from external third party lenders because of AER’s weak balance sheet and distressed power markets. *Id.* at 41-42, citing Pet. Exh. 2. And, petitioners continue, GENCO is barred from obtaining external financing by its interest rate ratio. *Id.* at 43. IPH also asserts that it is unable to obtain funding from Dynegy for major capital projects without leading to adverse consequences for Dynegy’s credit rating. *Id.* at 44.

Petitioners maintain that, unless the Board grants a variance, “plant closures are inevitable,” whether IPH comes to own the plants or AER continues to own them. Pet. at 30. Absent this variance, the only compliance option would be to shut down the E.D. Edwards and Joppa stations by January 1, 2015. *Id.* at 30-31. Petitioners mention this would be true even if the necessary financial resources were available to timely complete the Newton FGDs. *Id.* at 31.

Petitioners state that closure of the E.D. Edwards and Joppa plants would affect 274 direct jobs, 1,374 indirect jobs, over \$121 million annually in the local economies near the plants, and over \$338 million per year in the State's economy. *Id.* at 32. The estimated total economic impact of this variance being denied, according to petitioners, exceeds \$1.4 billion and over 6,200 total jobs. Pet. Br. at 23, citing Pet. Exh. 7.

The Agency recounts in its recommendation petitioners' claimed hardships but takes no position on whether they meet the statutory standard for grant of a variance. However, the Agency "recognizes that the economic viability of the Energy Centers is essential" to local communities, governments, and institutions, and "acknowledges the adverse impact that plant closures" would have on them as well as the state and local economies. Agency Rec. at 30.

Board Analysis and Ruling

Petitioners' Hardship. The Board finds that, upon acquiring the operating MPS plants, IPH would face a hardship. Even with Medina Valley's continued non-operation of the Meredosia and Hutsonville stations, IPH must complete the Newton FGD project to bring about MPS Group compliance with the MPS. The evidence of record, which has not been refuted, shows that even with sufficient financial resources, IPH could not complete the Newton FGD project in time to comply with the MPS 2015 rate because the project is expected to take up to 24 more months to complete. Pet. at 34-35. The Newton FGD project is already well underway. Petitioners state that all major equipment components required for that project have been procured, and engineering design will continue through 2014. Field construction activities will be sequenced; ductwork and insulation activities will occur; the absorber building will be constructed; and electric systems and piping connections will be completed. *Id.* at 21.

The variance granted in PCB 12-126 imposes specific dates by which each of these and other components of the Newton FGD project must be completed. Ameren Energy Resources, PCB 12-126, slip op. at 69 (Sept. 20, 2012). The schedule is designed to achieve compliance with the MPS final SO₂ emission rate beginning in 2020. *Id.* at 21. As of the filing of petitioners' briefs, over \$250 million, about half of the total cost, had been spent on construction of the Newton scrubber system, and engineering was approximately 90% complete. Pet. Br. at 35, citing Pet. Br. Exh. 3. The proposed variance would allow IPH to stay the course with that means of ultimate MPS compliance, locking in the benefit of AER's expenditures and progress on the Newton FGD project pursuant to the variance granted in PCB 12-126. Without a variance, IPH would have to accelerate completion of that project, which, according to petitioners, would still not bring the MPS Group into compliance with the MPS 2015 SO₂ emission rate, requiring plant closures. Thus, the Board finds that requiring the MPS Group to timely comply with the MPS upon new ownership would be a hardship.

In addition, it is uncontroverted that because AER will not at closing have sufficient resources to complete the Newton FGD project before the end of 2019, IPH, after acquiring New AER, will also not have such resources. IPH would take on GENCO's debt and face the same depressed energy prices as AER. The record reveals that since the variance was granted in PCB 12-126, AER's financial outlook, credit profile, and access to capital have all worsened. Pet. at 37, citing Pet. Exh. 9. Because AER's balance sheet is weak, IPH has not been able to obtain

financing from third party lenders, and will not otherwise have at closing the capital necessary to timely complete the Newton FGDs—even if there were sufficient time to do so and meet the MPS 2015 SO₂ emission rate. Pet. at 41-42. IPH states that it will at closing have only enough cash to fund operations, potential losses, make interest payments, and cover day-to-day business expenses. *Id.* at 38-39. No commenter opposing the variance contests this representation. Instead, the Citizens Groups question IPH’s ability to comply with the terms of the requested variance without declaring bankruptcy or otherwise failing. *See, e.g.*, PC#2337 at 3-4; PC#3162a at 17. The Board addresses the relevance of such comments to this proceeding below.

The question presented to the Board in a variance proceeding is whether compliance with an environmental requirement “would impose an arbitrary or unreasonable hardship.” 415 ILCS 5/35(a) (2012); *see also* Marathon Oil Co. v. IEPA, 242 Ill. App. 3d 200, 207, 610 N.E.2d 789, 793 (5th Dist. 1993) (stating that the “verb *would*, in this context, connotes a future condition”). In this case, the Board must determine whether “compliance” by IPH and Medina Valley with the MPS “would” impose an arbitrary or unreasonable hardship. The Board’s June 6, 2013 order in PCB 12-126 explained that for IPH to obtain a variance it would have to demonstrate that “*IPH’s compliance* with a rule or regulation, requirement or order of the Board would impose an arbitrary or unreasonable *hardship on IPH.*” Ameren Energy Resources, PCB 12-126, slip op. at 10 (June 6, 2013) (emphasis added). The Board previously found that, on the unique facts of this case, IPH and Medina Valley are not ineligible to petition for and, upon a proper showing, obtain a variance. Consistent with that ruling, the Board further finds that on this record, IPH is not barred from demonstrating hardship simply because it does not currently own any of the MPS plants.

Another hardship the Board considers here as relevant but not controlling is the severe adverse impact on communities and regions, as well as the State, all of which depend to varying degrees on continued operation of the MPS plants. The Board took this impact into account in PCB 12-126, and has noted similar impacts in prior decisions as well. Ameren Energy Resources, PCB 12-126, slip op. at 62 (Sept. 20, 2012); Wallace Pharmaceuticals v. IEPA, PCB 02-207, slip op. at 4, 6 (Sept. 19, 2002); Ozark-Mahoning Co. v. IEPA, PCB 70-19, slip op. at 3-4 (Dec. 22, 1970). Moreover, the appellate court has remarked that community impacts are relevant in assessing hardship. *See* Marathon Oil Co., 242 Ill. App. 3d at 207, 610 N.E.2d at 793-94; Material Service Corp v. PCB, 41 Ill. App. 3d 192, 195, 354 N.E.2d 37, 39 (3d Dist. 1976).

Hardship Not Self-Imposed. The Board next considers whether, as some commenters contend, any hardship to IPH is self-imposed because acquiring the MPS plants is a voluntary business deal that IPH does not have to execute. Obj. at 7-9; PC#2337 at 2-8.

Mismanagement Cases. The Board agrees with petitioners that judicial and Board decisions finding self-imposed hardships generally involve mismanagement, failure to recognize or plan to comply with applicable requirements, inaction, or some combination of these. *See, e.g.*, Ekco Glaco, PCB 87-41. Further, most arose in the context of a current facility owner or operator seeking additional time to bring its own ongoing operations into compliance. *See, e.g.*, Marathon Oil Co. v. IEPA, PCB 94-27 (May 16, 1996). For example, in Ekco Glaco Corp., PCB 87-41 (Dec. 17, 1987), the petitioner operated a bakery pan manufacturing facility that coated

pans with solvents containing volatile organic material (VOM). Ekco Glaco Corp., PCB 87-41, slip op. at 2. The Agency had notified the petitioner in March 1983 that it had to comply with current VOM emission limits. *Id.* at 4. After that, the Board observed, the petitioner had

argued that the rule does not apply to their operations, agreed that the rule does apply, chosen consultants, prepared reports, hired contractors, purchased equipment, changed consultants, evaluated alternatives, chosen to take the old pan line out of operation, chosen to leave the old pan line in operation. In summary, the facility has, since March 21, 1983, made a series of business decisions on how to proceed towards compliance. When those decisions did not achieve compliance, the facility has come to [the] Board for additional time to further evaluate alternatives and implement compliance. Ekco Glaco, PCB 87-41, slip op. at 4.

The Board found the petitioner's "problems" were attributable to "delay caused by decisions [Ekco Glaco] has made in attempting to secure compliance and its failure to commit to a particular compliance option." Ekco Glaco, PCB 87-41, slip op. at 4. The Board accordingly found the claimed hardship not arbitrary or unreasonable. *Id.*

In Marathon Oil, a refinery sought a variance from air quality regulations for its catalytic cracking unit. After the Agency, in June 1993, informed the refinery that it had determined the facility was in apparent violation of the regulations, the facility re-tested its stack, confirming the suspected violations. Marathon Oil, PCB 94-27, slip op. at 5. Four months later, the petitioner submitted a "compliance program" involving "change-out" of the cracking unit, but the change-out did not take place until nearly a year later. *Id.* In the meantime, USEPA initiated an enforcement action against the petitioner for the same violations. *Id.* at 6. The petitioner claimed two hardships: (1) having to shut down the catalytic cracking unit and likely the entire refinery to come into compliance, and (2) having to defend the USEPA's ongoing enforcement action. *Id.* at 7.

Regarding Marathon's first claimed hardship, the only one relevant here, the Board found it was the result of the petitioner's "indecision" for several months as to how to address its noncompliance. Marathon Oil, PCB 94-27, slip op. at 11. The Board explained that the petitioner could have reasonably anticipated it would remain out of compliance after the stacks were re-tested and violations confirmed, but that the petitioner failed to act diligently to correct the problem. *Id.* at 10-11. The Board therefore concluded that the refinery's claimed hardship was self-imposed. *Id.* at 11.

The Board finds these cases inapposite here. As petitioners contend, unlike the facility owners in those cases, they do not face a "quagmire of [their] own making, due to lack of diligence or despite knowledge of applicable requirements." Pet. at 46; Pet. Br. at 29-30. Petitioners do not request a variance because of poor decisionmaking, refusal to recognize compliance obligations or plan for compliance, or inaction. To the contrary, petitioners are fully aware of the MPS requirements and the PCB 12-126 variance conditions and have affirmatively sought to continue compliance with applicable requirements for the MPS Group.

New Owner Cases. Not all cases finding self-imposed or negligible hardships involved long-time facility owners or ongoing compliance problems. Specifically, in Willowbrook Motel, PCB 81-149, on which the Citizens Groups heavily rely, a partnership formed to acquire land and develop a motel sought a variance to connect to the county sewer system. Willowbrook Motel, PCB 81-149, slip op. at 1. The partnership's application for a sewer connection permit was denied because the system had previously reached design capacity under Board regulations and was, therefore, on "restricted status." *Id.* at 2. Under an order of the circuit court, the Agency could issue permits despite that status only if the Board granted a variance. *Id.* The partnership claimed several hardships absent a variance: loss of its payment for "residential equivalents" it had purchased from the county to bolster its permit application, the increased cost of reapplying for a construction permit, and loss of priority among permit applicants. *Id.* at 3.

Finding there had been no showing of an arbitrary or unreasonable hardship, the Board denied a variance. Willowbrook Motel, PCB 81-149, slip op. at 3-4. The Board found the cost of residential equivalents was at most a self-imposed hardship because the partnership incurred the cost knowing the sewer system was on restricted status, and that the partnership's development plans constituted a "gamble" that a variance would issue. *Id.* The other asserted hardships represented "a delay of an investment opportunity," which was not an arbitrary or unreasonable hardship, the Board concluded. *Id.* at 4.

On review, the appellate court affirmed, holding the partnership's claimed hardship amounted only to a "temporary prohibition against intense development" of the property. Willowbrook Motel Partnership v. PCB, 135 Ill. App. 3d 343, 349, 481 N.E.2d 1032, 1036 (1st Dist. 1985). Regarding the partnership's claim that the development delay would lead to the project's termination, the court found the partnership itself would still "lose only expected profits and incidental expenses," as its agreement to purchase the property was contingent on the Board's granting a variance. *Id.* The court further held that diminution in the property's value did not rise to the level of an "arbitrary or unreasonable hardship," since any owner of unimproved land affected by the sewer restriction faced the same hardship. *Id.* (emphasis in original). The court further observed that granting a variance to allow every opportunity for development despite the sewer connection ban would undermine the Board's control over overburdened sewage systems. *Id.*

The Board finds Willowbrook Motel distinguishable on several grounds. First, to the extent the Board found the petitioner's lost expenses were a "self-imposed hardship," it was because the partnership paid to obtain a permit knowing a permit could not be issued unless the Board granted a variance. Here, by contrast, IPH does not claim it faces any financial losses if a variance is not granted and the transaction does not close.

Second, the burden of compliance in Willowbrook Motel and in this case are entirely different. In Willowbrook Motel, compliance with the sewer requirement required nothing more of the partnership than that it hold off on its development plans until the overcapacity problem could be resolved by the treatment plant. Here, any owner of the MPS plants other than AER would, absent a variance, have to take affirmative, substantial steps to meet the MPS emission rates. This, petitioners claim, is not feasible for IPH and likely would not be for any other prospective owner of the plants. Pet. at 19. That challenge would be compounded because IPH

would have to accelerate completion of the Newton FGD project, the means of ultimate MPS compliance. Newton FGD construction is well underway and AER has already invested more than \$250 million in that project. Pet. Br. at 35. Moreover, IPH proposes to maintain the construction schedule for the FGD project imposed in the PCB 12-126 variance, and has budgeted \$18 million annually, and then whatever additional amounts are necessary in 2018-19, to complete the project. Pet. at 21; Pet Exh. 8 at 13. Petitioners represent that proceeding instead on an accelerated construction schedule is neither financially nor practically feasible. Pet. Br. at 35; Pet Br. Exh. 3 at 2. Petitioners have presented uncontroverted evidence that IPH will not have the financial means at closing to comply with the MPS without a variance, and that even if it did, it is not possible to complete the Newton FGD project in time to comply with the MPS 2015 SO₂ emission rate. See Pet. Exh. 2 at 4, 10; Pet. Exh. 8 at 5-6; Tr. at 28-29.

Finally, there is an important distinction between this case and Willowbrook Motel because of the nature of the environmental impact against which the claimed hardships must be weighed. Here, the Board has already found, consistent with the decision in PCB 12-126, that the impact of the proposed variance is a net benefit to air quality. See *supra* at p. 86. The Board weighs this impact against the hardship to AER and IPH below. The environmental impact of the proposed development in Willowbrook Motel was, in stark contrast to that here, serious environmental harm caused by additional loading of an already overburdened sewer system. 135 Ill. App. 3d at 349, 481 NE.2d at 1036. For this reason, the Board found that the benefits of the partnership's planned development were outweighed by the adverse impact of "aggravat[ing] the problems associated with an improperly functioning sewer and treatment system." Willowbrook Motel, PCB 81-149, slip op. at 3. The appellate court, too, rejected the partnership's claim that the environmental impact would be merely "insignificant." Willowbrook Motel, 135 Ill. App. 3d at 349-50, 481 N.E.2d at 1036-37.

IEPA v. Lindgren Foundry concerned new owners of a foundry that the prior owner had operated "in plain violation" of particulate emission standards, and then closed. IEPA v. Lindgren Foundry, PCB 70-1, slip op. at 1 (Sept. 25, 1970). The new owners sought to reopen the foundry immediately and operate it in violation of emission standards for seven months while they obtained and installed a scrubber to come into compliance. *Id.* at 4. The new owners claimed that a seven-month delay in resuming operations would make it impossible financially to reopen the foundry, and that they would lose \$70,000 in sunk costs. *Id.* The Board was "not greatly impressed" by that loss, which, it found, was the full extent of the owners' losses, since they could "cut and run if prospects dim." *Id.* "By investing money with reason to know it would be lost absent a favorable decision," the Board added, the owners had "created their own hardship." *Id.* at 8. The Board emphasized that "[a] petitioner may not bootstrap himself into a preferred position by spending money first and then claiming he has been injured." *Id.*

The Board is not persuaded that Lindgren Foundry is analogous to this case. In that case, as in Willowbrook Motel, the petitioners claimed financial hardship from a loss of investment made with the expectation that a variance would issue. Again, petitioners here do not point to any such losses. Further, the Board found in Lindgren Foundry that resuming operation of the closed foundry without emission controls would allow particulate emissions seven times higher than applicable regulations permitted, causing "a substantial nuisance." Lindgren Foundry, PCB 70-1, slip op. at 12. The net environmental benefit that the proposed variance here would

maintain and enhance sets this case apart from more typical variance cases like Lindgren Foundry and Willowbrook Motel, in which a variance would cause adverse environmental impacts.

This case also comes before the Board at a different stage than the “new owner” cases discussed above. IPH recognizes that it must essentially step into AER’s shoes and take on AER’s obligations under the variance the Board granted in PCB 12-126. IPH is not asking for further relief than AER’s variance provides. IPH not only proposes to follow the same compliance plan to which AER currently is subject under its variance, but even proposes to take on additional conditions beyond those in the AER variance to enhance positive environmental effects. *See* Pet. at 20-22; Pet. Br. at 5; Pet. Second Resp. at 3-5. AER, based upon this record, has followed the PCB 12-126 compliance plan. So, the Board finds that IPH would experience a hardship that is not self-imposed if it could not simply maintain that plan after stepping into AER’s shoes.

Further, the Board does not agree with comments that any hardship to IPH is self-imposed because Dynegy, IPH’s ultimate parent company, could fund compliance with the MPS. *See, e.g.*, PC#2337 at 3-5; PC#3162a at 17. Dynegy is legally separate from IPH and is not a petitioner in this case. Pet. Post. Br. at 19. The Board’s focus is on the hardship to IPH and not its corporate parent. The Board notes that AER’s relationship to Ameren, its parent company, is similar to the IPH-Dynegy relationship. Ameren, like Dynegy here, was not a party to the variance request in PCB 12-126, and the Board did not credit there the suggestion that Ameren fund AER’s compliance with the MPS. Ameren Energy Resources, PCB 12-126, slip op. at 50-51 (Sept. 20, 2012). Petitioners represent that since IPH, as a holding company, would acquire New AER, the proposed transaction structure “effectively changes very little for AER.” Pet. Br. at 19, citing Pet. Exh. 2.

Moreover, petitioners present evidence that Dynegy cannot integrate IPH into its capital structure or provide financial support to IPH without jeopardizing Dynegy’s own credit rating, and thus, Dynegy’s balance sheet and access to capital. *See* Pet. at 44-45. Petitioners add that given the “currently challenging commodity price environment,” Dynegy must maintain “strong credit metrics to support its current credit rating and preserve its access to affordable capital.” Pet. Br. at 21, citing Pet. Br. Exh. 2. The Board finds that IPH’s choice to proceed with the proposed transaction despite a lack of additional financial support from Dynegy does not disqualify IPH from obtaining a variance to the extent one is otherwise warranted.

Similarly, the Board finds misplaced in this variance proceeding Mr. Johnson’s opinion that IPH will be “severely undercapitalized from the start,” such that “bankruptcy is very likely.” PC#3162a at 17; *see also id.* at 21 (opining that transaction “looks more like a leveraged gamble on future price increases . . . than a transaction based on a rational belief that IPH will actually be able to sustain itself”). Whether or not legitimate grounds exist for concern about IPH’s financial health and prospects—a subject of intense debate between petitioners (*see, e.g.*, Pet. Br. 21-22, citing Pet. Br. Exh. 2) and the Citizens Groups (*see, e.g.*, PC#2337 at 4-5)—petitioners have submitted a plan to ultimately achieve compliance with the MPS, as required by Section 104.204(f) of the Board’s procedural rules (35 Ill. Adm. Code 104.204(f)). The rule does not also require that a petitioner provide financial assurance that the compliance plan will be

implemented. This omission in the procedural rule is sound, for the Board is not in a position to assess a petitioner's financial viability. In addition, the petitioners' explanation that IPH will be in a better financial position than AER to implement the compliance plan going forward provides some reassurance that they will ultimately comply with the MPS. Pet. Br. at 21-22 & Exh. 2 at 4-5.

Weighing Environmental Impact against Hardship to IPH

The Board has found above that the environmental impact of the requested variance is a net benefit to air quality. See *supra* at p. 86. Petitioners have shown that the variance will result in a net decrease of 7,778 tons of SO₂ emissions from fourth quarter 2013 through 2020, as compared to SO₂ emissions if timely compliance with the MPS were required. Moreover, petitioners have demonstrated that by capping total SO₂ emissions at 327,996 tons during that period, IPH will have to keep SO₂ emissions 27,700 tons below projections under the variance granted in PCB 12-126. This net reduction in emissions is attributable to the cap, and will be achieved by keeping the Meredosia and Hutsonville stations closed, operating FGD equipment at the Coffeen and Duck Creek stations at a 98%-99% SO₂ removal rate, using low sulfur coal, and permanently retiring E.D. Edwards Unit 1 as MISO permits. The Agency agrees that granting a variance subject to the conditions under the MOA it reached with Dynegy would result in a net environmental benefit "consistent with previous net environmental benefit determinations." Agency Rec. at 17. Further, the Agency concludes "there would be no injury to the public if the variance were granted" with the conditions to which IPH has agreed concerning the operating MPS plants. *Id.* Accordingly, the Board is persuaded that the overall reduction in SO₂ emissions resulting from this variance favors granting the variance.

The People argue that the environmental impact of increased SO₂ emissions in individual years from 2015 to 2019, rather than net emissions over that timeframe, should be factored into the determination of whether any hardship outweighs environmental harm. PC#2336 at 7. However, the Board has determined that the net reduction in emissions from fourth quarter of 2013 through 2020 is the impact to be weighed against any hardship to petitioners.

The Board has found that denying a variance would impose a hardship on IPH, and that the hardship is not self-imposed. In considering hardship, the Board has taken into account that AER has spent more than \$250 million to date on construction of the Newton plant scrubber. The Board has also considered that IPH would maintain the PCB 12-126 construction schedule for the balance of the Newton FGD project, and that IPH has budgeted \$18 million annually through 2017, and then whatever amounts are necessary in 2018-19, to complete the project. Pet. at 21 & Exh. 8 at 13; Pet. Br. at 35. In addition, the Board has taken into account the persistence of severely depressed electricity prices, which remain at approximately \$31.85 per megawatt hour, having fallen precipitously in the past several years, from approximately \$60 per megawatt hour in 2006 and 2007, and petitioners' representation that the expected recovery in power prices in 2015 will not be immediate or "sufficient to generate the cash flow and liquidity needed to accelerate completion of the Newton FGDs in time to meet the MPS." Pet. at 35, 41; Pet. Exh. 2 at 5-6, 11-12. These same issues have, since the PCB 12-126 variance was granted, caused a deteriorating financial outlook, worsening credit profile, and reduced access to capital for AER. Pet. at 37, citing Pet Exh. 9.

Considering the overall reduction in SO₂ emissions IPH must achieve during the term of the requested variance, the Board finds that requiring IPH to comply with the December 31, 2015 deadline in Section 225.233(e)(3)(C)(iii) and the December 31, 2017 deadline in Section 225.233(e)(3)(C)(iv) would impose an arbitrary or unreasonable hardship on IPH.

Consistency with Federal Law

The Board has authority under Section 110 of the CAA (42 U.S.C. § 7410) to adopt regulations that are part of the State's plan for implementing, maintaining, and enforcing air quality standards. The variance procedure to grant relief from a Board regulation is consistent with the authority granted to the states under the CAA's Section 110.

If the variance is granted, the Agency will submit the variance order to USEPA for approval as a revision to the Illinois SIP. Agency Rec. at 26-27. As noted earlier, USEPA did not identify any adverse issues with the prior variance granted in PCB 12-126. The Agency does not expect that USEPA will find any adverse issues with the current request, in which SO₂ reductions are expected beyond those contained in the previous SIP revision submitted to USEPA for PCB 12-126. Agency First Resp. at 3; Agency Second Resp. at 1-2.

The Agency concludes that granting this variance will not jeopardize the State's obligations to attain and maintain the 1-hour SO₂ NAAQS, but cautions:

This variance deals only with the requirements in question at the current time. Any new rules mandating reductions in SO₂ will be addressed in a separate rulemaking proceeding before the Board. Variances for existing requirements do not affect any future rules.

[T]he [Agency] will propose new rules to the Board and such rules will require sufficient reductions to allow the attainment and maintenance of the NAAQS. Agency First Resp. at 2.

Based upon this record, the Board finds that granting petitioners' request for a variance, subject to the conditions in the order below, would be consistent with current Illinois SIP obligations to attain and maintain NAAQS compliance. The Board therefore finds that granting petitioners a variance from the rule is consistent with federal law.

As indicated above, however, if federal rules, such as a CAIR or CSAPR replacement, go into effect, petitioners might need to implement additional controls. For example, USEPA's adoption of a new primary NAAQS for SO₂ of 0.75 ppb became effective August 23, 2010. 75 Fed. Reg. 35520 (June 22, 2010). Effective October 4, 2013, USEPA made its initial 1-hour SO₂ air quality designations for the State of Illinois. Among the areas designated as "nonattainment" for the 1-hour SO₂ NAAQS is the area in which the E.D. Edwards station is located. 78 Fed. Reg. 47191 (Aug. 5, 2013).

The schedule for state plans addressing areas designated as nonattainment is governed by CAA Sections 191(a) and 192(a) (42 U.S.C. §§ 7514(a), 7514a(a)). In adopting the new primary SO₂ NAAQS, USEPA stated:

[A]ny State containing an area designated as nonattainment with respect to the SO₂ NAAQS would need to develop for submission to [US]EPA a SIP meeting the requirements of part D, Title I, of the CAA, providing for attainment by the applicable statutory attainment date [A]ll components of the SO₂ part D SIP must be submitted within 18 months of the effective date of an area's designation as nonattainment. 75 Fed. Red. at 35577 (June 22, 2010).

Eighteen months from the October 4, 2013 effective date will be April 4, 2015. USEPA also stated that SIPs “would need to provide for attainment and maintenance of the new 1-hour SO₂ NAAQS as expeditiously as practicable, which we expect to be no later than five years after initial designation . . . in all areas of the State” 75 Fed. Reg. at 35553 (June 22, 2010). Five years from the October 4, 2013 effective date will be October 4, 2018. Although the conditions of the variance order below would extend through the end of 2020, the variance from the two MPS provisions at 35 Ill. Adm. Code 225.233(e)(3)(C)(iii) and (iv) would end on December 31, 2019, approximately 14 months after October 4, 2018.

Accordingly, it is conceivable that during the term of the variance, the Agency may begin proposing new rules for SO₂ emissions.¹⁴ As petitioners state, the Agency will need to analyze air emissions modeling to determine culpable sources and appropriate emission limits or control measures as part of its SIP. Pet. First Resp. at 7. Petitioners state that IPH “recognizes that the requested variance relief would not exempt E.D. Edwards from compliance with any federal Clean Air Act requirements adopted in the future, including Illinois regulations, if any, needed to implement SIP obligations concerning the one-hour SO₂ NAAQS.” Pet. at 67.

Of course, as noted by the People, any changes to the Board's rules will go through the rulemaking process, and all parties and participants here will have an opportunity at the time to reassess petitioners' prospects and environmental and health impacts in light of new regulatory requirements.

Compliance Plan and Variance Conditions

For the reasons below, the Board finds that petitioners' compliance plan is sufficiently definite to support granting the variance.

Petitioners' compliance plan, as initially proposed, included suggested variance conditions that were nearly the same as those imposed by the Board in PCB 12-126. The suggested conditions would require IPH to (1) operate the MPS Group with an overall SO₂ annual emission rate of 0.35 lb/mmBtu through 2019; (2) maintain a continuous program of

¹⁴ As another example, USEPA recently proposed revisions to the primary and secondary NAAQS for PM (PM_{2.5} and PM₁₀). 77 Fed. Reg. 38890 (June 29, 2012). PM_{2.5} and PM₁₀ refer to particles generally less than or equal to 2.5 and 10 micrometers in diameter, respectively. *Id.*

construction for the Newton FGD project on the schedule set forth in PCB 12-126; and (3) continue to not operate the Meredosia and Hutsonville stations through 2020, with the exception of the FutureGen project at Meredosia. Pet. at 68-70.

In PCB 12-126, AER did not propose a condition imposing a specific construction schedule for the Newton FGD project. Rather, the Board crafted that project schedule. The Board found that AER's compliance plan needed specific dates to demonstrate progress toward complying with the applicable requirements. To establish the schedule, the Board extracted information from the record based upon AER's descriptions of work and budgeted resources. The Board also required AER to submit annual progress reports to IEPA on the status of construction activities relating to the Newton FGD project. Ameren Energy Resources, PCB 12-126, slip op. at 65-66 (Sept. 20, 2012).

Petitioners state that IPH expects to have sufficient liquidity to continue constructing the Newton FGDs in accordance with the proposed compliance plan here, which is the same as the one required in PCB 12-126. Pet. at 39-40, 68-70. Petitioners also propose to include as a condition here the PCB 12-126 condition requiring annual progress reports. *Id.* at 68-70.

On September 4, 2013, after the petition was filed, an MOA was executed between IPH, DMG, Dynegy Kendall, and the Agency. The MOA (1) commits IPH to permanently retire E.D. Edwards Unit 1 as soon as MISO allows (as early as 2017); (2) commits DMG to withdraw air operating permits for the Stallings and Oglesby combustion turbine facilities by December 31, 2014; and (3) commits Dynegy Kendall to implement an Advanced Gas Path project (as early as 2015). Agency Rec. at 28-29. In addition, the Agency states that the MOA, along with petitioners' proposed variance conditions, would effectively commit IPH to (1) maximize performance of the FGDs at the Duck Creek and Coffeen stations; (2) burn low sulfur PRB coal from at the E.D. Edwards, Joppa, and Newton stations; and (3) manage generation as necessary to maintain compliance. Agency Rec. at 13-14.

Petitioners agree to the Agency's additional conditions, subject to non-substantive revisions. Pet. Second Resp. at 5. Also as noted earlier, although not requested by the Agency, petitioners also agree to a variance condition imposing an overall mass SO₂ emissions cap. The following lists the variance conditions proposed by or agreed to by petitioners, as drafted by petitioners:

- 1) Through December 31, 2019, IPH must continue to burn low sulfur coal at the E.D. Edwards, Joppa and Newton Energy Centers. The combined annual average stack SO₂ emissions of these three stations shall not exceed 0.55 lb/mmBtu on a calendar year annual average basis.
- 2) Through December 31, 2019, IPH must operate the existing Flue Gas Desulfurization systems at the Duck Creek and Coffeen Energy Centers to achieve a combined SO₂ removal rate of at least 98 percent on a calendar year annual average basis.

- 3) IPH must permanently retire the E.D. Edwards Unit 1 as soon as allowed by the Midcontinent Independent Transmission System Operator, Inc.
- 4) IPH must limit the MPS Group system-wide mass emissions of SO₂ to no more than 327,996 tons, through December 31, 2020. Pet. Br. Att. A.

According to the Agency, proceeding in this manner positions petitioners for compliance with the MPS final overall SO₂ annual emission rate of 0.23 lb/mmBtu beginning in 2020. Agency Rec. at 14.

The Board finds that the requirements of the proposed compliance plan pertaining to the following are sufficiently definite to support granting the requested variance: (1) the Newton FGD project schedule and progress reports; (2) the SO₂ interim rate; (3) the overall mass SO₂ emissions cap; (4) the burning of low sulfur coal; (5) the maximizing of existing FGDs; (6) the retirement of E.D. Edwards Unit 1 as soon as allowed by MISO; and (7) the continued closure of the Meredosia and Hutsonville stations (with the exception FutureGen 2.0). The Board imposes conditions to the variance, consistent with this opinion, in the order below.

Under standard practice, the Board would ordinarily give petitioners 45 days to file and serve an executed certificate of acceptance of the granted variance (*see* 35 Ill. Adm. Code 104.240). However, the Board is not bound by that practice, and the 45-day period is not jurisdictional. In this case, to allow a reasonable period for transfer of the MPS plants to close following grant of the variance, the Board requires petitioners, if they choose to accept the granted variance, to file and serve the certificate of acceptance within 60 days after the date of this decision.

CONCLUSION

In summary, the Board finds that petitioners are eligible to apply for and obtain variance relief, and that this record contains adequate proof that timely compliance with the overall SO₂ annual emission rates in Sections 225.233(e)(3)(c)(iii) and (iv) would impose an arbitrary or unreasonable hardship on IPH.

Petitioners have committed to an overall SO₂ annual emission rate of 0.35 lb/mmBtu from 2013 through 2019 in conjunction with the continued closure of the Meredosia and Hutsonville stations, increased efficiency of the FGD units at the Coffeen and Duck Creek stations, the use of low sulfur coal, and compliance with an overall mass SO₂ emissions cap of 327,996 tons from fourth quarter 2013 through 2020. The Board finds this compliance plan satisfactory, as it results in an overall reduction of SO₂ emissions from fourth quarter 2013 through 2020, and provides a net benefit to Illinois air quality.

Accordingly, the Board grants IPH and Medina Valley combined dual variances for the period beginning December 31, 2015 until December 31, 2019 from the requirements of 35 Ill. Adm. Code 225.233(e)(3)(C)(iii) and for the period beginning January 1, 2017 until December 31, 2019 from the requirements of 35 Ill. Adm. Code 225.233(e)(3)(C)(iv), subject to the conditions outlined in the order below.

ORDER

The Board grants Illinois Power Holdings, LLC and AmerenEnergy Medina Valley Cogen, LLC combined dual variances for the electrical generating units in the Ameren multi-pollutant standard (MPS) Group from the applicable requirements of 35 Ill. Adm. Code 225.233(e)(3)(C)(iii) for a period beginning January 1, 2015 through December 31, 2019 and 35 Ill. Adm. Code 225.233(e)(3)(C)(iv) for a period beginning January 1, 2017 through December 31, 2019, subject to the following conditions.

1. Through December 31, 2020, Illinois Power Holdings, LLC (IPH) must assure compliance with paragraph 3.
2. Through December 31, 2019, IPH must comply with an overall SO₂ annual emission rate of 0.35 lb/mmBtu. Beginning January 1, 2020, IPH must comply with an overall SO₂ annual emission rate of 0.23 lb/mmBtu.
3. AmerenEnergy Medina Valley Cogen, LLC must not operate the electrical generating units at Meredosia and Hutsonville Power Stations until after December 31, 2020. The FutureGen project at the Meredosia Energy Center is exempt from this restriction.
4. Through December 31, 2019, IPH must continue to burn low sulfur coal at the E.D. Edwards, Joppa, and Newton Energy Centers. The combined annual average stack SO₂ emissions of these three stations must not exceed 0.55 lb/mmBtu on a calendar year annual average basis.
5. Through December 31, 2019, IPH must operate the existing Flue Gas Desulfurization systems at the Duck Creek and Coffeen Energy Centers to achieve a combined SO₂ removal rate of at least 98 percent on a calendar year annual average basis.
6. IPH must permanently retire E.D. Edwards Unit 1 as soon as allowed by the Midcontinent Independent Transmission System Operator, Inc.
7. For the time period beginning October 1, 2013 through December 31, 2020, IPH must limit the MPS Group system-wide mass emissions of SO₂ to no more than 327,996 tons. The specified time period and emissions limit apply without any adjustment based on the time period of IPH ownership of MPS Group facilities.
8. For the time period beginning October 1, 2013 through December 31, 2020, IPH must report annually to the Illinois Environmental Protection Agency (Agency) the combined tons of mass SO₂ emissions and the overall SO₂ annual emission rate from the five operating power stations in the MPS Group: Coffeen, Duck Creek, E.D. Edwards, Joppa, and Newton Energy Centers. The SO₂ emissions report must be included in IPH's Annual Emissions Reports and show the mass

SO₂ emissions for each time period (October 1, 2013 through December 31, 2013, and each year thereafter) along with a running total of the remaining emissions available under the system-wide mass SO₂ emissions limit specified in paragraph 7.

9. Regarding the Flue Gas Desulfurization project at the Newton Power Station (I.D. No. 079808AAA) (Newton FGD project):
 - a. On or before July 1, 2015, IPH must complete engineering work on the Newton FGD project.
 - b. On or before December 31, 2017, IPH must obtain a new or extended construction permit, if needed, for the installation of the FGD equipment at the Newton Power station.
 - c. On or before December 31, 2018, IPH must complete construction of the absorber building on the Newton FGD project.
 - d. On or before July 1, 2019, IPH must complete steel fabrication of ductwork and insulation activities on the Newton FGD project.
 - e. On or before July 1, 2019, IPH must complete installation of electrical systems and piping on the Newton FGD project.
 - f. On or before September 1, 2019, IPH must set major equipment components into final position on the Newton FGD project.
 - g. Beginning with calendar year 2013 and continuing through 2019, IPH must file annual progress reports with the Agency as to the status of construction activities relating to the Newton FGD project by the end of each calendar year. IPH's annual progress reports must include an itemization of activities completed during the year, activities planned to be completed in the forthcoming year, progress of the Newton FGD project to comply with the timelines specified in this variance, and the estimated in-service date. Annual progress reports must be submitted to :

Illinois Environmental Protection Agency
Attn: Ray Pilapil, Manager
Bureau of Air-Compliance Section
1021 N. Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276

and

Illinois Environmental Protection Agency
Attn: Gina Roccaforte, Assistant Counsel
Division of Legal Counsel-Air Regulatory Unit
1021 N. Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276

IT IS SO ORDERED.

Chairman D. Glosser dissented.

If petitioners choose to accept this variance, petitioners must, within 60 days after the date of this opinion and order, file with the Board and serve on the Agency 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. Upon timely filing and service of the certificate of acceptance, the variance granted in this decision will supersede the variance granted in PCB 12-126. The form of the certificate follows:

CERTIFICATE OF ACCEPTANCE

On _____, Ameren Corporation and Illinois Power Holdings, LLC closed the transaction referenced in the opinion and order of the Illinois Pollution Control Board in docket PCB 14-10, dated November 21, 2013.

I (We), _____, having read the opinion and order of the Illinois Pollution Control Board in docket PCB 14-10, dated November 21, 2013, 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.

ILLINOIS POWER HOLDINGS, LLC

By: _____
Authorized Agent

Title: _____

Date: _____

AMERENENERGY MEDINA VALLEY COGEN, LLC

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, Don A. Brown, Acting Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on November 21, 2013, by a vote of 3-1.

A handwritten signature in black ink that reads "Don A. Brown". The signature is written in a cursive style with a large, looping initial "D" and a long horizontal flourish at the end.

Don A. Brown, Acting Clerk
Illinois Pollution Control Board

Attachment A - Hearing Commenters Supporting Requested Variance

The following lists commenters who supported the variance request of Illinois Power Holdings, LLC and AmerenEnergy Medina Valley Cogen, LLC at the Board's public hearing. The commenter's name appears on the left, with the citation to the hearing transcript appearing on the right.

<u>Name</u>	<u>Transcript Page Number</u>
Representative Brandon Phelps, 118th District	43
Senator Gary Forby, 59th District	46
Representative Wayne Rosenthal, 95th District	47
Senator Andy Manar, 48th District	50
Representative Brad Halbrook, 110th District	54
Representative David Reis, 109th District	57
Mark Bolander, Mayor of Newton	59
Brad Mitchell, Chairman of Jasper County Board	62
Dan Cox, Superintendent of Jasper County Unit #1 Schools	65
Roger Pethel, Mayor of Robinson	67
Bob Bert, Executive Director of Crawford County Development	69
Michael Carrigan, President, Illinois AFL-CIO	95
James Luckey, Manager, E.D. Edwards Energy Center	101
Jeremy McKinney, Director, Hayes PMC	105
Albert Martos, Employee, Ameren	107
Brian Smith, General Supervisor, Duck Creek Energy Center	108
Prentice Carter, Employee, Ameren	109
Dennis Morgan, General Supervisor Edwards	111
Tom Hart, Employee, Edwards Energy Center	115
Greg Russell, Director, Duck Creek Energy Center	116
Kevin Largent, Employee, Duck Creek Energy Center	117
Curt Kookan, Employee, E.D. Edwards Energy Center	118
Roger Look, Supervisor, Duck Creek Energy Center	119
James Klenke, Employee, Ameren	120
Joyce Lipe, Employee, Coffeen Energy Center	125
John Broder, Employee, Joppa Energy Center	127
Joe Luckett, Supervisor, Coffeen Energy Center	127
Rich Speraneo, Employee, Coffeen Energy Center	129
Mike McSperritt, Employee, Coffeen Energy Center	131
Jeff Coyle, Employee, Coffeen Energy Center	132
MC King	134
Scott Bell, Employee, Coffeen Energy Center	136
John, Romang, Employee, Coffeen Energy Center	137
Phyllis Oliver	139
Bill Mulconnery, Business Manager, Boilermakers Local 363	141
Bernie Wicklein, President, Neuter Construction Company	143

<u>Name</u>	<u>Transcript Page Number</u>
Dale Stewart, Executive Secretary/Treasurer, Southwestern Illinois Building & Trades Council	145
Tom Wolf, Illinois Chamber of Commerce	148
Jim Monk, President, Illinois Energy Association	152
Mark Denzler, Chief Operating Officer, Illinois Manufacturers Association	155
Kirk Cooper, Vice President, Boilermakers Local 60	157
Evan Wooding, Business Agent, Steamfitters Local 353, and Vice President, United Association of Pipe Trades District Council 34	159
Deanna Wubben, Employee, E.D. Edwards Energy Center	164
John Baker, Employee, Baldwin Generating Station	199
James Kipp, Employee Dynegy	201
Kathy Roemmel, Manager, Wood River Generating Station	203
Deb Koenig, Administrative Manager, Wood Generating Station	203
Joseph Lloyd, Health and Safety Managing Director, Dynegy	205
Debbie Lewis, Employee, Employee, Baldwin Generating Station	206
Randy Short, Plant Manager, Baldwin Generating Station	207
Greg Robert, Director of Maintenance, Dynegy	208
Joe Kimlinger, Employee, Dynegy	209
Dave Glosecki, Director of Maintenance, Baldwin Generating Station	210
Rachel Casey, Employee, Ameren Energy Resources	214
Winston Freund, Employee, Ameren Energy Resources	216
Steve Richard, Employee, Ameren Energy Resources	217
Tom Gannon, Employee, Ameren Energy Resources	218
Al Toennies, Employee, Ameren Energy Resources	219
Tamika Cole, Sales Representative, Ameren Energy Marketing	220
Carrie Smith, Sales Representative, Ameren Energy Marketing	222
Mike Apple, Newton Power Station Employee	223
Tim Dion, Employee, Newton Energy Center	223
Lance Farmer, Employee, Newton Energy Center	225
Paul Hardiek, Superintendent, Newton Energy Center	226
John Marschewski, Employee, Newton Energy Center	228
Jim Marshall, Technical Services Superintendent, Newton Energy Center	229
Roy Moore, Employee, Newton Energy Center	231
Larry Quick, Employee, Newton Energy Center	231
Lance Stanley, Employee, Newton Energy Center	235
Keith Trimble, Employee, Newton Energy Center	236
John Cooley, Director, Newton Energy	238
Marcus Helton, Employee, Joppa Energy Center	239
Nate McCuan, Employee, Joppa Energy Center	240
Chris Goebel, Employee, Joppa Energy Center	241
Bruce Parker, Environmental Engineer, Joppa Energy Center	242
Sam Freeman, Employee, Joppa Energy Center	244
Mike Pierson, Employee, Joppa Energy Center	245

<u>Name</u>	<u>Transcript Page Number</u>
Micky Jacobs, Employee, Joppa Energy Center	246
Mike Pullen, Employee, Joppa Energy Center	247
Kent Quertermous, Employee, Joppa Energy Center	249
Rob Faglier, Employee, Joppa Energy Center	255
Everett Ramage, Employee, Joppa Energy Center	258
David Helton, Employee, Joppa Energy Center	259
Chris Gates, Employee, Joppa Energy Center	263
Eric Deasel, Employee, Joppa Energy Center	265
Ronnie Douglas, Employee, Joppa Energy Center	266
Mark Jones, Supervising Engineer, Joppa Energy Center	270
Roger Kerley, Mechanic, Joppa Energy Center	275
Anthony Jones, Maintenance Welder, Joppa Energy Center	278
Lucas Schneider, Employee, Joppa Energy Center	280
Daniel Jeffords, Employee, Joppa Energy Center	283
Victor Holland, Mechanic, Joppa Energy Center	284
Michael Clark	285
John Johnson, Mechanic, Joppa Energy Center	285
Darin Gray, Employee, Joppa Energy Center	286
Julie Wilke, Employee, Joppa Energy Center	287
Tom Werner, Employee, Joppa Energy Center	288
Phillip Tune, Employee, Joppa Energy Center	290
Chris Wheat, Machinist, Joppa Energy Center	291
Manny Ebert, Employee, Joppa Energy Center	292
Kevin Bell, Employee, Joppa Energy Center	295
Justin Partridge, Employee, Joppa Energy Center	295
Todd Mowery, Employee, Joppa Energy Center	295
Carl Will, Employee, Newton Energy Center	299
Steve Fox, Employee, Newton Energy Center	299
Greg Musch, Employee, Newton Energy Center	300

Attachment B - Hearing Commenters Opposing Requested Variance

The following lists commenters who opposed the variance request of Illinois Power Holdings, LLC and AmerenEnergy Medina Valley Cogen, LLC at the Board's public hearing. The commenter's name appears on the left, with the citation to the hearing transcript appearing on the right.

<u>Name</u>	<u>Transcript Page Number</u>
Dan Dolan-Laughlin, Volunteer, American Lung Association	99
Teri Treacy, Employee, Sierra Club	122
Kevin Cashmer	125
Michael Beyer, President & CEO, Foresight Energy	161
Joyce Blumenshine, Chairperson, Heart of Illinois Group Sierra Club	165
Drew O'Bryan	168
Ryan Baker, Sierra Club	169
Richard Oram	170
Terry Gallagher	172
Nels Leutwiler	174
Cora Koehler	176
Ellyn Jacobson, Sierra Club	178
Justin Uebelhor	179
Chris Johnson, Sierra Club	180
Mike Elliott	181
Jeff Green, Illinois Renewable Energy Association	182
Amy Allen	184
Rose Gomez, Sierra Club	186
Barbara Gurtler	187
Kevin Morrison	189
Bob Jorgensen	190
Patty Rykhus	192
Velma Walton	195
Jenny Nailing	195
Gary Hall	196
Ron Trimmer, Citizens Climate Lobby	197
Robin Garlish	211
Tracy McFadden	251
Alyssa McMillen	253
Andy Stevens	256
Angel Sides	260
Idriss Sharief	262
Kiersten Sheets	268
Kady McFadden, Sierra Club	271
Josie D'Avolio, Sierra Club	276
Julie Mark	279
Larry Raymer	296

Name**Transcript Page Number**

Traci Barkley, Prairie Rivers Network, and on behalf of Central Illinois Healthy Community Alliance	302
Tamika Gibson, Illinois Environmental Council	307
Brian Urbaszewski, Director, Respiratory Health Association	309
Faith Bugel, Environmental Law & Policy Center	317
Andrew Armstrong, Staff Attorney, Environmental Law & Policy Center	321