## ILLINOIS POLLUTION CONTROL BOARD July 23, 2015

DYNEGY MIDWEST GENERATION, LLC,	)	
Petitioner,	)	
v.	)	PCB 12-135
ILLINOIS ENVIRONMENTAL	)	(Variance - Air)
PROTECTION AGENCY,	)	
Respondent.	)	

KATHLEEN C. BASSI, STEVEN BONEBRAKE, BINA JOSHI, SCHIFF HARDIN, LLP, APPEARED FOR THE PETITIONER; AND

DANA VETTERHOFFER, ASSISTANT COUNSEL, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, APPEARED FOR THE RESPONDENT.

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

Dynegy Midwest Generation, LLC (Dynegy) seeks a variance from the prohibition against selling or trading sulfur dioxide (SO<sub>2</sub>) emission allowances found in the multi-pollutant standard (MPS) at 35 Ill. Adm. Code 225.233(f)(2) (Section 225.233(f)(2)). The Dynegy facilities covered by the MPS are the following five coal-fired electric generating plants: Baldwin Energy Complex (Randolph County), Havana Power Station (Mason County), Hennepin Power Station (Putnam County), Wood River Power Station (Madison County), and Vermilion Power Station (Vermilion County). Dynegy specifically seeks a variance until April 1, 2017 to allow Dynegy to sell or trade SO<sub>2</sub> allowances allocated by the United States Environmental Protection Agency (USEPA) for the years 2015 and 2016 under the federal Cross-State Air Pollution Rule (CSAPR).

On May 7, 2015, the Board allowed Dynegy to file an amended petition (Am. Pet.). The Illinois Environmental Protection Agency (IEPA) filed an amended recommendation (Am. Rec.) on June 22, 2015, stating IEPA "neither supports nor objects to the Board granting [Dynegy's] petition." Am. Rec. at 2. IEPA does not disagree with the facts in the petition or the emission calculations. *Id.* at 4, 7. In addition, IEPA states "CSAPR provides air quality protection consistent with [IEPA's] goals in developing the MPS." *Id.* at 9.

The Environmental Protection Act (Act) gives the Board authority to grant a variance from a Board regulation when it finds that compliance with a regulation would impose an arbitrary or unreasonable hardship on the petitioner. 415 ILCS 5/35(a) (2014). For the reasons set forth below, the Board finds that Dynegy has not proven that compliance with Section 225.233(f)(2) as to CSAPR allowances issued for 2015 and 2016 is an arbitrary or unreasonable hardship on Dynegy. The Board, therefore, denies the requested variance.

### PROCEDURAL BACKGROUND

### **Original Petition**

On June 8, 2012, Dynegy filed its initial petition (Pet.) for a variance from the prohibition on selling or trading SO<sub>2</sub> allowances issued by USEPA under CSAPR for 2013 and 2014 as required by Section 225.233(f)(2). Pet. at 1. Additionally, Dynegy requested a variance from the companion requirement in the same section that Dynegy surrender such excess allowances. *Id.* Dynegy sought the variance until April 1, 2015. *Id.* 

As mentioned, the SO<sub>2</sub> allowances at issue are those allocated by USEPA under CSAPR. USEPA issued CSAPR in July 2011. 76 Fed. Reg. 48,208 (Aug. 8, 2011). Industry and state and local government petitioners promptly challenged CSAPR. <u>EME Homer City Generation v. EPA</u>, 696 F.3d 7 (D.C. Cir. 2012). Dynegy filed its initial petition for a variance relating to CSAPR allowances while this challenge was pending. The Board stayed this variance proceeding during the appeal of CSAPR. On April 29, 2014, the United States Supreme Court upheld CSAPR. <u>EPA v. EME Homer City Generation</u>, 134 S. Ct. 1584 (2014).

## **Amended Petition**

In December 2014, USEPA published notice of how it would proceed to implement CSAPR after the Supreme Court's ruling. 79 Fed. Reg. 71,663 (Dec. 3, 2014). Dynegy then filed a motion to amend its petition to update its petition. The Board granted Dynegy's motion on May 7, 2015.

Dynegy's amended petition continues to seek a variance from the prohibition in Section 225.233(f)(2) against selling or trading SO<sub>2</sub> allowances. Am. Pet. at 1-2. Due to the passage of time and USEPA's implementation of CSAPR, Dynegy now seeks a variance allowing Dynegy to sell or trade SO<sub>2</sub> allowances allocated by USEPA under CSAPR for the years 2015 and 2016. *Id.* at 1. Dynegy also requests a variance from the companion requirement in the same section that Dynegy surrender such excess allowances. *Id.* at 2.

#### **Public Notice**

Section 37(a) of the Act formerly required IEPA to provide public notice of a variance petition, including notice by publication in a newspaper of general circulation in the county where a facility is located. 415 ILCS 5/37(a) (2012). Upon receiving Dynegy's initial petition for variance, IEPA placed notices in newspapers in each of the five counties where Dynegy plants are located on dates between June 19 and June 21, 2012. IEPA also mailed notices of Dynegy's initial petition consistent with 35 Ill. Adm. Code 104.214(b), which generally requires notice be sent to elected officials.

Public Act 98-0822 amended Section 37(a) of the Act (415 ILCS 5/37(a)) to require a petitioner to provide notice of its variance petition rather than IEPA. P.A. 98-0822, eff. Aug. 1, 2014. Dynegy's amended petition was filed on May 7, 2015. The Board ordered Dynegy to

complete the notice requirements in Section 37(a) by May 21, 2015, and Dynegy filed a certification of publication on that date. Dynegy filed a supplement to its certification of publication on June 23, 2015. Dynegy placed newspaper notices in newspapers in each of the five counties where Dynegy plants are located, specifically: the Alton Telegraph (Madison County) on May 5, 2015; the Commercial News (Vermilion County) on May 1 and 2, 2015; the Mason County Democrat (Mason County) on May 6, 2015; the North County News (Randolph County) on May 7, 2015; and the News Tribune (Putnam County) on May 4, 2015. Dynegy also mailed notices of the amended petition to elected officials.

### **Hearing**

The Board will hold a hearing on a variance petition (1) if the petitioner requests a hearing; (2) if IEPA 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 its initial petition, Dynegy waived holding a hearing. Pet. at 28. IEPA did not file a written objection to the variance petition. On July 12, 2012, the Board received a public comment on the initial petition jointly submitted by Environmental Law & Policy Center, Natural Resources Defense Council, Respiratory Health Association of Metropolitan Chicago, and Sierra Club (PC #1). However, the public comment expressly stated that the commenters did not request a hearing.

In its amended petition, Dynegy again did not request a hearing. Am. Pet. at 37. Dynegy explained that the "[p]etition, including its exhibits, sufficiently informs the Board of the issues involved without the need for a hearing" and "the variance is not subject to any federal Clean Air Act requirements" requiring a hearing. *Id.* at 37-38. The Board did not receive any other requests for hearing.

Based on the record before the Board, the Board did not hold a hearing.

## **Public Comments**

As noted above, in 2012, the Board received a public comment on the initial petition jointly submitted by Environmental Law & Policy Center, Natural Resources Defense Council, Respiratory Health Association of Metropolitan Chicago, and Sierra Club. The Board also received two additional public comments on the initial petition from: John H. Johnson, Business Manager of the International Brotherhood of Electrical Workers (PC #2), and Michael T. Carrigan, President of the Illinois AFL-CIO (PC #3). The Board did not receive additional public comments on the amended petition.

#### **IEPA Recommendation**

Section 37(a) of Act requires IEPA to investigate each variance petition and "make a recommendation to the Board as to the disposition of the petition." 415 ILCS 5/37(a). Section 104.216 of the Board's procedural rules sets forth items IEPA must address in its recommendation and deadlines for filing with the Board. 35 Ill. Adm. Code 104.216. In

response to Dynegy's initial petition, IEPA filed a document titled "Recommendation" (Rec.) but declining to provide a recommendation, instead stating that IEPA "neither supports nor objects to the [Board] granting Dynegy's petition." Rec. at 1. Within 14 days after service of IEPA's recommendation, the petitioner may file a response to IEPA's recommendation or an amended petition. 35 Ill. Adm. Code 104.220. Dynegy made no such filing.

Section 104.226 of the Board's procedural rules requires IEPA to provide an amended recommendation when the petitioner amends the petition. 35 Ill. Adm. Code 104.226(b). The Board directed IEPA to file an amended recommendation to the Board as to the disposition of the amended petition by June 22, 2015. IEPA filed its amended recommendation on that date, and the Board discusses this filing below. Dynegy did not respond to IEPA's amended recommendation.

### **Board Questions**

On July 27, 2012, the hearing officer issued an order posing technical questions to Dynegy relating to Dynegy's initial petition. Dynegy filed answers to these questions on August 9, 2012 (Ans.). IEPA filed a response to Dynegy's answers on August 23, 2012.

### **LEGAL BACKGROUND**

## **Illinois Multi-Pollutant Standard**

Analysis of Dynegy's variance request requires an understanding of the underlying regulation and the history of its adoption. In 2005, USEPA promulgated regulations requiring reductions of nitrogen oxide ( $NO_x$ ),  $SO_2$ , and mercury emissions. 70 Fed. Reg. 25162 (May 12, 2005); 70 Fed. Reg. 28606 (May 18, 2005). IEPA proposed two rules to the Board to implement the federal rules.

The first rulemaking was <u>Proposed New 35 III. Adm. Code 225 Control of Emissions</u> <u>from Large Combustion Sources (Mercury)</u>, R06-25 (Dec. 21, 2006). This rule amended 35 III. Adm. Code Part 225 Subpart A and added Subpart B. Dynegy explains that the Illinois mercury rule required coal-fired power plants "to achieve a 90 percent reduction from input mercury or an emission rate of 0.008 [pounds] mercury [per gigawatt hour] gross electrical output." Am. Pet. at 9.

The second rulemaking was <u>Proposed New Clean Air Interstate Rule (CAIR) SO<sub>2</sub>, NO<sub>x</sub>, Annual and NO<sub>x</sub> Ozone Season Trading Programs, 35 Ill. Adm. Code 225, Subparts A, C, D, E, and F, R06-26 (Aug. 23, 2007). Dynegy explains that CAIR established a state-wide cap on SO<sub>2</sub> and NO<sub>x</sub> emissions to be implemented through emission reductions or emission allowance trading. Am. Pet. at 10.</u>

In 2006, during the development of these rules, Dynegy states that it "simultaneously faced . . . developing a compliance strategy to meet future emission reduction requirements under both the Illinois CAIR and the Consent Decree [Dynegy] had entered with, among others, the federal government." Am. Pet. at 9. The 2005 consent decree required Dynegy to reduce

SO<sub>2</sub>, NO<sub>x</sub>, and particulate emissions at its five coal-fired power plants and mercury at the Vermilion plant "through a combination of enforceable emission limits, installation of mandatory pollution control and monitoring technology, and SO<sub>2</sub> and NO<sub>x</sub> allowance restrictions" by the end of 2012. *Id.* at 9-10, fn. 11, *referencing* United States, *et al.* v. Illinois Power, *et al.*, No. 99-CV-833 (S.D. Ill.) (consent decree entered May 27, 2005). The consent decree imposed unit-specific SO<sub>2</sub> controls on three units at the Baldwin plant and unit 6 at the Havana plant on a staggered schedule by the end of 2012; SO<sub>2</sub> emission limits on Dynegy's units at the Hennepin, Wood River, and Vermilion plants; declining system-wide annual SO<sub>2</sub> emission caps; and annual surrender of up to 30,000 SO<sub>2</sub> acid rain program allowances. Am. Pet. at 10. The consent decree does not require surrender of any emission allowances allocated under CSAPR. *Id.* 

Confronting Illinois regulations and Dynegy's consent decree, Dynegy evaluated its compliance options and considered various combinations of pollution control equipment that could meet multiple requirements. Am. Pet. at 10. Dynegy determined that it could not install all of the equipment by the earliest compliance date of July 1, 2009, which was the initial compliance deadline for the Illinois mercury rule. *Id.* at 11. Dynegy then joined with other generators to develop a coordinated approach. *Id.* As a result, Part 225, titled "Control of Emissions from Large Combustion Sources," provides affected utilities 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 SO<sub>2</sub> and NO<sub>x</sub>. This second option is found at Section 225.233 and is referred to as the multi-pollutant standard or MPS. 35 Ill. Adm. Code 225.233.

On November 26, 2007, Dynegy opted in to the MPS. Am. Pet. at 11, Ex. 5. The MPS required Dynegy to meet a system-wide SO<sub>2</sub> emission rate starting in 2013. Am. Pet. at 12, fn 15. The MPS also extended the compliance deadline for controls on mercury emissions to 2015. Am. Pet. at 11.

The specific MPS requirement from which Dynegy now seeks relief is:

Section 225.233 Multi-Pollutant Standard (MPS)

f) Requirements for NO<sub>x</sub> and SO<sub>2</sub> Allowances

. . .

The owners or operators of [electric generating units] in an MPS Group must not sell or trade to any person or otherwise exchange with or give to any person SO<sub>2</sub> allowances allocated to the [electric generating units] in the MPS Group for vintage years 2013 and beyond that would otherwise be available for sale or trade as a result of actions taken to comply with the standards in subsection (e) of this Section. Such allowances that are not retired for compliance, or otherwise surrendered pursuant to a consent decree to which the State of Illinois is a party, must be surrendered to the

Agency on an annual basis, beginning in calendar year 2014. . . . 35 Ill. Adm. Code 225.233(f)(2).

Another MPS provision relevant to the Board's analysis is 35 Ill. Adm. Code 225.233(f)(4), which states:

For purposes of this subsection (f),  $NO_x$  and  $SO_2$  allowances mean allowances necessary for compliance with Sections 225.310, 225.410, or 225.510, 40 CFR 72, or Subparts AA and AAAA of 40 CFR 96, or any future federal  $NO_x$  or  $SO_2$  emissions trading programs that modify or replace these programs . . . . 35 Ill. Adm. Code 225.233(f)(4).

# **Federal Cross-State Air Pollution Rule**

The Clean Air Act requires states to prohibit certain emissions of air pollutants due to their impact on air quality in downwind states. 42 U.S.C. § 7410(a)(2)(D). Based on this statutory authority, in 2005, USEPA adopted CAIR. 70 Fed. Reg. 25162 (May 12, 2005). CAIR required twenty-nine states, including Illinois, to eliminate SO<sub>2</sub> and NO<sub>x</sub> emissions that contribute significantly to downwind nonattainment of national ambient air quality standards (NAAQS). *Id.* The rule was challenged and, in 2008, a federal appellate court remanded CAIR to USEPA but ordered that CAIR remain effective until replaced with a new rule. *See* North Carolina v. Environmental Protection Agency, 531 F.3d 896 (D.C. Cir. 2008), modified on rehearing, 550 F.3d 1176 (D.C. Cir. 2008).

In 2011, USEPA adopted CSAPR to replace CAIR. 76 Fed. Reg. 48208 (Aug. 8, 2011). CSAPR was challenged in federal court and the court stayed implementation of CSAPR. <u>EME Homer City Generation LP v. Environmental Protection Agency</u>, 696 F.3d 7 (D.C. Cir. 2012). CAIR remained in effect during the CSAPR appeal.

On April 29, 2014, the United States Supreme Court upheld CSAPR. <u>EPA v. EME</u> <u>Homer City Generation</u>, 134 S. Ct. 1584 (2014). In December 2014, USEPA published notice of how it would proceed to implement CSAPR after the Supreme Court's ruling. 79 Fed. Reg. 71,663 (Dec. 3, 2014).

In CSAPR, USEPA determined emission reductions needed in upwind states, including Illinois, to eliminate the states' contributions to nonattainment of NAAQS for fine particulate matter and ground-level ozone in downwind states. 76 Fed. Reg. at 48,211. USEPA imposed SO<sub>2</sub> and NO<sub>x</sub> emission budgets for each upwind state. *Id.* at 48,212. Each state's emission budget is composed of a number of emission allowances equal to the number of tons of pollutants emitted in that state's budget. *Id.* USEPA distributes or allocates allowances from a state's budget to covered electric generating units in that state. *Id.* CSAPR uses allowances specific to the CSAPR program, not acid rain program allowances (Clean Air Act Title IV) or CAIR allowances. *Id.* 

USEPA will implement the emission budgets in two phases. 76 Fed. Reg. at 48,211. Compliance with CSAPR's first phase of emission budgets is now required in 2015 and 2016.

79 Fed. Reg. at 71665. Compliance with the second phase will be required in 2017 and beyond. *Id.* In the first two years of CSAPR, USEPA allocated to Dynegy's MPS units 48,995 allowances for SO<sub>2</sub> emissions per year for 2015 and 2016. Am. Pet. at 14, fn. 20.

CSAPR requires sources to surrender to USEPA one allowance for each ton of SO<sub>2</sub> emitted during the previous control period. 76 Fed. Reg. at 48,271. Each source must hold enough allowances to match its actual emissions during the preceding year by the reconciliation deadline of March 1. 76 Fed. Reg. at 48,340. Any allowances remaining after surrendering the allowances needed to cover emissions during the control period are considered excess. CSAPR establishes two interstate trading programs for SO<sub>2</sub> allowances: one for Group 1 states, including Illinois, and the other for Group 2 states. 76 Fed. Reg. at 48,212-13. Only sources within the CSAPR Group 1 states may use allowances from Dynegy's MPS facilities for compliance with CSAPR, which include: Illinois, Indiana, Iowa, Kentucky, Maryland, Michigan, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and Wisconsin. 76 Fed. Reg. at 48,440-41.

### **DYNEGY'S AMENDED PETITION**

Dynegy petitions the Board for a variance from Section 225.233(f)(2) of the MPS seeking a waiver of the prohibition on selling or trading SO<sub>2</sub> allowances allocated to Dynegy under CSAPR for 2015 and 2016. Dynegy does not request any change to applicable SO<sub>2</sub> emission limits. Am. Pet. at 3. Dynegy's units remain subject to the SO<sub>2</sub> emission limits in the MPS and consent decree. *Id.* at 32.

#### **Dynegy's Facilities**

Dynegy seeks this variance for the five Dynegy coal-fired electric generating stations in its MPS group: Baldwin Energy Complex (Randolph County), Havana Power Station (Mason County), Hennepin Power Station (Putnam County), Wood River Power Station (Madison County), and Vermilion Power Station (Vermilion County). Am. Pet. at 2, fn. 2. In November 2011, Dynegy permanently retired the Vermilion Power Station and thus currently operates four coal-fired electric generating stations in Illinois. *Id.* at 3-4, Am. Pet. Ex. 1. Dynegy employs approximately 420 persons at its Illinois coal-fired power stations and an additional 70 support personnel at other Illinois offices. *Id.* at 4.

Dynegy states that three of the counties where Dynegy plants are located, Mason, Putnam, and Vermilion Counties, currently are designated as attainment or unclassifiable for all criteria pollutants. Am. Pet. at 5. Randolph and Madison Counties are also designated as attainment or unclassifiable for all criteria pollutants except for the 2008 ozone standard, excluding a portion of Madison County near Granite City not relevant here. *Id.* 

Dynegy states that its principal emissions from the plants in the Dynegy MPS group are SO<sub>2</sub>. Am. Pet. at 6. Dynegy controls SO<sub>2</sub> emissions through the use of low sulfur coal, specifically Powder River Basin coal with a sulfur content less than 0.3 percent. *Id.* In addition, Dynegy installed and operates spray dryer absorbers (dry scrubbers) with fabric filters on units at the Baldwin and Havana plants. *Id.* These dry scrubbers reduced the SO<sub>2</sub> emission rate at

facilities covered by the Illinois mercury rule from 46,776 tons per year during 2007-2010 to 17,972 tons in 2013 (a 60 percent reduction). *Id.* Dynegy installed and began operating these dry scrubbers between 2010 and 2012. Am. Pet. at 10, Ex. 8R.

Dynegy controls NO<sub>x</sub> emissions at its plants in the Dynegy MPS group by using low sulfur coal, low NO<sub>x</sub> burners, over-fire air, and selective catalytic reduction systems. Am. Pet. at 6. Dynegy controls particulate matter using flue gas conditioning, electrostatic precipitators, and fabric filter systems. *Id.* at 7. Dynegy controls mercury emissions at its plants in the Dynegy MPS Group by using activated carbon injection or mercury oxidation systems in conjunction with its other controls. *Id.* Dynegy "estimates that its costs of compliance with the Illinois mercury rule (including the MPS) and its Consent Decree have totaled approximately \$1 billion, of which \$11 million were for mercury controls." *Id.* at 24.

## **Dynegy's Relief Requested and Hardship**

Section 225.233(f)(2) prohibits the sale of  $SO_2$  allowances in excess of the MPS emission standard and requires that such excess allowances be surrendered on an annual basis. Dynegy, therefore, seeks a variance from Section 225.233(f)(2) to sell or trade excess  $SO_2$  emission allowances allocated to Dynegy's MPS facilities in 2015 and 2016. Am. Pet. at 1-2. Dynegy also seeks relief from the companion requirement that Dynegy surrender such excess  $SO_2$  allowances. *Id.* at 2. Dynegy gives an illustrative example of how Section 225.233(f)(2) applies:

For example, if an MPS unit were allocated 100 SO<sub>2</sub> allowances and the MPS equivalent SO<sub>2</sub> emission limit was 85 tons but the unit actually emitted only 80 tons of SO<sub>2</sub>, the 'excess' allowances that are the subject of this Amended Petition would be the difference between the 100 tons allocated and the 85 tons that match the MPS SO<sub>2</sub> limit, or 15 tons. The MPS would require the unit to surrender to the Agency the 15-ton difference between what was actually allocated and the MPS equivalent limit. The five tons resulting from the unit's over-compliance are not an issue because they would already be available to the unit for trade under the provisions of the MPS. Am. Pet. at fn. 17.

Dynegy maintains that Section 225.233(f)(2) causes arbitrary and unreasonable hardship on Dynegy. Am. Pet. at 3. Dynegy argues that

surrendering, during the first two years of implementation of the CSAPR, a large quantity of SO<sub>2</sub> allowances with significant economic value generated by [Dynegy's] significant capital investments in SO<sub>2</sub> pollution control equipment deprives [Dynegy] of that significant economic value, causing [Dynegy] unreasonable hardship. Am. Pet. at 25.

Dynegy estimates that it will have approximately 29,900 excess CSAPR SO<sub>2</sub> allowances for 2015 due to operating dry scrubbers at its coal-fired units. Am. Pet. at 27. Section 225.233(f)(2) requires that Dynegy surrender approximately 29,325 of these allowances leaving 575 for banking, selling, or trading. *Id.* Dynegy estimates that it will have

approximately 31,700 excess allowances for 2016 and will be required to surrender approximately 30,850 of these allowances leaving 850 for banking, selling, or trading. *Id.* 

Dynegy asserts that the "inability to trade or sell such excess allowances . . . represents a significant lost opportunity" for Dynegy. Am. Pet. at 27. Dynegy estimates that the value of these allowances is \$3 million. *Id.* Dynegy used a value of \$50 per allowance based on "several trades of CSAPR Phase 1 Group 1  $SO_2$  allowances since the Supreme Court's ruling . . . in August 2014." *Id.* at 28, fn. 28. The Board notes that  $(29,325+30,850) \times $50 = $3,008,750$ .

Dynegy provides a wide range of estimates of the potential value of SO<sub>2</sub> allowances. In June 2011, USEPA estimated that Phase I Group 1 CSAPR SO<sub>2</sub> allowances would cost \$1000 per allowance in 2012. Am. Pet. at fn. 29, *citing* USEPA, Regulatory Impact Analysis for the Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone in 27 States; Correction of SIP Approvals for 22 States, Docket No. EPA-HQ-OAR-2009-0491, p. 260 (June 2011). Dynegy states that, prior to the court stay, Phase I Group 1 CSAPR SO<sub>2</sub> allowances were trading between \$2,500 and \$4,000 per allowance. *Id.* In response to Board questions in 2012, Dynegy estimated value of these allowances at \$139 to \$2,500 per allowance. Ans. at 9.

Dynegy argues that prohibiting the transfer of CSAPR SO<sub>2</sub> allowances "interferes with a robust SO<sub>2</sub> allowance trading market consistent with air quality goals of the CSAPR." Am. Pet. at 28. Dynegy asserts that the CSAPR trading market would "protect jobs and encourage investment in the Illinois electric generation industry." *Id*.

Dynegy states that USEPA determined that the CSAPR "ensures the elimination of each state's significant contribution to nonattainment and interference with maintenance of the NAAQS." Am. Pet. at 28-29. Therefore, allowing Dynegy to trade or sell excess CSAPR allowances "will not defeat [Illinois'] efforts to achieve and maintain compliance with the ozone and [fine particulate] NAAQS in Illinois, nor will it defeat the efforts of other states." *Id.* at 29.

Dynegy argues that the Illinois MPS prohibition on trading SO<sub>2</sub> allowances "places[s] an unnecessary burden on Illinois [electric generating units] relative to [electric generating units] in neighboring states" and on Dynegy. Am. Pet. at 29. Dynegy asserts that states neighboring Illinois do not restrict CSAPR allowance trading beyond what CSAPR requires. *Id.* Dynegy concludes, therefore, that the MPS imposes a competitive disadvantage on Dynegy relative to other generators in the region. *Id.* 

Dynegy notes that it is an independent power producer without a rate base. Am. Pet. at 29. Dynegy recounts various market forces including declining power prices, reduced revenue, and forthcoming regulations. *Id.* Dynegy argues that "the requested variance would allow [Dynegy] the ability to offset some of the margin loss through the sales of our excess SO<sub>2</sub> allowances that have resulted from [Dynegy's] approximately \$1 billion investment in pollution control equipment." *Id.* at 30.

Dynegy states that it cannot predict the impact of its requested variance on Illinois ratepayers. Am. Pet. at 30. Dynegy notes that its net production costs would be higher if not

allowed to trade excess allowances and realize proceeds from the sale. *Id.* Higher net production costs generally increase the market price for Dynegy's energy sales. *Id.* However, energy pricing is based on many complex factors that mean Dynegy "is unable to predict with any certainty the impact of not being able to sell or trade these allowances on ratepayers." *Id.* at 31.

Dynegy contends that compliance with Section 225.233(f)(2) has an adverse economic impact on Dynegy. Am. Pet. at 31. This adverse impact, in combination with other factors, "potentially could adversely affect the number of Illinois citizens employed by [Dynegy]." *Id.* Reduction in workforce could result in less consumer spending, less sales tax collected, and lower income tax revenue. *Id.* 

Dynegy notes that it does not seek changes to any other MPS requirement. Am. Pet. at 32. Specifically, Dynegy confirms that it will continue to be subject to SO<sub>2</sub>, NO<sub>x</sub>, and mercury reductions in the MPS, as well as MPS requirements to install SO<sub>2</sub>, NO<sub>x</sub>, and mercury controls. *Id.* Dynegy's requested variance has no effect on acid rain program allowances and Dynegy will continue to be required to surrender up to 30,000 SO<sub>2</sub> acid rain program allowances annually under the consent decree. *Id.* 

Dynegy contends that if it is not allowed to sell or trade CSAPR SO<sub>2</sub> allowances, its "only possible compliance alternatives would be to surrender the excess CSAPR SO<sub>2</sub> allowances . . . or to seek a rule change or legislation to eliminate the requirement for allowance surrenders." Am. Pet. at 32. Surrendering the SO<sub>2</sub> allowances, argues Dynegy, causes it an "arbitrary and unreasonable economic burden." *Id.* A rule change, on the other hand, is viable but may be over-inclusive and may not be timely. *Id.* Dynegy concludes that its variance request is the best alternative. *Id.* 

## **Environmental Impact**

Dynegy states that "granting this requested variance does not affect the requirement for [Dynegy] to comply with applicable  $SO_2$  emission rates, nor would it directly result in an impact on Illinois' air quality goals." Am. Pet. at 3. Further, Dynegy argues that the requested variance will not result in an environmental detriment for two additional reasons: USEPA determined that CSAPR will protect air quality and Dynegy has undertaken several initiatives to reduce  $SO_2$  emissions. *Id.* at 23. Dynegy also notes that the variance will not cause "undue environmental impact" because IEPA "has not relied upon the surrender of the excess allowances under the MPS for any air quality purposes." *Id.* at 35.

### **Dynegy's SO<sub>2</sub> Emissions**

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<sup>&</sup>lt;sup>1</sup> The Board notes that, in a separate proceeding, Dynegy previously filed a statement that it had "pursued legislation to suspend portions of the MPS that limit the sale and require the surrender of federal sulfur dioxide (SO<sub>2</sub>) emission allowances." <u>Ameren Energy Resources v. IEPA</u>, PCB 12-126 (PC #10 filed June 21, 2012). Dynegy stated that the Board's granting of Dynegy's variance petition "would eliminate the need for legislative relief." *Id*.

Dynegy contends that its actual SO<sub>2</sub> emissions will not be increased if the Board grants the variance. Am. Pet. at 34. Dynegy argues that the variance will not affect Dynegy's actual SO<sub>2</sub> emissions because Dynegy's units remain subject to emission limits in the consent decree and MPS. *Id.* at 23. Dynegy's consent decree imposes a system-wide SO<sub>2</sub> emissions tonnage cap and unit-specific SO<sub>2</sub> emission limits. *Id.* at 34. Additionally, the MPS imposes a groupwide SO<sub>2</sub> emission limit. *Id.* The requested variance would not change any of these limits. Dynegy's own actual SO<sub>2</sub> emissions would not increase due to being allowed to trade its 2015 and 2016 SO<sub>2</sub> allowances. *Id.* at 24.

### Dynegy's SO<sub>2</sub> Emission Reductions

Dynegy enumerates  $SO_2$  emission reductions including reductions from compliance with its consent decree, outages during equipment upgrades, and unit shutdowns. Am. Pet. at 34-35. Dynegy claims that its efforts "have resulted in significant reduction or avoidance of  $SO_2$  emissions." Am. Pet. at 35.

Dynegy asserts that it achieved 3,600 tons in early SO<sub>2</sub> emission reductions by operating dry scrubbers on Baldwin units prior to the applicable compliance deadlines. Am. Pet. at 34, Am. Pet. Ex. 8R. Dynegy argues that allowing it to use the allowances associated with these SO<sub>2</sub> emission reductions "is consistent with the precepts of the MPS, which does not restrict trading allowances generated through over-compliance." Am. Pet. at 34.

Dynegy contends that outages during equipment upgrades resulted in  $SO_2$  emission reductions. Am. Pet. at 34, Am. Pet. Ex. 8R. Dynegy shut down units to install pollution control equipment. During these outages, the units did not emit  $SO_2$  or any other pollutant. Dynegy calculates that these outages resulted in avoiding 7,800 tons of  $SO_2$  emissions. *Id*.

Dynegy shut down units at Vermilion, Wood River, and Havana that "resulted in an estimated avoidance of greater than 60,000 tons of SO<sub>2</sub> since 2011." Am. Pet. at 34, Am. Pet. Ex. 8R. Dynegy contends that these shutdowns "represent ongoing estimated annual avoidances of nearly 20,000 tons of SO<sub>2</sub> emissions." Am. Pet. at 34.

Dynegy further notes that, as required by its consent decree, it is meeting an SO<sub>2</sub> emission limit of 1.20 lb/mmBtu at Wood River units. Am. Pet. at 34. Dynegy calculates that this compliance results in SO<sub>2</sub> emission reductions of 13,008 tons per year compared to Dynegy's permitted limit of 1.80 lb/mmBtu. *Id.* Dynegy asserts that IEPA used the permit limit rather than the consent decree limit in its modeling to determine compliance with the 1-hour SO<sub>2</sub> NAAQS. *Id.* 

#### **Cross State Air Pollution Rule**

Dynegy contends that USEPA determined that CSAPR adequately protects air quality in Illinois and the affected states, and, therefore, it follows that allowing Dynegy to trade SO<sub>2</sub> allowances in compliance with CSAPR will not harm air quality. Am. Pet. at 33. USEPA determined that CSAPR "ensures the elimination of each subject state's significant contribution to nonattainment and interference with maintenance." *Id.* 

Dynegy states that USEPA performed extensive modeling to support CSAPR. *Id.* at 16. USEPA examined each unit in affected states to determine historic emissions and current emission limits. *Id.* at 20. USEPA then set state budgets for allowances that USEPA would allocate to each unit. *Id.* Thus, "the Board can be assured that [Dynegy's] allowances directly reflect [Dynegy's] emissions, including the possibility or even likelihood of trading allowances." *Id.* 

Dynegy further contends that CSAPR allowance trading provisions sufficiently assure that air quality goals will be met. Am. Pet. at 33. Dynegy points to three aspects of CSAPR that ensure emissions from upwind states will be limited from impacting downwind states. Am. Pet. at 16. First, states are divided into two groups and may only trade within their group. *Id.* Second, USEPA set state emission budgets. *Id.* Third, USEPA developed variability limits for each state to account for year-to-year external variables such as weather and consumer demand and allow flexibility to generators. *Id.* at 16-17. CSAPR places restrictions on how allowances can be used in excess of the variability limit. *Id.* at 17-18.

Dynegy concludes that granting the requested variance "will not have an effect on air quality or downwind receptors beyond what the USEPA expects and has modeled in the course of the CSAPR rulemaking." Am. Pet. at 18.

## **Suggested Conditions and Compliance Plan**

Dynegy requests that the term of the variance begin on the date of the Board's order and terminate on April 1, 2017. Am. Pet. at 35. Dynegy proposes the following conditions for the requested variance:

- A. [Dynegy] shall not be subject to the requirements of Section 225.233(f)(2) relative to vintage 2015 and 2016 CSAPR SO<sub>2</sub> allowances.
- B. During the term of the variance, [Dynegy] shall comply with all other applicable MPS requirements, as otherwise required.
- C. Upon termination of the variance, [Dynegy] shall comply with all applicable MPS requirements, including Section 225.233(f)(2) relative to vintage 2017 and thereafter CSAPR SO<sub>2</sub> allowances. Am. Pet. at 35-36.

Dynegy proposes the following compliance plan:

Within 60 days after termination of the variance, [Dynegy] shall prepare and submit to the Agency a report identifying the amount of SO<sub>2</sub> emissions from its coal-fired power plants included in the [Dynegy] MPS Group during the term of this variance and the tons of SO<sub>2</sub> removed by [Dynegy's] spray dry absorbers associated with the [electric generating units] in the [Dynegy] MPS Group during the term of the variance. Am. Pet. at 36.

#### **Consistency with Federal Law**

Dynegy contends that the Board may grant the requested variance consistent with federal law, and, specifically, the Clean Air Act. Am. Pet. at 36. Dynegy notes that no federal law prohibits Dynegy from selling or trading SO<sub>2</sub> allowances under CSAPR in excess of MPS SO<sub>2</sub> emission limits. *Id.* The consent decree likewise does not prohibit Dynegy from selling or trading SO<sub>2</sub> allowances allocated under CSAPR. *Id.* at 37.

Further, Section 225.233(f)(2) of the MPS is not part of Illinois' state implementation plan approved by USEPA. IEPA submitted a revision to the Illinois state implementation plan to satisfy Illinois' obligation under the Clean Air Act to address regional haze. 77 Fed. Reg. 39,943 (July 6, 2012). This submittal did not include Section 225.233(f)(2) and, therefore, this variance request does not impact the state implementation plan. Am. Pet. at 36.

#### **Petition Content Requirements**

Section 104.204 of the Board's procedural rules sets forth the information required to be included in a petition for variance. 35 Ill. Adm. Code 104.204. If a petitioner believes that any of the requirements are not applicable to the specific variance requested, the petitioner must so state and explain the reasoning. *Id*.

Dynegy does not propose any equipment or method of control to be undertaken to achieve full compliance with the regulation. 35 Ill. Adm. Code 104.204(f)(1). By extension, Dynegy does not provide a time schedule for completion of a control program or estimated costs to achieve compliance. 35 Ill. Adm. Code 104.204(f)(2), (f)(3). The Board acknowledges that the nature of Dynegy's request does not lend itself to these proposal requirements. However, Dynegy further does not provide a statement of measures to be taken during the variance period to minimize the impact of the discharge on the environment. 35 Ill. Adm. Code 104.204(g)(3). Rather, Dynegy seeks the ability to sell or trade certain  $SO_2$  allowances.

#### IEPA RESPONSE

The Act and Board procedural rules require IEPA to "make a recommendation to the Board as to the disposition of the petition." 415 ILCS 5/37(a) (2014); 35 Ill. Adm. Code 104.216. In response to Dynegy's petition and amended petition, IEPA filed documents titled "Recommendation" and "Amended Recommendation," respectively, which did not recommend how the Board should dispose of the petition, but instead stated that IEPA "neither supports nor objects to the Board granting [Dynegy's] petition as specified in this Recommendation." Am. Rec. at 2.

#### **Facilities**

IEPA recounts Dynegy's description of its facilities and "incorporates by reference" Dynegy's information found in Exhibit 3R of the amended petition. Am. Rec. at 2. IEPA notes Dynegy's description of pollution control equipment on various units. *Id.* at 2-3. IEPA states that "pending permits associated with the facilities in [Dynegy's] MPS Group are described in

Exhibit 3R of the Amended Petition." *Id.* at 3. IEPA represents that there are no state air pollution enforcement actions against Dynegy currently pending before the Board. *Id.* 

## **IEPA Investigation of Facts in Petition**

IEPA conducted an investigation of the facts alleged in Dynegy's petition, including discussions with Dynegy. Am. Rec. at 3-4. IEPA generally "does not disagree with the facts set forth in [Dynegy's] Amended Petition." *Id.* at 4.

### **Environmental Impact**

IEPA agrees with Dynegy that "there are SO<sub>2</sub> emission trading restrictions and safeguards in CSAPR that did not exist in CAIR that assure air quality protection if the variance is granted." Am. Rec. at 6. IEPA states that "actions taken by [Dynegy] have resulted or will result in additional SO<sub>2</sub> emission reductions." *Id.* IEPA further states "CSAPR's trading restrictions were developed to accomplish air quality goals consistent with [IEPA's] intended purpose for the trading restrictions in the MPS, and are more appropriate and technically sound, as they are based on modeling performed by the USEPA." *Id.* at 6-7. Therefore, "sufficient trading restrictions will continue to apply through the CSAPR in the event this variance is granted." *Id.* at 7.

IEPA notes Dynegy's representations that during the requested variance period, Dynegy will operate its dry scrubbers, meet its system-wide  $SO_2$  emissions tonnage cap and unit-specific  $SO_2$  emission limits set forth in the consent decree, and meet its system-wide  $SO_2$  emission limit for the Dynegy MPS Group. Am. Rec. at 6.

IEPA states that "[a]ctions taken by [Dynegy] resulted in significant SO<sub>2</sub> emission reductions beyond those otherwise mandated by existing requirements." Am. Rec. at 7. IEPA reviewed Dynegy's emission reduction calculations and found them to be "consistent with the data currently available to, and reviewed by, [IEPA] during the course of its investigation of [Dynegy's] Amended Petition." *Id.* at 7. IEPA continues that "these reductions are greater than the additional SO<sub>2</sub> emissions that may occur if the variance is granted." *Id.* IEPA "confirms that it has not relied upon the allowance trading restrictions or surrender requirements in Section 225.233(f)(2) of the MPS as part of its air quality attainment planning efforts." *Id.* 

### **Hardship**

IEPA summarizes Dynegy's claimed hardship from not being allowed to sell or trade CSAPR SO<sub>2</sub> allowances during the first two years of CSAPR implementation. Am. Rec. at 7-8. IEPA reviews Dynegy's estimated excess allowances and estimated value of the allowances. *Id.* at 8. IEPA states that it "does not dispute the potential economic value of the CSAPR SO<sub>2</sub> allowances at issue." *Id.* at 9.

IEPA also notes Dynegy's argument that restricting the trade of CSAPR  $SO_2$  allowances interferes with the trading market intended by CSAPR. Am. Rec. at 8. IEPA responds that it "has no evidence that the MPS trading restrictions will or will not 'interfere' with the robust  $SO_2$ 

allowance trading market intended by the CSAPR." *Id.* at 9. As for Dynegy's argument that the MPS trading restrictions make it uncompetitive with generators in other states, IEPA states that it has no evidence that any such restrictions "will damage the ability of [Dynegy] and Illinois industry to stay competitive with other states." *Id.* 

## **Consistency with Federal Law**

IEPA states that there currently is no federal authority that precludes granting the variance. Am. Rec. at 9-10. IEPA further states that "the proposed variance does not implicate Illinois' SIP." *Id.* 

### **Compliance Plan**

IEPA recommends that the compliance plan include the following:

- A. During the term of the variance, Dynegy shall include in its annual report submitted to IEPA pursuant to 35 Ill. Adm. Code 225.233(f)(5) the number of excess CSAPR SO<sub>2</sub> allowances available as a result of this variance that were banked, the number traded, and the number sold in the previous calendar year.
- B. Dynegy shall continue to operate its dry scrubbers on Baldwin Units 1, 2, and 3 and Havana Unit 6 during the term of the variance.
- C. Dynegy shall continue to comply with its Consent Decree 30-day rolling average SO<sub>2</sub> emission limitation of 1.20 lb/mmBtu for Wood River Units 4 and 5 during the term of the variance. Am. Rec. at 10.

## **Recommendation and Conclusion**

IEPA states that it "neither supports nor objects to the Board granting [Dynegy's] Amended Petition." Am. Rec. at 11.

### **PUBLIC COMMENTS**

#### **Environmental Groups**

On July 12, 2012, the Board received a public comment (PC#1) on Dynegy's initial petition from the Environmental Law & Policy Center, Natural Resources Defense Council, Sierra Club, and the Respiratory Health Association of Metropolitan Chicago (Environmental Groups). The Environmental Groups asked the Board to deny Dynegy's variance request. PC#1 at 1.

The Environmental Groups argue that the variance will allow significantly greater  $SO_2$  emissions than without the variance. PC#1 at 3. Dynegy anticipates selling or trading approximately 46,000 allowances if the petition is granted which translates to 46,000 additional

tons of SO<sub>2</sub> emissions. *Id.* The Environmental Groups state that these allowances "could be sold either in Illinois to sources not covered by the MPS . . . or to a CSAPR state upwind of Illinois, both of which could affect air quality in the state." *Id.* 

The Environmental Groups challenge that "Dynegy's claim that the 46,000 additional allowances the variance would make available would 'not result in an environmental detriment' is simply not accurate." PC#1 at 3. They cite to research by the National Research Council in 2010 for the proposition that "each additional ton of  $SO_2$  emitted by [electric generating units] creates health impacts to the tune of thousands of dollars in damages." *Id.* The Environmental Groups cite to a spreadsheet in that report for the conclusion that "the average damages per ton of  $SO_2$  emissions from five Dynegy plants . . . total \$6,130 in 2007 dollars." *Id.* at 3, fn. 9.

The Environmental Groups also contest Dynegy's argument that various projects mitigate the impact of the variance. PC#1 at 3-4. They argue that these Dynegy initiatives "are entirely unrelated to the variance, and, in many cases, occurred years before Dynegy even sought the variance." PC#1 at 4. The Groups contend that actions taken years ago and actions unrelated to the variance should not be considered in evaluating the impact of the variance. *Id*.

## **International Brotherhood of Electrical Workers**

John Johnson, Assistant Business Manager of the International Brotherhood of Electrical Workers, Local Union No. 51, filed a public comment on July 27, 2012 (PC#2). Mr. Johnson, on behalf of Local Union No. 51, supports Dynegy's variance request. PC#2 at 1. Mr. Johnson notes Dynegy's compliance with initiatives to lower power plant emissions, and also the negative impact that the current economy and power production market has had on many power producers. *Id.* Mr. Johnson also emphasizes Dynegy's contributions to the Illinois economy through providing "hundreds of well-paying jobs," environmental projects providing "an economic 'boom' for Illinois construction trades" and contributions through property tax revenues. *Id.* Local Union No. 51 requests that the Board grant the variance request. *Id.* at 2.

### **Illinois AFL-CIO**

On August 2, 2012, the Board received a public comment from Michael Carrigan, President of the Illinois AFL-CIO (American Federation of Labor – Congress of Industrial Organizations) (PC#3). Mr. Carrigan states that Illinois AFL-CIO supports Dynegy's request for variance, noting that Dynegy "is a key employer of unionized workers" and the "economic benefits [Dynegy] provides the State of Illinois and local communities is critical during these economically trying times." PC#3 at 1. Mr. Carrigan also notes that recent unforeseen economic circumstances have "exacerbated conditions for Illinois power generators operating in a deregulated power market and subject to stricter emissions standards than competitors in neighboring states." *Id.* Mr. Carrigan continues that companies like Dynegy "are now disproportionately bearing costs attributable to these unexpected events." *Id.* Mr. Carrigan notes Dynegy's compliance with initiatives to lower power plant emissions, its economic influence on Illinois, and the property tax revenues generated by Dynegy plants. *Id.* at 1-2.

#### **BOARD DISCUSSION**

Dynegy seeks relief from the prohibition in Section 225.233(f)(2) to sell or trade  $SO_2$  emission allowances. Am. Pet. at 1. Specifically, Dynegy seeks the ability to sell or trade  $SO_2$  allowances allocated by USEPA under CSAPR for 2015 and 2016. *Id.* 

The Board is authorized to grant a variance when a petitioner demonstrates that compliance with a Board regulation would impose an arbitrary or unreasonable hardship on the petitioner. 415 ILCS 5/35(a) (2014). The Act further provides that 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." *Id.* The Board may grant a variance, however, only to the extent consistent with applicable federal law. 415 ILCS 5/35 (2014). Further, the Board may issue a variance with or without conditions, and for only up to five years. 415 ILCS 5/36 (2014).

To obtain a variance, Dynegy first must present to the Board adequate proof that compliance with a Board regulation would impose a hardship. After establishing the hardship from compliance with Section 225.233(f)(2), Dynegy must then show that this hardship "outweighs any injury to the public or the environment" from granting the variance. *See* Marathon Oil Co. v. EPA, 242 Ill. App. 3d 200, 206, 610 N.E.2d 789, 793 (5th Dist. 1993). If Dynegy only shows that compliance will be difficult, "that proof alone is an insufficient basis" for granting the variance. *Id.* Thus, after showing that a hardship exists, "only if the hardship outweighs the injury does the evidence rise to the level of an arbitrary or unreasonable hardship." *Id.* The burden of proof is on the petitioner, here Dynegy. 415 ILCS 5/37(a) (2014); 35 Ill. Adm. Code 104.200(a)(1), 104.238(a).

Accordingly, the Board analyzes whether Dynegy suffers a hardship through compliance with Section 225.233(f)(2). The Board then weighs any hardship against any injury to the public or environment to determine whether Dynegy has demonstrated that the hardship is arbitrary or unreasonable.

## **Hardship to Dynegy from Compliance**

### **Surrender of Allowances**

Dynegy argues that compliance with Section 225.233(f)(2) prohibiting Dynegy from selling or trading CSAPR SO<sub>2</sub> emission allowances allocated for 2015 and 2016 causes Dynegy an arbitrary or unreasonable hardship. Am. Pet. at 3. Dynegy argues that enforcement of Section 225.233(f)(2) causes Dynegy hardship because it deprives Dynegy of the significant economic value of selling these allowances. *Id.* at 25.

Section 225.233(f)(2) prohibits selling and trading SO<sub>2</sub> allowances issued under CSAPR and, therefore, results in a lost economic opportunity for Dynegy. Am. Pet. at 27. Dynegy estimates that it will have approximately 29,325 excess CSAPR SO<sub>2</sub> allowances for 2015 which are required to be surrendered under Section 225.233(f)(2) and 30,850 in 2016 for a total of 60,175 allowances. *Id.* at 27. This is based on the allocation USEPA has made to Dynegy under

CSAPR. Dynegy estimates that the value of these allowances is \$3 million. *Id.* Dynegy used a value of \$50 per allowance based on "several trades of CSAPR Phase 1 Group 1 SO<sub>2</sub> allowances since the Supreme Court's ruling . . . in August 2014." *Id.* at 28, fn. 28. IEPA states that it "does not dispute the potential economic value of the CSAPR SO<sub>2</sub> allowances at issue." Am. Rec. at 9.

Dynegy contends that compliance with Section 225.233(f)(2) has an adverse economic impact on Dynegy. Am. Pet. at 31-32. Dynegy argues that "the requested variance would allow [Dynegy] the ability to offset some of the margin loss through the sales of our excess SO<sub>2</sub> allowances that have resulted from [Dynegy's] approximately \$1 billion investment in pollution control equipment." *Id.* This adverse impact, in combination with other factors, "potentially could adversely affect the number of Illinois citizens employed by [Dynegy]." *Id.* Reduction in workforce could result in less consumer spending, less sales tax collected, and lower income tax revenue. *Id.* Dynegy states that it cannot predict the impact of its requested variance on Illinois ratepayers. *Id.* 

Dynegy argues that prohibiting the transfer of CSAPR SO<sub>2</sub> allowances "interferes with a robust SO<sub>2</sub> allowance trading market consistent with air quality goals of the CSAPR." Am. Pet. at 28. Dynegy asserts that the CSAPR trading market would "protect jobs and encourage investment in the Illinois electric generation industry." *Id.* Further, Dynegy asserts that states neighboring Illinois do not restrict CSAPR allowance trading beyond what CSAPR requires. *Id.* at 29. Dynegy concludes that the MPS imposes a competitive disadvantage on Dynegy relative to other generators in the region. *Id.* IEPA responds stating that it "has no evidence that the MPS trading restrictions will or will not 'interfere' with the robust SO<sub>2</sub> allowance trading market intended by the CSAPR." Am. Rec. at 9.

While the record includes widely divergent estimates of the value of CSAPR SO<sub>2</sub> allowances (from \$50 to \$4,000 per allowance), and the value will fluctuate depending on the market, the Board acknowledges that the approximately 60,175 available CSAPR SO<sub>2</sub> allowances have value. Whether that value is significant is unclear. Dynegy's own estimate is \$3 million (using \$50 per allowance). While compliance with Section 225.233(f)(2) may result in Dynegy not receiving the value of selling those allowances, any significant financial loss or resulting competitive disadvantage is speculative.

### Cross State Air Pollution Rule Replacing Clean Air Interstate Rule

Dynegy makes an additional assertion that CSAPR was not foreseen when Section 225.233(f)(2) was adopted and, therefore, it was foreseeable that Dynegy would require some relief, particularly when USEPA did not reflect the limitations in Illinois' MPS rule in CSAPR. Am. Pet. at 23. Dynegy contends that CSAPR was a fundamental change to the MPS, specifically Section 225.233(f)(2). *Id.* at 21. Accordingly, the Board "may grant the requested variance without undermining the basis for the MPS." *Id.* Dynegy makes two arguments, which the Board addresses below.

Dynegy first asserts that, when the MPS was adopted, CSAPR emission allowance trading was not foreseeable. Am. Pet. at 20. Dynegy contends that, when the Board adopted Section 225.233(f)(2) in 2006, only CAIR was contemplated, and it used existing acid rain

program allowances, not a new type of emission allowance. *Id.* at 20-21. Thus, Section 225.233(f)(2) required surrender of acid rain program allowances in addition to those required under the acid rain program itself. *Id.* at 21-22. Section 225.233(f)(2) could not have applied to "the then non-existent and not-yet-even envisioned CSAPR SO<sub>2</sub> allowances." *Id.* at 21.

Second, Dynegy argues that a 2009 amendment to Section 225.233(f)(4) fundamentally changed the rule from when the MPS was proposed and initially adopted. Am. Pet. at 22. Dynegy notes that in 2009 the Board amended Section 225.233(f)(4) that defines NO<sub>x</sub> and SO<sub>2</sub> allowances. *Id.* The Board added the language "or any future federal NO<sub>x</sub> or SO<sub>2</sub> emissions trading programs that modify or replace these programs." *Id.* Dynegy argues that this amendment "fundamentally changed the scope of the MPS." *Id.* at 23. Specifically, the scope of restrictions in Section 225.233(f)(2) "was expanded to include an unanticipated and unforeseen program." *Id.* When CSAPR later was proposed and adopted, its allowance trading program "represent[ed] a fundamental change to [Dynegy's] and [IEPA's] mutual assumption on which the MPS SO<sub>2</sub> allowance trading restrictions were based." Am. Pet. at 21. Thus, Dynegy contends that "the Board may grant the requested variance without undermining the basis for the MPS." *Id.* Dynegy essentially claims that making CSAPR SO<sub>2</sub> allowances subject to the MPS prohibition against selling or trading allowances in Section 225.233(f)(2) violates the "understanding" and "agreement" between Dynegy and IEPA when the MPS was proposed and adopted. *Id.* at 22-23.

As explained above, the Board adopted Section 225.233(f) in the rulemaking <u>Proposed New 35 Ill. Adm. Code 225 Control of Emissions from Large Combustion Sources (Mercury)</u>, R06-25 (Dec. 21, 2006). Section 225.233(f)(2) prohibited the sale or trade of SO<sub>2</sub> allowances allocated to an electric generating unit that are necessary to achieve compliance with the MPS. As adopted in 2006, Section 225.233(f)(4) provided:

4) For purposes of this subsection (f),  $NO_x$  and  $SO_2$  allowances mean allowances necessary for compliance with Sections 225.310, 225.410, or 225.510, 40 CFR 72, or Subparts AA and AAAA of 40 CFR 96. . . .

Dynegy is correct in noting that the language in Section 225.233(f)(4) was amended in the rulemaking Amendments to 35 Ill. Adm. Code 225: Control of Emissions from Large Combustion Sources (Mercury Monitoring), R09-10 (June 18, 2009). The primary purpose of the R09-10 rulemaking was to amend the Illinois mercury rule to provide monitoring provisions necessitated by vacating the federal Clean Air Mercury Rule. *Id.* at 4. In addition to these changes, IEPA also proposed changes to account for the remand of the federal CAIR. Mercury Monitoring, R09-10, IEPA Statement of Reasons, p. 18 (October 3, 2008). In 2008, a federal court struck down CAIR and held that USEPA improperly relied on acid rain program allowances in CAIR. North Carolina v. Environmental Protection Agency, 531 F.3d 896, 929-930 (D.C. Cir. 2008). In R09-10, IEPA "replaced references to the CAIR trading program with references to any trading program due to the recent *vacatur* of CAIR." Mercury Monitoring, R09-10, IEPA Statement of Reasons, p. 18 (October 3, 2008).

IEPA initially proposed the following change to Section 225.233(f)(4):

4) For purposes of this subsection (f), NO<sub>x</sub> and SO<sub>2</sub> allowances mean allowances necessary for compliance with <u>Subpart W of Section 217 (NO<sub>x</sub> Trading Program for Electrical Generating Units)</u> Sections 225.310, 225.410, or 225.510, 40 CFR 72, or subparts <u>Subparts</u> A through IA and AAAA of 40 CFR 96, or any future federal NO<sub>x</sub> or SO<sub>2</sub> emissions trading programs that include Illinois sources. . . . <u>Mercury Monitoring</u>, R09-10, Proposed Amendments to Part 225, p. 34 (October 3, 2008).

During hearings in the R09-10 rulemaking, Dynegy's attorney asked IEPA about IEPA's intent in proposing these changes. IEPA explained

It was the intent of those revisions to maintain the original intent of the MPS and [Combined Pollutant Standard (CPS)] that any SO<sub>2</sub> and NO<sub>x</sub> allowances as agreed to by the parties would be surrendered or retired in accordance with the agreements we reached with the individual companies, not to go beyond any of the agreements that were reached but to simply maintain the level of retirements and surrenders of NO<sub>x</sub> and SO<sub>2</sub> allowances that were agreed to, so certainly not to go beyond what was agreed to. Mercury Monitoring, R09-10, Hearing Transcript, p. 19-20 (Dec. 17, 2008).

Subsequently, IEPA revised its proposed changes to Section 225.233(f)(4) as follows:

4) For purposes of this subsection (f), NO<sub>x</sub> and SO<sub>2</sub> allowances mean allowances necessary for compliance with <u>Sections 225.310, 225.410</u>, or <u>225.510</u>, <u>Subpart W of Section 217 (NO<sub>x</sub> Trading Program for Electrical Generating Units)</u>, 40 CFR 72, or Subparts AA and AAAA through I of 40 CFR 96, or any future federal NO<sub>x</sub> or SO<sub>2</sub> emissions trading programs that modify or replace these programs. include <u>Illinois sources</u>. . . . <u>Mercury Monitoring</u>, R09-10, IEPA's Second Errata Sheet to its Proposal to Amend 35 Ill. Adm. Code 225, p. 13 (Dec. 17, 2008).

Thus, after questions from Dynegy's attorneys, the proposed amendments to Section 225.233(f)(4) were changed from "or any future federal  $NO_x$  or  $SO_2$  emissions trading programs that include Illinois sources" to "or any future federal  $NO_x$  or  $SO_2$  emissions trading programs that modify or replace these programs."

Dynegy claims that it thought the MPS trading restriction only applied to acid rain allowances and could not foresee that it would apply to CSAPR allowances. Based on this sequence of events and the current language of Section 225.233(f), the Board is not persuaded that CSAPR represents a fundamental change to Section 225.233(f)(2). Further, the amended Section 225.233(f)(4) was foreseeable to Dynegy. Dynegy actively participated in both the R06-25 and R09-10 rulemakings, and asked questions and provided comments on Section 225.233(f) in both proceedings. The proposal and promulgation of CSAPR after the R06-25 and R09-10 rulemakings does not undermine the validity and enforceability of Section 225.233(f)(2). The current language of Section 225.233(f)(4) expressly contemplates that SO<sub>2</sub> allowances issued

under the federal replacement for CAIR (now known as CSAPR) are intended to be covered by subsection (f).<sup>2</sup>

As Dynegy explains, the MPS "required [Dynegy] to install and operate halogenated activated carbon injection systems to control mercury emissions but extended the deadline to demonstrate compliance with the rule's overall 90 percent mercury reduction requirement." Am. Pet. at 11. Thus, by opting in to the MPS, Dynegy became subject to emission limits for SO<sub>2</sub> applicable in 2013 and NO<sub>x</sub> applicable in 2012, as well as associated allowance trading restrictions, in exchange for extended deadlines on installing mercury controls. 35 Ill. Adm. Code 225.230(a), 225.233(d), (e). Dynegy thus chose to comply with the MPS, including surrendering excess allowances and meeting emission requirements. Dynegy made this choice when it opted into the MPS in 2007 and made this choice without accounting for an estimated \$3 million recovery from selling CSAPR allowances.

The trading restriction in Section 225.233(f)(2) prohibits the exact type of trading requested by Dynegy and expressly contemplates trades under CSAPR as a replacement for CAIR. Dynegy realized a financial benefit from the efficiencies of coordinating equipment installations and delayed emission reductions for mercury. The estimated \$3 million recovery from selling excess SO<sub>2</sub> allowances under the requested variance would be an additional benefit to Dynegy over and above the regulatory relief provided by the MPS. Dynegy chose to be regulated under the MPS in 2007 and the changes to the MPS since then are neither fundamental nor unforeseeable.

## **Board Finding on Hardship**

The Board finds that Dynegy has not shown that surrendering excess SO<sub>2</sub> emission allowances imposes a hardship. Dynegy does not claim an inability to comply with the trading restriction in Section 225.233(f)(2). Dynegy does not claim any change to its operations or energy production. It cites no prior Board determinations that granted a variance in a similar factual context. Indeed, the Board denied petitions for variances where compliance with Board regulations would be impossible without construction of additional pollution control equipment. See, e.g., City of East Moline v. IEPA, PCB 87-127 (Nov. 15, 1989). By contrast, Dynegy has no impediments to compliance beyond the lost value of the allowances.

# Environmental Impact of Sale of SO<sub>2</sub> Emission Allowances

Dynegy contends that allowing the sale of excess SO<sub>2</sub> emission allowances will not cause an environmental detriment. Am. Pet. at 33. Dynegy makes three arguments. First, Dynegy will continue to comply with SO<sub>2</sub> emission limits and its SO<sub>2</sub> emissions will not increase as a result of granting the variance. *Id.* at 3, 34. Second, Dynegy has undertaken several activities to reduce

<sup>&</sup>lt;sup>2</sup> On April 28, 2015, IEPA filed a rulemaking generally proposing to control emissions of SO<sub>2</sub> in and around areas designated as nonattainment with respect to the 2010 SO<sub>2</sub> NAAQS. Amendments to 35 Ill. Adm. Code Part 214, Sulfur Limitations, Part 217, Nitrogen Oxides Emissions, and Part 225, Control of Emissions from Large Combustion Sources, R15-21. IEPA proposes changes to another emission trading prohibition but does not propose repealing that provision or any changes to Section 225.233(f).

SO<sub>2</sub> emissions. *Id.* at 33-34. Third, in developing CSAPR, USEPA has determined that CSAPR, including its trading provisions, will protect air quality. *Id.* at 33.

### **Dynegy's SO<sub>2</sub> Emissions**

The Board recognizes that Dynegy does not seek relief from any numerical  $SO_2$  emission limit, such as the system-wide  $SO_2$  emission rate set forth at Section 225.233(e)(2). Nor does Dynegy seek relief from any other emission control requirement under the MPS. Dynegy states that it will continue to be subject to  $SO_2$ ,  $NO_x$ , and mercury emission limits in the MPS, such as the system-wide  $SO_2$  emission rate set forth at Section 225.233(e)(2), as well as MPS requirements to install and operate  $SO_2$ ,  $NO_x$ , and mercury controls. Am. Pet. at 32, 34. Dynegy represents that the sale of excess  $SO_2$  emission allowances also has no effect on acid rain program allowances and Dynegy will continue to be required to surrender up to 30,000 acid rain program allowances annually under its consent decree. *Id.* at 32.

Thus, selling excess SO<sub>2</sub> emission allowances will not impact Dynegy's actual SO<sub>2</sub> emissions from Dynegy's MPS facilities because Dynegy will continue to be subject to existing SO<sub>2</sub> emission limits in its consent decree and MPS. The Board agrees that actual SO<sub>2</sub> emissions from Dynegy's MPS facilities would not be increased as a result of granting the requested variance.

## **Dynegy's SO<sub>2</sub> Emission Reductions**

Dynegy identifies SO<sub>2</sub> emission reductions at its facilities including reductions from compliance with its consent decree, outages during equipment upgrades, and unit shutdowns. Am. Pet. at 34-35. For example, Dynegy asserts that it achieved 3,600 tons in early SO<sub>2</sub> emission reductions by operating dry scrubbers on three Baldwin units prior to deadlines in its consent decree. *Id.* at 34, Am. Pet. Ex. 8R. These reductions occurred prior to December 31, 2012. *Id.* Dynegy calculates that outages resulted in avoiding 7,800 tons of SO<sub>2</sub> emissions over a period of time from 2010 to 2014. *Id.* Dynegy contends that shutdowns at Vermilion (retired 2011), Wood River (retired 2011), and Havana (retired 2012) resulted in 60,000 tons of SO<sub>2</sub> emissions avoided since 2011. *Id.* 

Dynegy further notes that permanent shutdowns result in ongoing avoidance of nearly 20,000 tons of  $SO_2$  emissions per year. Am. Pet. at 34. Dynegy calculates that compliance with the lower emission limit in the consent decree for Wood River results in  $SO_2$  emission reductions of 13,008 tons per year. *Id*.

IEPA reviewed Dynegy's emission reduction calculations and found them to be consistent with data reviewed by IEPA. Am. Rec. at 7. IEPA states that "[a]ctions taken by [Dynegy] resulted in significant SO<sub>2</sub> emission reductions beyond those otherwise mandated by existing requirements." *Id.* 

#### **Cross State Air Pollution Rule**

Dynegy argues that USEPA concluded that CSAPR provides "sufficient assurances that air quality goals will be met." Am. Pet. at 33. More specifically, USEPA has determined that CSAPR "ensures the elimination of each subject state's significant contribution to nonattainment and interference with maintenance." *Id.* Accordingly "there is no undue environmental impact related to [trading or selling Dynegy's] excess CSAPR SO<sub>2</sub> allowances." *Id.* 

IEPA states that CSAPR trading restrictions were developed based on modeling performed by the USEPA. Am. Rec. at 7. IEPA believes that "sufficient trading restrictions will continue to apply through the CSAPR in the event this variance is granted." *Id.* 

The Board notes that in Proposed New 35 Ill. Adm. Code 225 Control of Emissions from Large Combustion Sources (Mercury), R06-25, IEPA expressed concern that CAIR, as a regional trading program, did not ensure that specific emission reductions occurred in Illinois. The MPS restrictions on emission allowance trades were designed to ensure emission reductions required by the MPS occurred in Illinois. R06-25, Comments of IEPA (PC 6298) at 45-47 (Sep. 20, 2006). Specifically, IEPA intended that emission reductions beyond CAIR requirements that were due to MPS requirements were to be removed from the CAIR trading program and prevented from being reintroduced and used in Illinois and other states. *Id.* at 47. Dynegy argues that CSAPR is more stringent than CAIR and CSAPR includes additional protections to ensure that adequate reductions occur in Illinois. IEPA states that "CSAPR provides air quality protection consistent with [IEPA's] goals in developing the MPS." Am. Rec. at 9.

In developing CSAPR, USEPA conducted extensive modeling and research into emissions in affected states. 76 Fed. Reg. at 48,211; *see* USEPA, Air Quality Modeling Final Rule Technical Support Document, Docket No. EPA-HQ-OAR-2009-0491-4140 (June 2011). USEPA determined emission reductions were needed in Illinois and other states to eliminate contributions to nonattainment of NAAQS in downwind states. 76 Fed. Reg. at 48,211. USEPA imposed an SO<sub>2</sub> emission budget for Illinois based on emission allowances that USEPA will allocate to electric generating units in Illinois. *Id.* at 48,212. Additionally, CSAPR's assurance provisions are intended to provide "the most flexibility for sources while meeting the Clean Air Act requirements and protecting human health." *Id.* at 48,271. The Board acknowledges that compliance with CSAPR and its trading provisions is sufficient to meet federal air quality goals to eliminate Illinois' contribution to nonattainment in downwind states under the federal Clean Air Act, 42 USC § 7410(a)(2)(D).

However, USEPA's determinations in developing CSAPR and IEPA's position that CSAPR will protect air quality to the degree required by federal law is not sufficient to show whether the variance will impact air quality. Selling CSAPR allowances is allowed under CSAPR and accounted for in finding that CSAPR will sufficiently protect air quality in downwind states in USEPA's view. Illinois also has duly promulgated regulations, specifically the MPS, which also are intended to protect air quality. Compliance with CSAPR should ensure reaching CSAPR's goal to eliminate Illinois' impact on downwind states attaining NAAQS.

Yet, Dynegy and IEPA merely provide conclusory statements that the trading provisions in CSAPR and the creation of CSAPR-specific allowances make CSAPR sufficient to protect air quality and have not provided evidence specific to the variance in question. Dynegy has not sufficiently specified the environmental impact of the requested variance.

## **Impact of Another Facility Emitting SO<sub>2</sub>**

As described above, SO<sub>2</sub> allowances are transferable under CSAPR. Dynegy states that it occasionally makes direct trades but usually engages in blind trades through an exchange. Am. Pet. at 15. In response to Board questions on the initial petition, Dynegy stated that it cannot predict SO<sub>2</sub> emissions from another facility who may acquire Dynegy's allowances. Ans. at 17. Dynegy explains that Dynegy mostly trades allowances through an exchange and "may never know who buys its allowances." *Id.* at 7. Thus, "it is impossible for [Dynegy] to identify what receptors might be affected by any one of its allowance sales." *Id.* Also, Dynegy "cannot predict when the allowance may be used, if ever." *Id.* at 17.

The Board recognizes that due to the CSAPR trading mechanism for selling or trading excess emission allowances Dynegy "may never know who buys its allowances" and "cannot predict when the allowance may be used." Ans. at 7, 17. However, sources within the CSAPR Group 1 states may use Dynegy's allowances for compliance with CSAPR: Illinois, Iowa, Kentucky, Maryland, Michigan, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and Wisconsin. 76 Fed. Reg. 48,440-41. Thus, if Dynegy sells or trades its estimated 29,325 allowances for 2015 and another 30,850 allowances for 2016, another facility or may emit up to 60,175 additional tons of SO<sub>2</sub>, as allowed and intended under CSAPR. Dynegy has not sufficiently specified the environmental impact from the availability of these allowances.

#### **Board Finding on Environmental Impact**

When evaluating a variance request, the Board must weigh the environmental impact of granting the variance against not granting the variance. Marathon Oil, 242 Ill. App. 3d at 206. Allowing Dynegy to sell or trade excess SO<sub>2</sub> emission allowances will not impact Dynegy's actual SO<sub>2</sub> emissions. Additionally, the Board acknowledges Dynegy's SO<sub>2</sub> emission reductions due to compliance with its consent decree and the MPS, as well as outages during upgrades and unit shutdowns. However, the record is unclear as to the environmental impact from making available approximately 60,175 tons of SO<sub>2</sub> allowances. Under CSAPR, Dynegy's allowances could be used by a facility inside or outside Illinois but the source must be located in a Group 1 state. The Board recognizes that the sale or transfer of SO<sub>2</sub> emission allowances will not necessarily result in another facility using the credits to cover its emissions, but this is a potential, if not likely, outcome. CSAPR allowing these emissions and USEPA accounting for these emissions does not negate that granting Dynegy's requested variance may result in increased SO<sub>2</sub> emissions compared to compliance with Section 225.233(f)(2)'s requirement to surrender these SO<sub>2</sub> allowances to IEPA. Dynegy has not adequately shown the environmental impact of selling excess SO<sub>2</sub> emission allowances.

## Weighing Environmental Impact against Hardship

Dynegy has not proven that surrendering excess  $SO_2$  emission allowances imposes a hardship. Similarly, Dynegy has not adequately evaluated the environmental impact of selling or trading excess  $SO_2$  allowances. Accordingly, the outcome of balancing these factors is evident.

It is Dynegy's burden to establish that the hardship from complying with a regulation outweighs injury to the public or the environment from granting the variance. Dynegy has not presented an argument that compliance with Section 225.233(f) in surrendering SO<sub>2</sub> emission allowances would impose an arbitrary or unreasonable hardship. Dynegy is not seeking a variance for relief from requirements to install pollution control equipment or meet emission limits. Dynegy has already installed equipment, shut down units, and made other operational changes to comply with emission limits in its consent decree and the MPS. Years have passed since Dynegy implemented these changes. Dynegy does not claim an inability to comply with this requirement. After reviewing the record, the Board finds that Dynegy has not met its burden of demonstrating an arbitrary or unreasonable hardship from complying with Section 225.233(f). The Board denies the variance petition.

#### **CONCLUSION**

Based on the record, the Board finds that Dynegy has not established that requiring compliance with Section 225.233(f)(2), prohibiting selling and trading  $SO_2$  emission allowances, imposes an arbitrary or unreasonable hardship on Dynegy. The Board dismisses this matter and closes the docket.

#### IT IS SO ORDERED.

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) (2014); see also 35 Ill. Adm. Code 101.300(d)(2), 101.906, 102.706. Illinois Supreme Court Rule 335 establishes filing requirements that apply when the Illinois Appellate Court, by statute, directly reviews administrative orders. 172 Ill. 2d R. 335. The Board's procedural rules provide that motions for the Board to reconsider or modify its final orders may be filed with the Board within 35 days after the order is received. 35 Ill. Adm. Code 101.520; see also 35 Ill. Adm. Code 101.902, 102.700, 102.702.

I, John T. Therriault, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on July 23, 2015, by a vote of 5-0.

John T. Therriault, Clerk

Illinois Pollution Control Board

John T. Therriant