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

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IN THE MATTER OF: AMENDMENTS TO 35 ILL. ADM. CODE 225.233 MULTI-POLLUTANT STANDARDS (MPS)

R18-20 (Rulemaking – Air)

#### **NOTICE OF FILING**

PLEASE TAKE NOTICE that on this 15th day of June 2018, I have filed with the Clerk

of the Illinois Pollution Control Board, the Reply Comments of the Illinois Attorney General's

Office in the above-referenced case, a copy of which is hereby served upon you.

Respectfully submitted,

PEOPLE OF THE STATE OF ILLINOIS By LISA MADIGAN, Attorney General of the State of Illinois

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## **CERTIFICATE OF SERVICE**

I, STEPHEN J. SYLVESTER, an attorney, do certify that on June 15, 2018, I caused the foregoing Reply Comments of the Illinois Attorney General's Office and the Notice of Filing to be served upon the persons listed in the attached Service List by email for those who have consented to email service and by U.S. Mail for all others.

<u>/s/ Stephen J. Sylvester</u> STEPHEN J. SYLVESTER

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

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IN THE MATTER OF:

AMENDMENTS TO 35 ILL. ADM. CODE 225.233, MULTI-POLLUTANT STANDARDS R18-20 (Rulemaking-Air)

#### <u>REPLY COMMENTS</u> OF THE ILLINOIS ATTORNEY GENERAL'S OFFICE

The Illinois Attorney General's Office, on behalf of the People of the State of Illinois ("People"), hereby files its Reply Comments in this proceeding. The People respectfully request that the Illinois Pollution Control Board ("Board") reject the Illinois Environmental Protection Agency's ("Illinois EPA") proposal to amend the Multi-Pollutant Standards ("MPS").

#### I. <u>The People appropriately have presented relevant information for the</u> <u>Board's consideration.</u>

The purpose of the People's testimony in this proceeding was to present the Board with data and analysis to assist in considering the central issue presented by Illinois EPA's proposal: how might it impact the amount of pollution emitted by Dynegy's eight coal-fired power plants regulated by the MPS? That the People played this role was entirely proper. The Attorney General is the chief legal officer of the State and its departments and agencies. *Pioneer Processing, Inc. v. EPA*, 102 Ill. 2d 119, 137 (1984). The People of the State of Illinois have a strong interest in environmental quality. As Article XI, Section 1 of the Illinois Constitution provides: "The public policy of the State and the duty of each person is to provide and maintain a healthful environment for the benefit of this and future generations." Accordingly, the Attorney General "has the duty and authority to represent the interests of the People of the State to insure a healthful environment." *Pioneer Processing*, 102 Ill. 2d at 138. This duty and authority extends even to cases where the Attorney General has a different view than Illinois EPA of what is necessary to protect the public

interest. *See id.* at 144 (voiding permit to construct hazardous-waste-disposal site granted by Illinois EPA, based on Attorney General's appeal).

Moreover, though, this is not an adversarial proceeding. It is a quasi-legislative rulemaking, in which the Board will review the assembled record to determine what—if any—changes to the MPS it finds to be appropriate. *Granite City Div. of Nat. Steel Co. v. IPCB*, 155 Ill. 2d 149, 180 (1993). Accordingly, the People have presented this Board with detailed information about Dynegy's operations that the Board may use to evaluate Illinois EPA's proposal. Much of this information had not been presented to the Board by Illinois EPA or any other participant. Broadly speaking, this information falls into two categories: (1) historical heat input data from 2008 through 2017, *see* Ex. 37, Armstrong Test., Att. 2; and (2) emission rate data from 2013 through 2017, Ex. 9, Gignac Test., Att. 1 (2016 data), and Ex. 37, Armstrong Test., Att. 3-6 (2013-2015 and 2017 data).

Specifically, as to the first category, Attachment 2 to the People's April 3, 2018 pre-filed testimony includes, for the years 2008 through 2017, for all current MPS units, unit- and MPS group-level capacity factors; actual heat inputs at the unit and group levels; and, based strictly on those group-level heat inputs, what level of SO<sub>2</sub> and NOx pollution would have been allowed under the MPS, had its current emission rate limits been in place during those years. As to the second category, Attachment 1 to the People's December 11, 2017 pre-filed testimony and Attachments 3 through 6 to the People's April 3, 2018 pre-filed testimony contain information including actual unit- and group-level SO<sub>2</sub> and NOx annual mass emissions; actual unit- and group-level SO<sub>2</sub> and NOx annual emission rates; and, in Table 10 on each of those Attachments, the absolute maximum amount of SO<sub>2</sub> that the Old Ameren Group could have emitted annually in compliance with the MPS's current emission rate limit, based on a hypothetical (and, all parties agree, infeasible)

scenario in which all of its cleanest units ran first, at full capacity. Attachment 10 to the People's April 3, 2018 pre-filed testimony integrates those two categories of information, projecting SO<sub>2</sub> and NOx emissions under current MPS emission rate limits, were the current MPS units to be operated at 2002 heat inputs and the most recent 2017 annual emission rates.

Illinois EPA and Dynegy contend in their post-hearing comments that there is something confused or subjective about the above data and analysis the People have presented. As discussed in Sections III and IV, below, in more detail, these criticisms are unwarranted. There is nothing subjective about facts, and two critical facts are clear. First: based on their actual operations, not once during the past ten years would the current MPS units have been allowed to emit pollution in the amount of Illinois EPA's currently proposed caps of 49,000 tons of SO<sub>2</sub> or 25,000 tons of NOx, annually, if the current MPS's emission rate limits had been in place. *See* Ex. 37, Armstrong Test., Att. 2. Second: the Old Ameren Group's heat input has now been significantly constrained by the MPS's current SO<sub>2</sub> emission rate limit, because Dynegy has failed to install the pollution controls it earlier acknowledged were necessary to keep up with the increasingly stringent limit. *See* Ex. 9, Gignac Test., Att. 1, and Ex. 37, Armstrong Test., Att. 3-6; PCB 14-10, Dynegy Post-Hearing Brief (Oct. 7, 2013), at 7.

Illinois EPA's proposed mass-based caps do not reflect these real-world facts. Instead, they would allow Dynegy to immediately increase air pollution. *See* R18-20, IAGO Post-Hearing Comments, at 32-35. Illinois EPA in its Post-Hearing Comments takes issue with the People's position that the Board should consider whether Illinois EPA's proposal serves to "restore, maintain, and enhance the purity of the air of this State"—the stated purposes of Title II of the Act. 415 ILCS 5/8. *See* R18-20, IEPA Post-Hearing Comments, at 21-22. Yet that is precisely what the Act instructs. *See* 415 ILCS 5/10(A) (providing that the Board "may adopt regulations to

promote the purposes of [Title II]"). It is entirely accurate, as Illinois EPA observes, that Section 8 of the Act does not specify a precise level of "purity" for the State's air. IEPA Post-Hearing Comments at 21. But the People are not in this case advocating that air pollution must be completely eradicated, or for some other such draconian position. To the contrary, the People ask only that the Board preserve the status quo. The People's position is that the MPS—a rule that Illinois EPA itself has told the Board "**should not generally be amended**," R09-10, IEPA Post-Hearing Comments (Mar. 6, 2009) (emphasis added), at PDF page 13, **should not be amended**, but that, if it is, that it not be amended in a way that would permit more air pollution. The People's position is entirely in line with the Act's mandate to "restore, maintain, and enhance the purity of the air of this State." 415 ILCS 5/8. By contrast, an amended MPS that would permit increased air pollution—as Illinois EPA's proposal would—is not. The Board should reject Illinois EPA's proposal.

#### II. <u>Neither Illinois EPA nor Dynegy has presented any reason for the Board</u> to reverse its earlier findings that the current MPS is technically feasible and economically reasonable.

All parties agree that, in promulgating any amendments to the MPS, the Board would need to "take into account . . . the technical feasibility and economic reasonableness of measuring or reducing" SO<sub>2</sub> and NOx pollution. 415 ILCS 5/27(a). The Board has already twice found the current MPS emission rate limits to be technically feasible and economically reasonable. *See* R06-25 (Dec. 21, 2006), at 54; R09-10 (Apr. 16, 2009), at 29. Neither Illinois EPA nor Dynegy has provided any reason to depart from those earlier conclusions, so as to warrant MPS amendments.

Illinois EPA discusses "technical feasibility and economic reasonableness" only once in its Post-Hearing Comments, at pages 23 to 24. Illinois EPA asserts that the Environmental Groups' detailed testimony regarding the MPS plants' current profitability is irrelevant, citing to *EPA v*. *PCB*, 308 Ill. App. 3d 741 (2d Dist. 1999), for the proposition that economic reasonableness is not

about a regulated entity's "financial history and profit margins," but rather about the costs and benefits of implementing specific pollution control technologies.

Rather than discounting the Environmental Groups' testimony, though, Illinois EPA's argument serves more to highlight a huge gap in the record before the Board: Illinois EPA has not provided any evidence about the cost or benefits of pollution controls in this proceeding. *See* IAGO Post-Hearing Comments at 18-20. To the contrary: Illinois EPA has acknowledged that Dynegy could comply with the current MPS by installing pollution controls to reduce emission rates in the Old Ameren Group, Apr. 17, 2018 Trans. at 155, lines 18-24, but dismisses that possibility because "controls are not cheap," Jan. 17, 2018 Trans. at 53, lines 10-20, without providing any analysis of costs or benefits. This, despite the fact that it has been clear since the MPS's adoption that the "installation and operation of pollution control equipment" would be "required to achieve" compliance with MPS SO<sub>2</sub> limits, R06-25, Corrected Joint Statement (Aug. 23, 2006), at 4. The record before the Board therefore does not allow for the sort of consideration of technical feasibility and economic reasonableness that Illinois EPA itself argues is necessary to support amendments to the MPS.

Neither has Dynegy provided such analysis. To the extent Dynegy in its June 1, 2018 responses to the People's questions did provide some additional information regarding recently installed sorbent injection equipment at Newton, first identified to the Board in the People's April 3, 2018 pre-filed testimony, these responses cannot be considered as a basis for a consideration of the costs and benefits of pollution control equipment, let alone one that could disturb the Board's earlier conclusions that the current MPS is technically feasible and economically reasonable. Dynegy states in its answers that the provided cost information for the Newton scrubber is "not reflective of actual construction or operations and maintenance costs associated with permanent

DSI [dry sorbent injection] systems." R18-20, Dynegy Response to Questions (Jun. 1, 2018), at 7, Question 2.d. At the very least, though, Dynegy's installation and operation of the equipment in and of itself undercuts Illinois EPA's implication that any further installation and operation of pollution control equipment on the Old Ameren Fleet is somehow impossible or infeasible.<sup>12</sup>

Illinois EPA's argument against the Environmental Groups' testimony also undercuts the stated rationale for its revised SO<sub>2</sub> cap. Illinois EPA testified that it set its revised cap of 49,000 tons, annually, based on its perception of what pollution limits Dynegy needed to "operate in a financially reasonable way," Apr. 17, 2018 Trans. at 209, line 15, to 210, line 4. Per Illinois EPA's post-hearing comments, though, this consideration of "the overall financial position or health of Dynegy" is not "the correct analysis of economic reasonableness" under Section 27(a) of the Act, 415 ILCS 5/27(a). *See* R18-20, IEPA Post-Hearing Comments, at 23-24.

Dynegy, for its part, references "technical feasibility" and "economic reasonableness" on a handful of occasions in its Post-Hearing Comments, but never provides any explanation of why it should not complete the installation of pollution controls that have been promised for over a decade to bring the Old Ameren Group into compliance. *See* R18-20, IAGO Post-Hearing

<sup>&</sup>lt;sup>1</sup> Dynegy's admission that it has operated the Newton sorbent injection system nearly continuously for the past yearand-a-half, *see* R18-20, Dynegy Responses to Questions, at 8, Questions 2.e. and 2.h., demonstrates that it ceased being a "pilot project" many months ago. It is pollution control equipment that Dynegy installed to comply with the MPS—pollution control equipment that Dynegy will shut off if the Board adopts Illinois EPA's proposal.

<sup>&</sup>lt;sup>2</sup> As to the benefits of reducing pollution, Dynegy asserts that no participant in the rulemaking has raised evidence regarding the PM2.5 and ozone National Ambient Air Quality Standards ("NAAQS"). R18-20, Dynegy Post-Hearing Comments, at 22 fn. 88. This statement is inaccurate. Illinois EPA testified that portions of the State again would be designated as nonattainment with the most recent 2015 NAAQS for ozone. *See* Apr. 17, 2018 Trans. at 123, line 23, to 124, line 3; *see also* USEPA, *Additional Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards*, 83 Fed. Reg. 25776, 25801 (Jun. 4, 2018) (designating nonattainment areas in Illinois). And the Environmental Groups provided uncontested evidence of USEPA's expert opinion that there is no safe threshold level of PM2.5 below which there is no risk to human health from exposure. *See* R18-20, Ex. 34, Urbaszewski Test., at PDF page 6 and Exhibit 3, at 4 (citing USEPA's 2009 *Integrated Science Assessment for Particulate Matter*). The People do agree with Dynegy's statement to the extent that neither Illinois EPA nor Dynegy have provided any evidence that would support the Board's departure from its reasonable finding in earlier proceedings involving the MPS, that less pollution is an environmental benefit. *See* R18-20, IAGO Post-Hearing Comments, at 35-39.

Comments, at 2-4 (describing history of the MPS). Dynegy instead cites a hodgepodge of reasons in support of a rule change, such as "changing market conditions," *id.* at 6-7; that the original MPS purportedly "did not account for the effect of retiring units," *id.* at 8; that the MPS purportedly "failed to account for the transfer of MPS units," *id.* at 8-9; that the MPS has an "arbitrary" separation of plants into groups "based on their historical ownership," *id.* at 9; and that the current MPS mandates that "lower emitting units often *must* run," *id.* at 9 (emphasis in original).

As an initial point: none of these issues have anything to do with the costs or benefits of pollution controls, but at most concern Dynegy's overall financial position. *See* R18-20, IEPA Post-Hearing Comments, at 23-24. Moreover, though, none of these issues are in any way recent developments, and they were all well-known to Dynegy when it purchased the Old Ameren Group in 2013. Indeed: the only reason Dynegy even owns the Old Ameren Group today was because Dynegy committed in 2013 to comply with the current MPS, even in the face of challenging market conditions. *See* PCB 14-10 (Nov. 21, 2013), at 103-05 (providing conditions of Dynegy's MPS variance).

One of the conditions in Dynegy's contract to purchase the Old Ameren Group was its obtaining the same variance relief from the MPS that Ameren had in place. *See* PCB 12-126, Mot. of Ameren Energy Resources and Illinois Power Holdings, LLC to Reopen Docket and Substitute Parties (May 2, 2013), at 17 ("[T]he transfer of the variance relief by the Board is a condition to the closing of the transaction . . . ."). The Board rejected Dynegy's request to transfer Ameren's variance, *see* PCB 12-126 (Jun. 6, 2013), but Dynegy ultimately did obtain variance relief in PCB 14-10. *See* PCB 14-10 (Nov. 21, 2013).

As to "changing market conditions," R18-20, Dynegy Post-Hearing Comments, at 6-7, Dynegy, in support of its 2013 variance request, referred to "severely depressed power prices

which are expected to continue for the next several years." PCB 14-10, Petit. for Variance (Jul. 22, 2013), at PDF page 41. Dynegy explained that: "[t]he steep decline in power prices is largely due to the combination of excess natural gas supplies resulting from increasing unconventional natural gas production from shale deposits, which has resulted in lower natural gas prices, and lower demand resulting from poor overall economic conditions." *Id.* These are exactly the same types of "substantial changes" to the Illinois energy market that Dynegy now references five years later. PCB 18-20, Dynegy Post-Hearing Comments, at 7. They are not new developments, and do not justify any permanent, substantive modification of the MPS, in the absence of any analysis, whatsoever, of the costs and benefits of pollution controls.

It is not market conditions that have changed from 2013 to 2018, but rather Dynegy's compliance approach to the MPS. In 2013, Dynegy obtained a variance from the MPS by committing to "maintain a continuous program of construction at the Newton Energy Center . . . so as to be in position to have the Newton FGD [flue gas desulfurization] Project completed and operational to meet compliance obligations." PCB 14-10, Petit. for Variance (Jul. 22, 2013), at PDF page 27. Dynegy stated: "Proceeding in this matter will position [Dynegy] for compliance with the Ameren MPS Rule's final overall SO<sub>2</sub> annual emission rate (0.23 lb/mmBtu) beginning in 2020, with the installation and operation of the Newton FGDs." *Id*.

The first sign that Dynegy was changing its MPS compliance approach came in 2016, when Dynegy asked the Board to terminate its variance. Dynegy announced that, "[d]ue to continued depressed energy pricing," it had decided to permanently retire Newton Unit 2 effective September 15, 2016. PCB 14-10, Joint Mot. to Terminate Variance (Sept. 2, 2016), at 4. Dynegy told the Board it had no more need for relief from the MPS: "[I]n lieu of completing the Newton FGD project identified in Condition 9, with the retirement of Newton Unit 2, <u>the MPS Group can</u>

<u>comply with the [MPS's] SO<sub>2</sub> emission limit . . . without the Variance in calendar year 2017</u> <u>and each calendar year thereafter</u>." *Id.* (emphasis added). On October 27, 2016, the Board granted Dynegy's motion to terminate its variance. Just a month later, Dynegy and Illinois EPA began discussions on the present proposed amendments to the MPS. PCB 18-20, IEPA Statement of Reasons, at 3 ("[I]n or around November 2016, Dynegy approached the Illinois EPA, requesting that changes be made to the MPS.").

What Dynegy now claims are "structural flaws" with the MPS, PCB 18-20, Dynegy Post-Hearing Comments, at 7, then, really are just the consequences of Dynegy's compliance decisions. Dynegy asserts that the MPS mandates that "lower emitting units often must run." Id. at 9 (emphasis in original). That is incorrect. The MPS mandates emission rate limits that everyoneincluding Dynegy-anticipated would be met through the installation of pollution controls. Now, rather than install pollution controls, Dynegy purportedly has made the operational decision to bid in the Old Ameren Group's controlled units below-cost, to ensure that they are called upon to run. Id. at 10. That Dynegy chooses to conduct its business in this manner does not justify a rule change. Moreover, just looking at the historical data demonstrates that this manner of operation has served the MPS's goal of limiting pollution. While Dynegy attempts to paint a picture of the current MPS as requiring unnecessary pollution-"consuming fuel and creating emissionspurely for compliance reasons," id. at 11, that picture is not consistent with the record. During 2016 and 2017—the first and only full years in which the Old Ameren Group has met the current 0.23 lb/mmBtu SO<sub>2</sub> emission limit—the Old Ameren Group's SO<sub>2</sub> and NOx emissions were the lowest by far of any of the past five years. Ex. 37, Armstrong Test., at 9-10.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Neither has Dynegy's compliance strategy led to greater fuel consumption by the Old Ameren Group. To the contrary: the Old Ameren Group's annual heat inputs for 2015 through 2017 were all significantly lower than any annual heat input during 2008 through 2014. Ex. 37, Armstrong Test., Att. 2. The 2016 heat input was the lowest of the past ten years. *Id.* 

Having failed to install needed pollution controls to meet the MPS SO<sub>2</sub> emission rate limit for the Old Ameren Group, as required by its 2013 variance, Dynegy now seeks regulatory relief in a different manner: simply eliminating that limit and combining the MPS groups. Dynegy stated quite clearly one of its goals for this rulemaking in its post-hearing comments:

The DMG Group has maintained a sizable SO2 compliance margin in recent years  $\ldots$ . But the current MPS does not allow the DMG's low SO<sub>2</sub> emission rate to balance out comparatively higher emissions from the Ameren Group. This arbitrary separation of units into groups based on their historical ownership no longer serves any regulatory purpose.

R18-20, Dynegy Post-Hearing Comments, at 8-9.

But the current structure does serve an important regulatory purpose: limiting the amount of pollution from **both** MPS groups. *See* Section IV, below.<sup>4</sup> Contrary to Dynegy's assertions that the MPS "did not account" for the retirement or sale of units, *id.* at 7, both of those scenarios were in fact discussed at the time the MPS was adopted. The intent has always been that the separate MPS groups would survive sale and retirement, as described by Illinois EPA witness Chris Romaine in 2006:

MS. BASSI: And what if Ameren sold another plant to Company Y and Ameren sold another one—it's got 21 plants or units or whatever—and it sold them all over the place and Ameren went out of existence? Although it would have a lot of money then.

MR. MENNE: Not necessarily.

MR. ROMAINE: As the rule is currently drafted, the MPS group would still be in existence and there would be a system-wide rate that would be applicable to those units.

MS. BASSI: What if one of those plants were shut down?

MR. ROMAINE: Well, then that particular plant would no longer have to worry about the complexities of this.

<sup>&</sup>lt;sup>4</sup> By contrast, eliminating the MPS's emission rate limits would allow Dynegy to immediately increase pollution. *See* R18-20, IAGO Post-Hearing Comments (Jun. 1, 2018), at 32-35.

MS. BASSI: Would they get to average zero?

MR. ROMAINE: There wouldn't be an average of zero because there would be neither emissions nor heat input. They would not be contributing to the systemwide average once shut down.

R06-25, Aug. 15, 2006 a.m. Trans., at 350-51. Attorneys for Dynegy and Ameren were present during these hearings; both companies knew exactly what MPS compliance would entail, and they opted into the MPS nonetheless. The notion that these features of the MPS that were discussed and known to all participants in 2006 have suddenly become "structural flaws" that only "now require revision," R18-20, Dynegy Post-Hearing Comments, at 8, is not reasonable.<sup>5</sup>

Moreover, the historical record shows that it is not the current MPS that is arbitrary, but rather Dynegy's request to combine the two MPS groups at this late date, based on nothing more than the fact that Dynegy now owns both groups. The original intent and understanding of the MPS was that plants, even after being sold, would remain in their original MPS group, subject to their original emission rate limits, which were planned to become more stringent over time. R06-25, Aug. 15, 2006 a.m. Trans., at 350-51. Indeed, the only reason that Dynegy now owns the Old Ameren Group is because Dynegy committed to bring that Group into compliance with the currently applicable MPS SO<sub>2</sub> emission rate limit. Dynegy's 2013 purchase of the Old Ameren Group was contingent upon it obtaining a variance from the MPS. PCB 12-126, Mot. of Ameren Energy Resources and Illinois Power Holdings, LLC to Reopen Docket and Substitute Parties (May 2, 2013), at 17. Dynegy obtained a variance, facilitating its transaction, only because it agreed to a detailed plan to bring the Old Ameren Group into compliance with the current MPS.

<sup>&</sup>lt;sup>5</sup> Dynegy's additional contention that past retirements of MPS units have somehow made MPS compliance more difficult also is unpersuasive. R18-20, Dynegy Post-Hearing Comments, at 8. The MPS units retired to date have been uncontrolled for SO<sub>2</sub> and therefore higher emitting. Just like Dynegy's retirement of the uncontrolled Newton 2 unit made MPS compliance easier, not harder, for Dynegy, *see* PCB 14-10, Joint Mot. to Terminate Variance (Sept. 2, 2016), at 4, so too did the retirement of other uncontrolled MPS units. Had Dynegy continued to run those uncontrolled units, it would have needed to install even more pollution controls to comfortably comply with the MPS.

SO<sub>2</sub> emission rate limit. PCB 14-10 (Nov. 21, 2013), at 103-05. Almost immediately after telling the Board it could comply with the MPS in "calendar year 2017 and each calendar year thereafter" (PCB 14-10, Joint Mot. to Terminate Variance (Sept. 2, 2016), at 4), though, Dynegy switched tactics and began working on another approach to undercut the current pollution-limiting MPS—the current proposal. PCB 18-20, IEPA Statement of Reasons, at 3 ("[I]n or around November 2016, Dynegy approached the Illinois EPA, requesting that changes be made to the MPS."). Now, Dynegy argues the current MPS SO<sub>2</sub> emission rate limit for the Old Ameren Group should be scrapped, because of its 2013 transaction—which occurred only because Dynegy committed to comply with that emission rate limit. Dynegy's position is not just arbitrary; it is a shell game.

Because the current MPS is technically feasible and economically reasonable, it serves to "restore, maintain, and enhance the purity of the air of this State"—the stated purposes of Title II of the Act, 415 ILCS 5/8. Neither Illinois EPA nor Dynegy has provided any reason for the Board to revisit its earlier determinations that the current MPS is technically feasible and economically reasonable. Consequently, this proposal, which would solely benefit Dynegy at the expense of the environment and the citizens of the State of Illinois, should be rejected by the Board.

#### III. <u>Illinois EPA's proposed mass caps are unreasonably high and would allow</u> <u>Dynegy to increase pollution from the MPS Units.</u>

The People's position remains the same as at the beginning of this proceeding: the Board should reject Illinois EPA's proposal outright. If the Board does further entertain Illinois EPA's proposal, though, it is clear that Illinois EPA's proposed mass-based caps are set too high. Illinois EPA and Dynegy have not provided any basis to depart from the analysis employed in R09-10, of assessing MPS amendments' environmental impact by projecting actual emissions based on historic heat inputs. Any analysis of the current MPS units' heat inputs over the past ten years demonstrates that adopting Illinois EPA's proposal would have a negative environmental impact.

This negative impact is even greater when the current MPS units' actual emission rates are taken into account. Illinois EPA's proposal should be rejected.

While Illinois EPA and Dynegy have argued at length that the Board should base its evaluation of Illinois EPA's proposed caps on "allowable emissions," it is important to recall that Illinois EPA itself has never contended that actual emissions are an irrelevant consideration. In fact, Illinois EPA asserts that it has "considered the impact of mass-based limits on actual emissions," but contends that this analysis is "difficult" because the utilization of MPS units is impacted by forces such as "external conditions, weather, and the price of natural gas." R18-20, IEPA Post-Hearing Comments, at 4.

This contention, that projecting actual emissions is "difficult," departs from Illinois EPA's past policies toward the MPS—not only in R09-10, but also in the two following variance proceedings, PCB 12-126 and PCB 14-10—without any justification. It is not "difficult" but rather very reasonable to look to the MPS units' past operations to assess how much they will operate in the future, as Illinois EPA did in those earlier proceedings. And, while Illinois EPA claims that it did consider actual emissions in assessing the environmental impact of its proposal, *id.*, it has provided nothing to document this analysis beyond the conclusory statements cited above.

The Board should instead consider Attachment 2 to the People's April 3, 2018 pre-filed testimony. As described above, it lays out ten years' worth of operating data for the MPS units. It is very easy to see that Illinois EPA's proposed caps compare unfavorably with the MPS's current requirements. The bottom of Attachment 2 includes three charts: (1) historical heat inputs for the current MPS units in the Dynegy Group, from 2008 to 2017; (2) historical heat inputs for the current MPS units in the Old Ameren Group, from 2008 to 2017; and (3) a combined chart. For both Groups, the People multiplied their historic annual heat inputs, group-wide, by the current

emission rate limits for SO<sub>2</sub> and NOx for each respective Group, to determine what level of pollution would have been permitted during each year, had the current MPS limits been in place. Not once during the past ten years would the current MPS have allowed Dynegy to emit pollution in the amount of Illinois EPA's proposed caps of 49,000 tons of SO<sub>2</sub> and 25,000 tons of NOx. During the past two years—the only two years during which Dynegy has been in compliance with the currently effective MPS emission rate limits—the current MPS permitted Dynegy to emit no more than 33,630 tons of SO<sub>2</sub> and 16,670 tons of NOx, across all units. Simply put: there is no reasonable way to examine this data and conclude that Illinois EPA's proposed caps are as protective as the current MPS emission rate limits.<sup>6</sup>

Looking even further back, the current MPS units' 2002 heat inputs provide an additional data point demonstrating that Illinois EPA's proposed caps are set too high. (As discussed further below, the MPS units' 2002 heat inputs are before the Board because those heat inputs—and projected annual emissions based on them—are central to Illinois EPA's Clean Air Act Section 110(I) analysis to show that its proposal would be consistent with the State's Regional Haze State Implementation Plan ("SIP").) As shown on Attachments 7 and 10 to the People's April 3, 2018 pre-filed testimony, the 2002 heat inputs for current MPS units were, respectively, 178,195,000 mmBtu for the Dynegy Group and 242,336,000 mmBtu for the Old Ameren Group, for a total of 420,531,000 mmBtu. Notably, these heat inputs exceed both group-level and overall heat inputs for the current MPS units for the past five years running (with the sole exception of 2013's Dynegy

<sup>&</sup>lt;sup>6</sup> Illinois EPA in its Post-Hearing Comments contends that it "has not used full capacity figures for heat input for proposing appropriate limits for SO<sub>2</sub>," but it does not address the more relevant point that it has proposed SO<sub>2</sub> and NOx limits that both exceed any amount of pollution that would have been allowed by the current MPS during the past ten years of Dynegy's actual operations. R18-20, IEPA Post-Hearing Comments, at 10. Also unpersuasive is Illinois EPA's attempt to distinguish its analysis of environmental impacts in R09-10 on the grounds that proceeding involved "emission rates for specified years," *see id.* at 9. Illinois EPA's proposal would set emission limits for the MPS units for all years going forward—all the more reason to be sure that any mass caps are set at levels that reasonably reflect the current MPS units' actual operations and the environmental benefits realized under the current MPS.

Group heat input of 179,774,663 mmBtu). *See* Ex. 37, Armstrong Test., Att. 2. The 2002 heat inputs therefore provide an exaggerated view of the current MPS units' operations. But even if the current MPS units again reached their 2002 heat input levels, the current MPS would limit them to no more than 44,920 tons of SO<sub>2</sub> and 22,469 tons of NOx pollution. *See* Ex. 37, Armstrong Test., Attachment 7. In other words: Illinois EPA's proposed caps are set too high based on MPS operations even going back to <u>sixteen vears ago</u>. The robust historical data assembled by the People discredits Dynegy's assertion that the People are asking the Board to assess Illinois EPA's proposal "based on short-term emissions trends." R18-20, Dynegy Post-Hearing Comments (Jun. 1, 2018), at 16. To the contrary: all of the historical data in the record shows that Illinois EPA's proposed caps are unreasonably high and that its proposal should be rejected.

Perhaps recognizing that it would not be reasonable to completely ignore the MPS units' actual operations, Illinois EPA and Dynegy in their post-hearing comments have attempted to shift the debate from heat inputs to capacity factors. Illinois EPA's and Dynegy's analyses of capacity factors are factually inaccurate, though. For example, Illinois EPA posits that the People's suggested alternative annual SO<sub>2</sub> cap of 34,094 tons "would restrict operations at the EGUs to about 51% of capacity." R18-20, IEPA Post-Hearing Comments, at 11. This claim is easily disprovable. In 2016 and 2017, the current MPS units operated at 55% and 57% capacity factors, respectively. *See* Ex. 37, Armstrong Test., Att. 2. Dynegy would have complied with the People's suggested cap, though, with annual SO<sub>2</sub> emissions of 27,621 tons and 30,578 tons, respectively. Accordingly, Dynegy was by no means restricted to operations of "about 51% of capacity," and would have had an ample margin to increase capacity at well-controlled units.

Dynegy's analysis of capacity factors is slightly more nuanced but similarly unsupported. For example, Dynegy makes the following assertion in its June 1, 2018 Response to Questions,

regarding Illinois EPA's currently proposed annual SO<sub>2</sub> cap of 49,000 tons:

Using the methodology set forth on pages 15-16 of the [People's] December 11, 2017 testimony an SO<sub>2</sub> cap of 49,000 tons corresponds to a hypothetical year in which both current MPS groups ran at a 73.8 percent capacity factor at exactly their MPS emission rate limits. That capacity factor is lower than the average annual capacity factor for the MPS fleet in three of the past ten years <u>and, therefore, has</u> the potential to constrain future operations below recent levels.

R18-20, Dynegy Response to Questions, at 2, Question 2 (citation omitted) (emphasis added). The emphasized statement is false. Dynegy's argument disregards how its plants actually operate, both in terms of usage and emission rates.

Initially, to be clear, the People did not present the "methodology" Dynegy references above as one that should be used to set mass-based caps. Instead, the People presented the analysis on pages 14 to 16 of its testimony to support its request that the Board "reject [Illinois EPA's] proposed switch to mass-based emission limits." R18-20, Ex. 9, Gignac Test., at 16. Later on that very same page, the People stated:

Even more significant than the above, it also is not technically feasible for Dynegy to operate the MPS units at their maximum heat input and at the maximum emission rate allowed by the MPS, because the emission rate of each individual unit is constrained within narrow bounds by its pollution control technology and associated legal requirements. Some units have pollution controls and some do not; units with controls operate far below the maximum rate and units without controls cannot come close to reaching it.

*Id.* In other words: the People never testified that it is feasible for both MPS groups to run at the exact same capacity factor, at exactly their MPS emission rate limits, i.e., the scenario Dynegy posits in the above response as a basis for evaluating Illinois EPA's proposal. To the contrary, the People testified that emission rates at MPS units are "constrained within narrow bounds by . . . pollution control technology and associated legal requirements." *Id.* And the record, including Dynegy's testimony, supports the People's analysis.

First, with respect to the MPS units' usage, the actual historical data that the People have

assembled show that the two MPS groups do not operate at exactly the same capacity factor. For example, the below table shows group-level capacity factors for 2016 (the last year all current MPS units were operated), drawing on data from Attachment 2 to the People's April 3, 2018 pre-filed testimony:

	2016 Gross Load (MW-h)	Nameplate Capacity (MW)	Capacity Factor
<b>Old Ameren Group</b>	16,255,288	3,807	49%
Dynegy Group	14,876,524	2,689	63%

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The Dynegy Group—which has a significantly lower SO<sub>2</sub> emission rate limit than the Old Ameren Group—had a much higher capacity factor than the Old Ameren Group. In its argument above, though, Dynegy unreasonably conflates the operations of both MPS groups under a single capacity factor, attempting to erase not only the different manner in which the groups have been operated, but also their differing emission rate limits under the current MPS.

It is telling that Dynegy now asks the Board to consider the historical operating data presented in Attachment 2 to the People's April 3, 2018 pre-filed testimony, but chooses to ignore the most relevant data on that spreadsheet: group-level heat inputs, exactly of the type that Illinois EPA and the Board relied upon to assess the environmental impact of MPS amendments in R09-10. This heat input data disproves Dynegy's assertion that Illinois EPA's proposed SO<sub>2</sub> cap of 49,000 tons "has the potential to constrain future operations below recent trends." R18-20, Dynegy Response to Questions, at 2, Question 2. To the contrary: assuming (as Dynegy does above) that current MPS units are operated in compliance with current MPS emission rate limits, then Dynegy could operate the current MPS units at exactly the same heat inputs as it did from 2008 through 2017 and never come close to hitting Illinois EPA's proposed cap of 49,000 tons of NOx, for that matter). *See* Ex. 37, Armstrong Test., Att. 2.

Dynegy's attempted defense of Illinois EPA's proposed cap has no factual basis.

Second, Dynegy's posited scenario is further unrealistic because the circumstances under which Dynegy can operate the MPS Groups "at exactly their MPS emission rate limits," R18-20, Dynegy Response to Questions, at 2 Question 2, are limited—extremely limited, in the case of the Dynegy Group. As the People have explained on multiple occasions during this proceeding, this is due to the differing pollution controls installed at each Group and the current MPS's group-wide emissions averaging requirement.

As to the Old Ameren Group, the People described its constraints on pages 28 through 31 of their Post-Hearing Comments. Dynegy has not installed the SO<sub>2</sub> controls needed to comply with the MPS, so it cannot operate the Old Ameren Group as it once did. As to Dynegy's specific statement above, there is no record support for the conclusion that the Old Ameren Group could operate at a 73.8% capacity factor in compliance with the currently applicable SO<sub>2</sub> emission rate limit of 0.23 lb/mmBtu. During 2017, the Old Ameren Group operated at a 58% capacity factor and only barely complied with the limit. See Ex. 37, Armstrong Test., Atts. 2 and 6 (calculating a 2017 SO<sub>2</sub> emission rate of 0.233 lb/mmBtu for the Old Ameren Group). And, notably, this razorthin compliance margin purportedly was obtained only by Dynegy's artificially boosting the capacity factors at the controlled Coffeen and Duck Creek plants by bidding them into the energy market below-cost. PCB 18-20, Dynegy Post-Hearing Comments, at 10. By contrast, when Dynegy operated the current MPS units at even moderately higher capacity factors (for example, in 2013 and 2014), it did not come close to complying with the currently applicable emission rate limit. See R18-20, IAGO Post-Hearing Comments, at 30-31, and Ex. 37, Armstrong Test., Atts. 3 and 4.

On the other side of the coin, the current MPS units in the Dynegy Group could not operate

at a 73.8% capacity factor in exact compliance with the currently applicable SO<sub>2</sub> emission rate of 0.19 lb/mmBtu. As the People's analysis of emission rates from 2013 through 2017 demonstrated, the Dynegy Group's SO<sub>2</sub> emission rate invariably has been well below 0.19 lb/mmBtu. *See* Ex. 9, Gignac Test., Att. 1, and Ex. 37, Armstrong Test., Atts. 3-6. The reason for this is that there are separate limitations on the Dynegy Group imposed by the Consent Decree in *United States v*. *Illinois Power Company*, 99-833-MJR (S.D. Ill.). Dynegy has acknowledged this constraint. Asked to describe a scenario in which the Dynegy Group could have an annual SO<sub>2</sub> emission rate of 0.19 lb/mmBtu, while still complying with the Consent Decree, Dynegy testified:

It would have to be a scenario which included the Hennepin station operating near its allowable emission rates and the Baldwin and Havana stations operating at very low capacity factor.

R18-20, Apr. 17, 2018 Trans. at 149, lines 16-20. Given that Baldwin and Havana make up the bulk of the Dynegy Group (2,383 MW nameplate capacity out of 2,689 MW for the Group, see Ex. 37, Armstrong Test., Att. 2), it would be impossible for the Dynegy Group to operate at a 73.8% capacity factor, at exactly its current MPS emission rate limit of 0.19 lb/mmBtu. In sum: Dynegy and Illinois EPA's various uses of capacity factors in defense of Illinois EPA's proposed caps lack any factual basis.

To be clear: it is not necessary to consider the current MPS units' emission rates at all to conclude that Illinois EPA's proposed caps are set too high. That point is established by the historic heat input data, alone. But the current limitations on the MPS units' emission rates, described above, further demonstrate why Illinois EPA's proposal is unreasonable. In its posthearing comments, Illinois EPA maintained that:

[W]hile utilization of the EGUs in the existing MPS Groups has been relatively low in recent years, that could potentially change if the price of natural gas rises or weather conditions cause an increased demand for electricity. <u>This change could</u> occur regardless of whether the EGUs are subject to the current rate-based

#### standards or the proposed mass emission caps.

R18-20, IEPA Post-Hearing Comments, at 4 (emphasis added). With respect to the Old Ameren Group, though, Illinois EPA's statement is simply incorrect. Dynegy cannot appreciably increase utilization of the Old Ameren Group while still complying with the MPS's current SO<sub>2</sub> emission rate limit, no matter the market conditions. Illinois EPA's proposed caps do not take that fact into account.

Instead of considering actual historical operating data to justify its proposal, Illinois EPA continues to rely on "allowable emissions" to conclude that its proposal offers an environmental benefit. See, e.g., R18-20, IEPA Post-Hearing Comments, at 22. Illinois EPA relies heavily on the contention that the metric of allowable emissions is required by the United States Environmental Protection Agency ("USEPA") for purposes of a Clean Air Act Section 110(1) analysis, to demonstrate that adoption of Illinois EPA's proposal would be consistent with the State's Regional Haze SIP. See, e.g., id. at 4-6. As an initial point: Illinois EPA has agreed that the Board is not constrained to Illinois EPA's Section 110(1) analysis in considering its proposal's environmental impact. R18-20, Apr. 17, 2018 Trans. at 93, lines 6-18. Illinois EPA has prepared a Section 110(1) analysis for one reason, and one reason, only: in 2011, the State of Illinois relied upon the MPS (along with other measures) as a method for showing compliance in the SIP for the Regional Haze Rule. See 40 C.F.R. 51.308; R18-20, IEPA Statement of Reasons, at 9-10. As Illinois EPA has testified, though, the MPS was not adopted for the purposes of complying with the Regional Haze Rule. See R18-20, Jan. 17, 2018 Trans. at 138, lines 6-9. And the MPS was not written into the Regional Haze SIP at the time the Board considered the amendments to the MPS in R09-10, in 2009. Illinois EPA's and Dynegy's proposal that the Board now ignore the analysis of environmental impacts employed in R09-10, merely because of the unrelated

happenstance that the State subsequently relied upon the MPS to show compliance with the Regional Haze Rule, is arbitrary.

Even more, though, even a cursory examination of Illinois EPA's Section 110(1) analysis demonstrates that it does not speak to what should be the central issue before by the Board: how Illinois EPA's proposed amendments could impact the amount of pollution emitted by the current MPS units. Instead, the analysis answers only one question: whether the MPS as amended would be able to serve the purposes of the Regional Haze Rule. As USEPA stated in reviewing another State's Section 110(1) analysis of revisions to a Regional Haze SIP:

The critical question under section 110(1) is not whether the SIP revision will cause an increase in actual emissions, it is whether that increase in actual emissions will interfere with attainment of the NAAQS or RFP [reasonable further progress], or if the SIP revision interferes with any other applicable requirement of the [Clean Air Act].

USEPA, *Approval and Revision of Air Plans; Arizona; Regional Haze State and Federal Implementation Plans; Reconsideration*, 82 Fed. Reg. 15139, 15149 (Mar. 27, 2017).<sup>7</sup> In other words: a Section 110(1) analysis by design is indifferent to whether a rule change would permit increased emissions, so long as the emissions do not interfere with a Clean Air Act requirement.

In discussing its Section 110(1) analysis, then, Illinois EPA misses a crucial point. The comparison of "allowable-to-allowable" emissions, R18-20, IEPA Post-Hearing Comments, at 5, (i.e., of the hypothetical emissions of current MPS units operating at maximum heat input, at exactly the current MPS emission rate limits, with Illinois EPA's proposed mass-based caps) is not being performed just to compare "allowable" emissions for their own sake. Instead, the point of the comparison is to determine whether "allowable" emissions under an amended MPS would be less than an earlier projection of **actual emissions** that had been made for Regional Haze

<sup>&</sup>lt;sup>7</sup> With respect to Illinois EPA's submission of an email from USEPA regarding Section 110(l) requirements, USEPA's public statements in official sources such as the *Federal Register* speak for themselves.

purposes. *See* R18-20, Statement of Reasons, at 11; R18-20, Technical Support Document, at 18-19. Specifically, the MPS (among other rules) was included in the Illinois Regional Haze SIP as an "alternative measure" in lieu of requiring that specific sources install and operate "Best Available Retrofit Technology" ("BART"). *See* 40 C.F.R. 51.308(e)(1) and (2). In order to justify the MPS, in association with other rules, as an alternative measure, Illinois EPA had to provide to USEPA a demonstration that they would "achieve greater reasonable progress than would have resulted from the installation and operation of BART." 40 C.F.R. 51.308(e)(2)(i). This demonstration included "an analysis of the projected emissions reductions achievable" through the MPS. 40 C.F.R. 51.308(e)(2)(i)(D).

The actual emissions that were projected for purposes of the Regional Haze Rule have nothing to do with current MPS operations, though. Those projections were based on MPS emission rate limits assuming that 31 historic MPS units were operated at 2002 heat input levels. *See* R18-20, Technical Support Document, at 15-19. Today, though, there are only 18 MPS units (including the mothballed Baldwin 3). The purpose of Illinois EPA's Section 110(1) analysis, then, is ultimately to show that its proposed mass caps—the "worst-case" "allowables"—are less than "anticipated emissions" that were projected from the operation of a much larger MPS fleet than the one that exists today. *Id.* at 18-19.

Illinois EPA's and Dynegy's contention that the Board should not consider projected actual emissions for the <u>current</u> MPS units is therefore manifestly unreasonable. Illinois EPA's Section 110(l) analysis itself depends on projected actual emissions, but they are outdated due to subsequent unit retirements. The Board should assess Illinois EPA's proposal based on historic heat inputs for the current MPS units, not for a fleet that no longer exists. And, based on that assessment, it should reject Illinois EPA's proposal because it would permit significantly more

pollution than the current MPS, under any analysis.

# IV. If the Board does determine to set mass-based caps, they should be no higher than the limits suggested in the People's June 1, 2018 post-hearing comments.

As maintained above, Illinois EPA's proposal does not serve to "restore, maintain, and enhance the purity of the air of this State" and accordingly should be rejected. 415 ILCS 5/8. Illinois EPA has not provided any reasoned basis for its proposed annual mass-based caps of 49,000 tons of SO<sub>2</sub> and 25,000 tons of NOx. These caps are not as protective as the current MPS, and the Board's adoption of them would permit Dynegy to immediately increase pollution. *See*, *e.g.*, R18-20, IAGO Post-Hearing Comments, at 32-35. Given Illinois EPA's failure to justify its proposal, there is no need for the Board to "fix" these caps; instead, it would be more appropriate for the Board to simply reject Illinois EPA's proposal and close this proceeding.

If the Board does determine to move forward with Illinois EPA's amendments, though, then the proposed caps must be significantly reduced. Illinois EPA's proposed caps would not provide any "environmental benefit," as the Board found of the MPS amendments adopted in R09-10. They would not even maintain the status quo of a rule the Board has twice before found technically feasible and economically reasonable. *See* R06-25 (Dec. 21, 2006), at 54; R09-10 (Apr. 16, 2009), at 29. Any mass caps that the Board adopts should take into account two central considerations: (1) that they reflect realistic historic heat inputs for the current MPS units; and (2) that they do not arbitrarily permit Dynegy to operate the Old Ameren Group's uncontrolled units in excess of the levels allowed under the current MPS.

With respect to historic heat inputs, the People submit that the Board could reasonably view the 2002 heat inputs (for current MPS units) relied upon by Illinois EPA and USEPA for purposes of the Regional Haze Rule as being representative of the current MPS units' operations— with one important caveat, discussed below. The Board appeared to express interest in this

approach during the April 17, 2018 hearing. *See* Apr. 17, 2018 Trans. at 97, line 18, to 99, line 14. In fact, utilizing 2002 heat inputs would actually exaggerate the current MPS units' operations during recent years. As shown on Attachment 7 to the People's April 3, 2018 pre-filed testimony, the 2002 heat inputs for current MPS units (including the now-mothballed Baldwin 3), totaled 420,531,000 mmBtu, with 178,195,000 mmBtu for the Dynegy Group and 242,336,000 mmBtu for the Old Ameren Group. Comparing the 2002 heat inputs with the historic heat input data in Attachment 2 to the People's April 3, 2018 pre-filed testimony, the overall heat input of 420,531,000 mmBtu for 2002 was higher than any overall heat input for the current MPS units since 2011. Looking at the past five full years of operation, of 2013 through 2017, the average overall heat input for the current MPS units was 349,939,955 mmBtu.

The 2002 heat inputs also are more than reasonable at the group level. As to the Old Ameren Group, the 2002 heat input of 242,336,000 mmBtu is also higher than any annual heat input reached by the current units in that Group since 2011. From 2013 through 2017, the average heat input for the current MPS units in the Old Ameren Group was 198,814,755 mmBtu. As to the Dynegy Group, the 2002 heat input of 178,195,000 mmBtu was higher than any annual heat input reached by the current units in that Group since 2013. From 2013 through 2017, the average heat input for the current MPS units in that Group since 2013. From 2013 through 2017, the average heat input for the current MPS units in the Dynegy Group was 155,125,200 mmBtu.<sup>8</sup>

The 2002 heat inputs are even quite comparable to current heat inputs on a unit level, with two notable exceptions. Illinois EPA asserts, without explanation, that "the proportional use of

<sup>&</sup>lt;sup>8</sup> To the extent that Illinois EPA or Dynegy would try to argue that relatively higher heat inputs in 2008, 2010, and 2011 are somehow more representative of the current MPS units' operations, this argument is undercut by the fact that Dynegy has been before the Board twice over the past five years advising of "substantial changes" to the Illinois energy market. PCB 18-20, Dynegy Post-Hearing Comments, at 7; PCB 14-10, Petit. for Variance (Jul. 22, 2013), at PDF page 41. Given the "substantial changes" that have taken place this decade, there is no support in the record for the conclusion that those older heat inputs are more representative of actual operations than recent ones. Moreover, though, Illinois EPA and Dynegy have not made any arguments about representative heat inputs, but instead attempt to defend mass caps that bear no relation to actual operations over the past ten years.

the currently operating units . . . is much different today than it was in 2002." R18-20, IEPA Post-Hearing Comments, at 7. This conclusory statement is largely not borne out by actual numbers, though:

		2017 Heat 2002 Heat		
Plant	Unit	Input	Input	
Baldwin	1	38824663	43884000	
Baldwin	2	40385824	37135000	
Baldwin	3	0	46403000	
Coffeen	1	19939412	18570000	
Coffeen	2	39101271	37545000	
Duck Creek	1	19985699	22635000	
E D Edwards	2	13212705	17222000	
E D Edwards	3	17698112	15972000	
Havana	9	30567133	28514000	
Hennepin	1	4508524	4684000	
Hennepin	2	14201402	17575000	
Joppa	1	8983253	13548000	
Joppa	2	8140886	16258000	
Joppa	3	7034467	15396000	
Joppa	4	5244525	13402000	
Joppa	5	6357587	15094000	
Joppa	6	7292449	16063000	
Newton	1	33298298	40631000	

Table 2:

Contrary to Illinois EPA's assertion, the heat inputs for current MPS units between 2002 and 2017 actually are very similar, with the exception of: (1) the mothballing of Baldwin 3, and (2) a significant reduction of heat input (greater than 50%) at the Joppa plant.

That second exception points to the caveat mentioned above: 2002 heat inputs, alone, do not adequately capture the restrictions placed on the Old Ameren Group by the MPS's current 0.23 lb/mmBtu emission rate limit, which took effect only recently. This is demonstrated very clearly by a comparison of the current Old Ameren Group's operations during 2002 and 2017. Putting aside Joppa, they had nearly identical heat inputs: 143,235,497 mmBtu in 2017, and 135,862,000

mmBtu in 2002.<sup>9</sup> In other words: the constriction of heat input at Joppa accounted for almost the entire difference in group heat input between 2002 and 2017. But Dynegy at this point <u>could not</u> restore that reduced heat input at Joppa, because it would then blow past the current MPS's SO<sub>2</sub> emission rate limit of 0.23 lb/mmBtu. *See* pages 18-19, above. Again, this encapsulates the point the People have been making for this entire proceeding: under the current MPS, Dynegy cannot increase heat input at the Old Ameren Group from recent levels because it has failed to install the pollution controls necessary to comply with the MPS.

Accordingly, if the Board does determine to set mass-based caps, it must take into account both realistic heat inputs and the impact of the current SO<sub>2</sub> emission rate limit for the Old Ameren Group. Both of the suggested approaches in the People's June 1, 2018 post-hearing comments would accomplish this. Contrary to suggestions by Illinois EPA and Dynegy, the People in this proceeding have provided only one set of projections for future fleet-wide emissions under the current MPS: 34,094 tons for SO<sub>2</sub> and 18,920 tons for NOx. Ex. 37, Armstrong Test., at 17-19. These projections take into account both reasonable assumptions about heat inputs and the fact that emission rates at MPS units are "constrained within narrow bounds by . . . pollution control technology and associated legal requirements." R18-20, Ex. 9, Gignac Test., at 16. While Illinois EPA asserts that the People's approach to the two MPS groups is "inconsistent," R18-20, Illinois EPA Post-Hearing Comments, at 8, the People's methodology was driven by the fact that the Dynegy Group is bound by its Consent Decree to perform well below its MPS emission rate limit, while the Old Ameren Group cannot increase capacity and still comply with its MPS emission rate limit. *See* pages 18-20, above.

As discussed at pages 11 to 12, above, Dynegy itself has acknowledged these facts, stating

<sup>&</sup>lt;sup>9</sup> The difference of 7,373,497 mmBtu is only 5% of the 2017 heat input.

that the MPS in its view should "allow the [Dynegy Group]'s lower SO<sub>2</sub> emissions rate to balance out comparatively higher emissions from the [Old Ameren Group]." R18-20, Dynegy Post-Hearing Comments, at 8. Combining the Groups in that fashion certainly would benefit Dynegy, but it would also permit increased pollution relative to the current MPS. It would, without any justification, give Dynegy a free pass on its failure to install the pollution controls needed to ensure MPS compliance—even though Dynegy agreed to a detailed plan to bring the Old Ameren Group into compliance at the time it purchased the plants. PCB 14-10 (Nov. 21, 2013), at 103-05.

Accordingly, the Board also could consider the People's second suggestion in its June 1, 2018 post-hearing comments: annual caps totaling 44,920 tons of SO<sub>2</sub> and 22,469 tons of NOx for the two current MPS Groups, but without combining the two MPS Groups. Specifically, based on 2002 group-level heat inputs, the Board could adopt annual caps for the Dynegy Group of 16,972 tons of SO<sub>2</sub> and 9,000 tons of NOx, and, for the Old Ameren Group, of 27,948 tons of SO<sub>2</sub> and 13,469 tons of NOx. Either of the People's suggestions would be more reasonable than Illinois EPA's proposed caps, and better maintain the status quo of the current MPS, which the Board has twice before found technically feasible and economically reasonable. *See* R06-25 (Dec. 21, 2006), at 54; R09-10 (Apr. 16, 2009), at 29.

#### V. <u>If the Board finds merit in Illinois EPA's proposed mass-emission-cap</u> <u>approach, then the Board should include an appropriately stringent</u> <u>reduction of SO<sub>2</sub> and NOx emissions when a unit is shutdown or</u> <u>mothballed.</u>

The People continue to advocate that this rulemaking is entirely unnecessary and should be rejected by the Board, as the MPS is operating exactly as it was intended (i.e. to limit SO<sub>2</sub> and NOx pollution from the MPS units). However, if the Board determines that amending the MPS to allow for SO<sub>2</sub> and NOx emission caps is warranted, the Board must require 100% reductions of SO<sub>2</sub> and NOx emissions from the MPS caps for any unit that is either shutdown or mothballed.

In its post-hearing comments, Dynegy does not address the issue of allocation of emission reductions for SO<sub>2</sub> and NOx if a unit is shutdown or mothballed, while the Illinois EPA does put forth some limited and insufficient allocation of emission reductions. However, Illinois EPA makes clear that it "does not believe that allocation amounts in the event of a shutdown are necessary, and it does not recommend that the Board include such amounts in the rule language." R18-20, IEPA Post-Hearing Comments, at 24. If the Board finds any merit in changing the currently effective pollution-reducing MPS, the Board should not adopt Illinois EPA's proposal on this issue, because it is unsupported, underdeveloped, and inappropriate.

First, Illinois EPA does not propose any allocations for when a unit is mothballed for either SO<sub>2</sub> or NOx. This approach undermines the environmental benefits of the MPS. Under the current MPS, if a unit is mothballed, it simply does not factor into MPS compliance. The reason for this is that if there is no heat input to a unit, then there is no allowance for pollution from that unit.<sup>10</sup> Adopting Illinois EPA's approach in this instance would lock in an allowance for pollution for all current MPS units. Simply put, if Dynegy elects to take a unit out of service, then that pollution should remain off the board. It should not be utilized at any other unit in the MPS fleet. Moreover, Illinois EPA offers no compelling justification for allowing Dynegy to increase pollution at other MPS units when a given unit is mothballed. Accordingly, if the Board does adopt mass-based emissions caps, then the regulations must include SO<sub>2</sub> and NOx reductions when a unit is mothballed.

Second, the allocation of emission reductions that Illinois EPA provides for shutdowns are

<sup>&</sup>lt;sup>10</sup> As mentioned above on page 11, in responding to a question of whether a non-operating MPS unit would get to average zero emissions, Illinois EPA's Chris Romaine testified that "[t]here wouldn't be an average of zero because there would be neither emissions nor heat input. They would not be contributing to the system-wide average once shut down." R06-25, Aug. 15, 2006 a.m. Trans., at 350-51.

valued at only 50% of a given unit's transfer value. Illinois EPA's justification for this approach is that "[t]he Agency calculated shutdown allocation amounts at 50% of the transfer amounts because generation lost at those units will likely need to be made up for by other units in the area." R18-20, IEPA Post-Hearing Comments, at 25. However, under the current MPS, when there is no heat input to a unit, there is no allowance for pollution from that unit. Under the Illinois EPA's current approach, when there is no heat input to a unit, any other unit in the fleet can pollute the air at 50% of what the shutdown unit would have emitted. Yet, the purpose of the MPS was to clean up Illinois's coal-fired power plants via increasingly more stringent SO<sub>2</sub> and NOx emission rates. Here, the Illinois EPA's approach would frustrate the purposes of the MPS by actually allowing more pollution into the environment when a unit is shutdown. Because Illinois EPA's proposal does not promote the Act's purposes to "restore, maintain, and enhance the purity of the air of this State," 415 ILCS 5/8, the Board should reject it. Instead, the Board must provide for 100% reduction to the SO<sub>2</sub> and NOx emission caps when a unit is either shutdown or mothballed.

Third, any cap the Board adopts must be reduced by 100% of any allocation for SO<sub>2</sub> and NOx emissions for Baldwin Unit 3, which was mothballed almost two years ago, in October 2016.<sup>11</sup> Quite simply, the other MPS units must not be allowed to increase their pollution because Dynegy has chosen to take Baldwin Unit 3 out of service. No other approach makes sense or comports with the Act's purposes to "restore, maintain, and enhance the purity of the air of this State." 415 ILCS 5/8. To the extent that Dynegy restarts Baldwin Unit 3, then the caps for the SO<sub>2</sub> and NOx emissions can be increased accordingly.

Finally: the People greatly appreciate the opportunity to have presented testimony over multiple days of hearing; the thoughtful questions posed by Board members and staff; and the

<sup>&</sup>lt;sup>11</sup> Dynegy, "Third Quarter 2016 Review" (Nov. 2, 2016), at 4, *available at* <u>http://phx.corporate-ir.net/phoenix.zhtml?c=147906&p=irol-presentations2016</u>.

efficient and professional oversight of the proceeding by the Hearing Officer.

By:

Dated: June 15, 2018

Respectfully submitted,

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