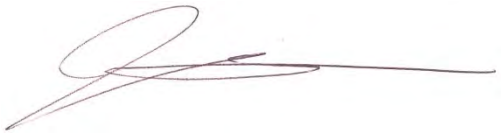
BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:	)	
	)	R2018–20
AMENDMENTS TO	)	(Rulemaking – Air)
35 ILL. ADM. CODE 225.233,	)	
MULTI-POLLUTANT STANDARDS (MPS)	)	

NOTICE OF FILING

PLEASE TAKE NOTICE that I have filed today with the Illinois Pollution Control Board the attached **COMMENTS OF ENVIRONMENTAL GROUPS**, copies of which are served on you along with this notice.

Respectfully Submitted,



Justin Vickers
Environmental Law & Policy Center
35 E. Wacker Dr., Suite 1600
Chicago, IL 60601
jvickers@elpc.org
(312) 795-3736

Dated: June 1, 2018

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COMMENTS OF ENVIRONMENTAL GROUPS

I. INTRODUCTION

Environmental Defense Fund, Environmental Law and Policy Center, Natural Resources Defense Council, Respiratory Health Association, and Sierra Club ("Environmental Groups") appreciate this opportunity to file public comments on this proposed rulemaking. The Environmental Groups respectfully submit that the Illinois Pollution Control Board ("Board") should decline to amend the Multi-Pollutant Standard ("MPS") as proposed by the Illinois Environmental Protection Agency's ("IEPA"). The proposed amendment to the MPS does not provide an environmental benefit because it would not improve air quality, but instead allow increased air pollution. Moreover, neither IEPA nor Dynegy/Vistra[1] has established the principle justifications that would support such a rewrite: that the current rule is not economically reasonable and the revision is necessary to ensure the fleet's economic stability. The Board must therefore decline to amend the MPS as proposed.

If the Board is compelled to modify the current rule to provide some relief to Dynegy/Vistra, changes should be limited to allowing Dynegy/Vistra to combine its two MPS

[1] On April 9, 2018, Dynegy and Vistra finalized their merger. The regulated entity in this case has appeared before the Board as both Dynegy and Vistra. Throughout this brief we simply refer to the regulated entity as Dynegy/Vistra with the exception of a very few references we make to solely Dynegy because the action being discussed clearly took place before this proceeding began and before the merger.

groups[2] under a single rate-based standard for sulfur dioxide ("SO_2") of 0.23 lbs/mmBtu for SO_2 and a single rate-based standard for nitrogen oxide ("NO_X") of 0.11 lbs/mmBtu, which are the current standards for half of Dynegy/Vistra's Illinois fleet.[3] These changes would address Dynegy/Vistra's concern that its MPS groups are too small for averaging. The Board should, however, reject the conversion of the MPS limits to mass-based caps for the combined MPS groups.

If the Board were to conclude that mass-based caps are justified for a combined MPS group, those caps would have to be set lower than those currently proposed by IEPA. Under such circumstances, the Environmental Groups would subscribe to the annual caps calculated by the Attorney General's Office of 34,094 tons for SO_2 and 18,920 tons for NO_X. Caps at those levels would ensure that emissions from the Dynegy/Vistra Illinois fleet do not exceed levels allowed by the current MPS and would, therefore, preserve the environmental benefit provided by the current MPS. Any amendment allowing a mass-based approach must also include a provision that would proportionally reduce these caps when a unit retires. This would ensure that plants continue to use existing SO_2 controls on a plant-by-plant basis, maintain good pollution control practices, and prevent significant emissions increases on a pounds-per-million-Btu basis (rate basis).

II. HISTORY OF THE MPS

The MPS rule was originally passed in 2006, partly in response to federal requirements in

[2] One group consists of the plants that Dynegy/Vistra has always owned: Baldwin, Havana and Hennepin. The second group are the plants formerly owned by Ameren and now owned by Dynegy/Vistra's subsidiary, Illinois Power Holdings ("IPH"): Duck Creek, Coffeen, E.D. Edwards, Newton, and Joppa. IEPA Statement of Reasons at 2-3, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Oct. 2, 2017).

[3] This is the standard for half of Dynegy's fleet which was purchased from Ameren and now owned by IPH. *See* IEPA Statement of Reasons at 4-5, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Oct. 2, 2017).

place at that time. The rule regulates the emissions of three pollutants from coal-fired power plants: SO_2, NO_X, and mercury. At that time, Dynegy, Ameren—who was the preceding owner of part of Dynegy's fleet[4]—IEPA, and the Board all agreed that the SO_2 and NO_X pollution reductions (and mercury reductions) required by the rule were technically feasible and economically reasonable.[5] However, despite their original agreement with the MPS requirements, Ameren, Dynegy, and Illinois Power Holdings ("IPH")—the Dynegy subsidiary that owns the former Ameren plants—have returned to the Board on numerous occasions to seek various forms of relief from the MPS.

In 2009, Ameren, in the context of a broader rulemaking, requested that the Board postpone the deadline for the Ameren plants to meet the 2013-14 SO_2 standard.[6] In exchange, Ameren suggested that the SO_2 standard for 2017 onward be reduced to 0.23 lbs/mmBtu.[7] The Board approved Ameren's amendment, stating: "On the basis of its review of the record, particularly the projected environmental benefit . . . , the Board finds that the proposal by Ameren is technically feasible and economically reasonable . . ."[8]

In 2012, Ameren returned to the Board, this time petitioning for a variance to allow the company to delay the deadline for its compliance with the 0.23 lbs/mmBtu SO_2 limit until 2020; in return, the company would continue to not operate two of its plants: Hutsonville and

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[4] In 2013, Dynegy purchased Ameren's generating assets in Illinois. Dynegy created a subsidiary, IPH, to complete the purchase and be the owner of the plants. *See* IEPA Statement of Reasons at 2-3, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Oct. 2, 2017).

[5] *See In re Proposed New 35 Ill. Adm. Code 225, Control Of Emissions From Large Combustion Sources (Mercury),* R06-25 (July 28, 2006) at 3; *In re Proposed New 35 Ill. Adm. Code 225,* R06-25 (Aug. 23, 2006) at 4; *In re Proposed New 35 Ill. Adm. Code 225,* R06-25 (Nov. 2, 2006) at 2.

[6] *See In re Amendments To 35 Ill. Adm. Code 225: Control Of Emissions From Large Combustion Sources (Mercury Monitoring)*, R09-10 (Apr. 16, 2009) at 12.

[7] *See* Testimony of Michael Menne on Behalf of Ameren Companies at 5-6, *In re Amendments to 35 Ill. Adm. Code 225: Control of Emissions from Large Combustion Sources*, R09-10 (Feb. 2, 2009); *see also* Post-Hearing Comments of Ameren Companies at 6, *In re Amendments to 35 Ill. Adm. Code 225: Control of Emissions from Large Combustion Sources,* R09-10 (March 6, 2009).

[8] *In re Amendments To 35 Ill. Adm. Code 225: Control Of Emissions From Large Combustion Sources (Mercury Monitoring)*, R09-10 (Apr. 16, 2009) at 29.

Meredosia.[9] The Board granted the variance based on the fact that Ameren's compliance plan would offer a "net benefit to the environment."[10] In 2013, the Board granted Dynegy's subsidiary, IPH, its own variance from the MPS SO_2 limit, again finding that the proposed compliance plan "would produce a net environmental benefit."[11]

Four years later, in a reversal of its position, IPH returned to the Board with a jointly-filed motion with Ameren to terminate the variance, stating that the company could comply with the MPS SO_2 limit "without the variance in calendar year 2017 and each calendar year thereafter."[12] When IPH and Ameren had petitioned for that very variance, the two companies claimed that if the variance were not granted, they would "need to mothball multiple units across [their] coal fleet, so as to comply with the MPS overall SO_2 annual emission rates . . . ."[13] The two companies also stated that, aside from the variance, shuttering units was the "only other viable compliance alternative."[14] Thus, IPH made a complete about-face in its motion to terminate the variance when it represented that it was in fact a "viable compliance alternative" for the MPS Group to comply with the SO_2 emission limit of 0.23 lbs/mmBtu going forward.[15] The Board granted the motion to terminate the variance.[16] This history of MPS amendments demonstrates that Dynegy, IPH, and the preceding owner of half of the Dynegy fleet have repeatedly sought relief before the Board from the MPS, and those cases set important precedents as to the legal standard by which the Board will determine whether to approve a rulemaking.

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[9] *See Ameren Energy Resources v. IEPA*, PCB 12-126 (Sept. 20, 2012) at 8.
[10] *See id.* at 54.
[11] *Illinois Power Holdings, LLC v. IEPA*, PCB 14-10 (Nov. 21, 2013) at 37.
[12] *Illinois Power Holdings, LLC v. IEPA*, PCB 14-10 (Sept. 2, 2016) at 4.
[13] *Ameren Energy Resources v. IEPA*, PCB 12-126 (Sept. 20, 2012) at 8 (citing Pet. at 7- 8).
[14] *Ameren Energy Resources v. IEPA*, PCB 12-126 (Sept. 20, 2012) at 8 (citing AER Post Br. at 2).
[15] *Illinois Power Holdings, LLC v. IEPA*, PCB 14-10 (Sept. 2, 2016) at 4 (emphasis added).
[16] *See Illinois Power Holdings, LLC v. IEPA*, PCB 14-10 (Oct. 27, 2016) at 7.

III. LEGAL STANDARD

A. The Illinois Environmental Protection Act

The Illinois Environmental Protection Act (the "Act") grants the Board its authority and governs the rulemakings before the Board. The purpose of the Act is "to establish a unified, state-wide program supplemented by private remedies, to restore, protect and enhance the quality of the environment, and to assure that adverse effects upon the environment are fully considered and borne by those who cause them." 415 ILCS 5/2(b).

Air pollution is covered by Title II of the Act. "It is the purpose of this Title to restore, maintain, and enhance the purity of the air of this State in order to protect health, welfare, property, and the quality of life and to assure that no air contaminants are discharged into the atmosphere without being given the degree of treatment or control necessary to prevent pollution." 415 ILCS 5/8 (emphasis added). The Act defines air pollution as "the presence in the atmosphere of one or more contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life, to health, or to property, or to unreasonably interfere with the enjoyment of life or property." 415 ILCS 5/3.115.

The Board's rulemaking authority is covered by Title VII of the Act. The Act authorizes the Board to adopt substantive regulations. 415 ILCS 5/27(a). "In promulgating regulations under [the] Act, the Board shall take into account . . . . the technical feasibility and economic reasonableness of measuring or reducing the particular type of pollution. . . . " *Id.* (emphasis added). The Board's authority to promulgate rules and regulations under the Act "is a general grant of very broad authority and encompasses that which is necessary to achieve the broad purposes of the Act."[17] While the Illinois Supreme Court has emphasized the breadth of the

[17] *Granite City Div. of Nat. Steel Co. v. IPCB*, 155 Ill. 2d 149, 182 (1993).

Board's rulemaking authority, it has also pointed out that the Board's authority is limited to only those rules necessary to achieve the purposes of the Act.[18] Thus, the Board does not have the authority to promulgate regulations that are at odds with the purposes of the Act, including rules that do not "restore, protect and enhance the quality of the environment." 415 ILCS 5/2(b).

B. Environmental Benefit

The Board must reject a proposed rule if it fails to provide an actual, net environmental benefit.[19] When the Board has previously adopted amendments to the MPS, it based the decision on the fact that the amendments would provide an environmental benefit.[20] "On the basis of its review of the record, particularly the projected environmental benefit and the absence of any objection on the part of the Agency, the Board finds that the proposal by Ameren is technically feasible and economically reasonable."[21] Accordingly, when Ameren—the predecessor owner of half of Dynegy/Vistra's Illinois fleet, advocated for an amendment to the MPS, it asserted that "the proposed amendment will result in a net environmental benefit because it requires earlier reductions of SO_2 and NO_X and, in 2017 and thereafter, an even more stringent emission rate requirement for SO_2 than currently provided in the MPS."[22] This environmental benefit standard is also imposed in order for a regulated entity to obtain a variance.[23] Arguably, the standard should be higher when a regulated entity is seeking relief in the form of a rulemaking, as Dynegy/Vistra is doing in this proceeding, which is a permanent change, as opposed to a

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[18] *See id.*

[19] *See In re Amendments to 35 Ill. Adm. Code 225, Control of Emissions from Large Combustion Sources (Mercury Monitoring*), R09-10 (Apr. 16, 2009) at 29 (adopting amendments to the MPS because they offered a "net environmental benefit").

[20] *See id.*

[21] *Id.* (emphasis added).

[22] Testimony of Michael L. Menne on Behalf of Ameren Companies at 3, *In re Amendments to 35 Ill. Adm. Code 225: Control of Emissions from Large Combustion Sources*, R09-10 (Feb. 2, 2009) (emphasis added).

[23] *See Ameren Energy Resources v. IEPA*, PCB 12-126 (Sept. 20, 2012) at 48, 54 (granting a variance based on Ameren's compliance plan offering a "net benefit to the environment.).

variance, which is only 5 years.

Further, when determining an environmental benefit, the environmental benefit cannot be measured "on paper" alone but must be an actual, real-world benefit. As the Attorney General's testimony noted "actual emissions" "reflect actual historical 'operating hours' and 'production rates,' as well as historical emission rates."[24] IEPA and electric generating utilities have typically calculated environmental benefit by looking at actual emissions. Ameren (the prior owner of half of Dynegy/Vistra's fleet of coal plants), IEPA, and the Board have all calculated environmental benefit based on actual emissions and projected actual emissions.

In the 2009 rulemaking to amend the MPS and in Ameren's variance proceedings in 2012, Ameren, IEPA, and the Board calculated the projected actual emissions based on actual heat input from 2006-2008. In the 2009 rulemaking, the Board, IEPA, and Ameren relied on projected actuals rather than allowables to determine whether there would be an environmental benefit.[25] In that case, Ameren witness Michael Menne explained how projected mass emission calculations, projected actuals, and baseline heat inputs are all directly connected.

> [T]he projected mass emission calculations required Ameren to make reasoned decisions regarding the appropriate heat input data and emission rate values used to develop a representative baseline upon which to evaluate a net environmental benefit. In the initial analysis, IEPA calculated an average heat input based upon the three highest years between 2000 and 2007. Accordingly, and in conjunction with this filing, Ameren repeated the analysis but used updated data to include calendar year 2008 which resulted in a constant projected heat input of 340,446,252 mmBtu.[26]

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[24] Ex. 37, Pre-filed Testimony of Andrew Armstrong on Behalf of the Illinois Attorney General's Office at 7, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018) (citing 35 Ill. Adm. Code 203.104).

[25] *See In re Amendments to 35 Ill. Adm. Code 225, Control of Emissions from Large Combustion Sources*, R09-10 (Apr. 16, 2009) at 16.

[26] Testimony of Michael Menne on Behalf of Ameren Companies at 15, *In re Amendments to 35 Ill. Adm. Code 225: Control of Emissions from Large Combustion Sources*, R09-10 (Feb. 2, 2009); *see also* Post-Hearing Comments of Ameren Companies at 14, *In re Amendments to 35 Ill. Adm. Code 225: Control of Emissions from Large Combustion Sources*, R09-10 (March 6, 2009).

In the 2012 variance proceeding, Ameren and the Board also relied on actual emissions.[27] "AER's Exhibit 4 shows that it will emit 192,196 tons of SO_2 under the variance compared to 282,571 tons of SO_2 under the MPS . . . ."[28]

The Board has consistently required the environmental benefit to be an actual emission reduction that occurs in the real world and not just on paper. Thus in this proceeding in order for the Board to approve the amendment: (1) there must be an environmental benefit from IEPA's rewrite of the MPS for Dynegy/Vistra; and (2) that environmental benefit must be calculated using actual emissions under the current MPS compared to projected actual emissions under the proposed MPS rewrite.

IV. ARGUMENT

A. The MPS Amendment Must Be Denied.

The evidence in the record shows that adoption of IEPA's proposed amendments would conflict with the purposes of the Illinois Environmental Protection Act and would be inconsistent with the Board's previous decisions. In order to adopt IEPA's proposed rewrite of the MPS, the Board must find that IEPA's proposal provides some actual environmental benefit and must conclude that the proposal is economically reasonable. However, the proposed changes do not offer any environmental benefit, and it has not been demonstrated that the proposal is necessary to replace the existing MPS. To demonstrate that the amendment is necessary, parties must demonstrate that the rule change is required because the current rule is not an economically reasonable way to reduce pollution. 415 ILCS 5/27(a). Dynegy/Vistra and IEPA, however, have failed to do this. Further, the proposed rule would fail to provide an environmental benefit, risks increasing air pollution, and poses a risk to human health. Put simply, IEPA's proposal is not in

[27] *See Ameren Energy Resources v. IEPA*, PCB 12-126 (Sept. 20, 2012) at 54.
[28] *Id.* (emphasis added).

keeping with what the Illinois Environmental Protection Act demands and the Board must deny IEPA's proposed rewrite.

1. The MPS amendment must be denied because it does not offer any environmental benefit.

The Board should reject the amendment requested by Dynegy/Vistra and proposed by IEPA because they do not offer any environmental benefit since no actual reductions of SO_2 and NO_X are required. In fact, the proposed changes may lead to increased emissions.

IEPA justifies its proposed rule in part by relying on allowable emissions as a baseline for assessing the environmental impact of new limits. As explained above, relying on maximum allowable emissions and 100% capacity rather than actual emissions is improper when determining environmental impacts.[29] The environmental benefit occurs only on paper, because the reduction in allowables fails to reflect the actual capacity levels at which the plants are operating, which are lower than the allowables. In reality, the shift from actual emissions to maximum allowables and from rate-based to mass-based will allow Dynegy/Vistra to operate its unscrubbed plants[30] more often, likely increasing overall actual emissions and causing local increases in pollution. There has been no evidence presented in this rulemaking that the proposed amendments will reduce actual pollution from the regulated plants; the evidence only indicates that there will be a

[29] *See In re Amendments to 35 Ill. Adm. Code 225, Control of Emissions from Large Combustion Sources (Mercury Monitoring*), R09-10 (Apr. 16, 2009) at 29; *Ameren Energy Resources v. IEPA*, PCB 12-126 (Sept. 20, 2012) at 54.

[30] Dynegy/Vistra's plants with flue gas desulfurization, also known as FGD or scrubbers, consist of Baldwin, Havana, Duck Creek and Coffeen. *See* Ex. 6, IEPA Responses to Pre-Filed Questions at 7, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Jan. 12, 2018). Hennepin, Joppa, Edwards and Newton do not have scrubbers. *Id.* A scrubber installation was partially completed at Newton and there is some question in the record as to whether dry sorbent injection (which is also known as a form of flue gas desulfurization) was installed at Newton. Ex. 37, Pre-Filed Testimony of Andrew Armstrong on Behalf of the Illinois Attorney General's Office at 3-4, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018).

reduction in allowables under the proposal.[31] The proposed MPS amendment, therefore, does not offer a net environmental benefit or any environmental benefit, and the Board cannot approve the amendment.

Switching to a mass-based cap and using maximum allowable emissions to measure environmental benefit as the IEPA proposed in the amended MPS limits, would allow emissions increases instead of requiring emissions reductions. As the Attorney General's office summarized in its testimony, "Illinois EPA's 'allowable emissions' analysis only identifies the absolute highest amount of emissions that could be allowed for the fleet, assuming that the maximum heat input for each unit remains the same, and does not consider the impact its proposed amendments would have on actual operations."[32] The proposed SO_2 cap is 60% higher than the MPS units' actual SO_2 emissions in 2017.[33] The proposed NO_X cap is 57% higher than the MPS units' actual NO_X emissions in 2017.[34] As a result, any claims of environmental benefit or emissions reductions bear little relation to the MPS fleet's real-world operations, and, instead, allow for increases in actual pollution levels.[35]

The proposed caps would not lead to any reduction compared to the current MPS limits. As the Attorney General's Office pointed out:

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[31] *See, e.g.,* IEPA Statement of Reasons at 9, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Oct. 2, 2017); Ex. 1, Prefiled Testimony of Rory Davis at 4, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Dec. 11, 2017); Ex. 14, Prefiled testimony of Rick Diericx at 11-14, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Dec. 11, 2017) ("The proposal will significantly reduce the amount of emissions Dynegy is allowed to emit.").

[32] Ex. 9, Pre- Filed Testimony of the Illinois Attorney General's Office (James P. Gignac) on the Pollution Control Board's First Notice Proposal at 14, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Dec. 11 2017).

[33] *See* Ex. 37, Pre-Filed Testimony of Andrew Armstrong on Behalf of the Illinois Attorney General's Office at 10, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018).

[34] *See id.*

[35] *See id.*

> [I]f the current MPS emission rate limits had been in place for the past ten years, then the current MPS units would at no point during the past ten years have been permitted to emit either 49,000 tons of SO_2 or 25,000 tons of NO_X annually, based on the actual overall heat inputs for the Dynegy and Old Ameren Groups for each year in that period.[36]

Even assuming peak heat input, which was in 2011 and reflects the peak capacity at which the plants operated in the last ten years, the current MPS limits would still lead to lower annual mass emissions than the caps proposed by the IEPA.[37] [38] Alternatively, using the 2002 heat input, which is comparable to actual heat inputs from 2008 to 2014 and more representative of the fleet's operations according to IEPA and Dynegy/Vistra, the current MPS limits would still lead to lower annual mass emissions than the caps proposed by the IEPA.[39] [40] The fact that Illinois EPA's proposed caps consistently exceed emissions based on real-world heat inputs calculated over many years indicates that there is no environmental benefit from the caps in the proposed MPS amendment, and those caps would, in fact, allow emissions increases.

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[36] Ex. 37, Pre-Filed Testimony of Andrew Armstrong on Behalf of the Illinois Attorney General's Office at 11, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018).

[37] *See id.* at 11-12.

[38] *See* The 2011 heat inputs were 445,904,570 mmBtu total, which is 194,717,709 mmBtu for the Dynegy/Vistra Group of plants and 251,186,861 for the Old Ameren Group of plants. Ex. 37, Pre-Filed Testimony of Andrew Armstrong on Behalf of the Illinois Attorney General's Office at 11-12, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018). At those levels, if they operated in compliance with MPS emission rate limits, "the MPS would still limit the units to no more than 47,385 tons of SO_2 emissions and 23,551 tons of NO_X emissions annually." *Id.* This analysis is confirmed by IEPA's calculations as reflected in Attachment 7 to its Responses to Pre-filed Questions from January 12, 2018. *Id.* at 12 (citing Att. 7, IEPA's Responses to Pre-filed Questions, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Jan 12, 2018)).

[39] *See* Ex. 37, Pre-Filed Testimony of Andrew Armstrong on Behalf of the Illinois Attorney General's Office at 12, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018).

[40] The 2002 heat input of 420,531,000 mmBtu is comparable to actual heat inputs from 2008 to 2014, years which IEPA and Dynegy/Vistra argue are more representative of the fleet's operations than 2015 through 2017. Ex. 37, Pre-Filed Testimony of Andrew Armstrong on Behalf of the Illinois Attorney General's Office at 17-18, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018). IEPA's tables in Attachment 7 "calculated projected actual emissions from the current MPS units using 2002 actual unit-level heat inputs and currently applicable MPS emission rate limits. The resulting projections were 44,920 tons of SO_2 and 22,469 tons of NO_X." *Id.* at 12.

Under the current MPS, Dynegy/Vistra cannot run exclusively uncontrolled units in the groups of plants previously owned by Ameren[41] and comply with the MPS SO_2 limits. Dynegy/Vistra must also run cleaner units in order to achieve the fleetwide average of SO_2 required by the MPS for that group.[42] The consequence of the MPS rewrite is that the operator of the MPS units would be able to run exclusively uncontrolled units in the groups of plants previously owned by Ameren, and any incentive to run cleaner units will have disappeared. IEPA's proposed caps would permit significantly more pollution than the current MPS. As such, this proposal clearly conflicts with the Board cases requiring an environmental benefit that is measured in actual emissions[43] and the stated purpose of Title II of the Illinois Environmental Protection Act, which is to "restore, maintain, and enhance the purity of the air of this State." 415 ILCS 5/8 (2016). Thus, the Board cannot approve the revision.

2. The MPS amendment must be denied because the existing rule is economically reasonable and the proposed rule is not necessary to ensure the Illinois fleet's economic stability.

i.

As demonstrated above, this rulemaking is not about environmental protection. In fact, IEPA's statement of reasons for the proposed rule explains that Dynegy approached the Agency seeking this MPS amendment in order to provide its Illinois fleet with "operational flexibility and economic stability."[44] While the Board must consider "economic reasonableness" of

[41] This group consists of the Coffeen, Duck Creek, E.D. Edwards, Joppa, and Newton plants. IEPA Statement of Reasons at 2-3, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Oct. 2, 2017). The same is not true of the Dynegy MPS compliance group of plants--Baldwin, Havana, and Hennepin--because, even without the MPS, their collective emissions rate is governed by a federal Consent Decree. Ex. 9, Pre- Filed Testimony of the Illinois Attorney General's Office (James P. Gignac) on the Pollution Control Board's First Notice Proposal at 4-5, 7, 9, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Dec. 11 2017).

[42] *See* Ex. 37, Pre-Filed Testimony of Andrew Armstrong on Behalf of the Illinois Attorney General's Office at 13, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018).

[43] *See In re Amendments to 35 Ill. Adm. Code 225, Control of Emissions from Large Combustion Sources (Mercury Monitoring*), R09-10 (Apr. 16, 2009) at 29; *Ameren Energy Resources v. IEPA*, PCB 12-126 (Sept. 20, 2012) at 54.

[44] IEPA Statement of Reasons at 3, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Oct. 2, 2017) at 3.

reducing pollution, that does not translate to the type of "operational flexibility and economic stability" that IEPA and Dynegy/Vistra argue this rule revision provides.

Economic stability is commonly defined as positive cash flow.[45] Dynegy/Vistra's Illinois fleet is free cash flow positive[46] and thus financially viable and economically stable. As Ms. Dzubay explained at the April 17, 2018 hearing, "The MISO segment's free cash flow position is the most important indicator of financial and operational health and therefore the best way to determine economic reasonableness. The company itself says this is how it determines the economic health of its operations."[47] Ms. Dzubay testified – and no party has disputed – that the Illinois fleet has a positive free cash flow of $123 million as of year-end 2017.[48]

Dynegy/Vistra's purpose for the proposed rule appears to be to maximize Dynegy/Vistra's profits by allowing them to decrease the use of, and possibly retire, scrubbed units in favor of increased operation of cheaper, unscrubbed units.[49] Dynegy/Vistra witness Dean Ellis responded to questioning that the proposed rule would give the company the flexibility to run its cheapest, dirtiest plants such as Joppa more:

> Q: . . . Mr. Diericx' original statement would be that the MPS, as it is currently written, requires some units that are losing money to be run more and some units that are

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[45] *See White House Green Lights Automaker Bailout*, CBS News (Dec. 19, 2008) https://www.cbsnews.com/news/white-house-green-lights-automaker-bailout/ (*last visited* May 31, 2018).

[46] Free cash flow takes into account additional expenses beyond those included in cash flow (defined as a stream of revenues and expenses that alters a cash account). A company that has a positive free cash flow will also meet the viability determination required by the Treasury Department. Therefore, use of free cash flow as a proxy for the cash flow required by Troubled Asset Relief Program and other standards of financial stability is appropriate. Ex. 42, Pre-Filed Testimony of Tamara Dzubay at 6, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018).

[47] Apr. 17, 2018 R18-20 Tr. 66:23-67:5.

[48] *See* Ex. 42, Pre-Filed Testimony of Tamara Dzubay at 16, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018).

[49] "Dynegy also requested that the NOx annual, NOx seasonal, and SO2 annual emission rates be replaced with mass emission limits to provide the company with additional operational flexibility and economic stability. In response, the Illinois EPA developed proposed rule revisions that address Dynegy's requests while safeguarding air quality." IEPA Statement of Reasons at 3, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Oct. 2, 2017).

> profitable to be run less. I'm just trying to understand what the profitable units are. What does that refer to?
>
> * * *
>
> A: I am aware of units at the Joppa Power Station which have run less because of the MPS rule and they are unscrubbed.[50]

This flexibility does not protect the environment, nor is it necessary to achieve economic stability. Rather, the Board is being asked to weaken a painstakingly-negotiated, longstanding rule to maximize profits for an already-profitable out-of-state company.

a) *The best way to determine if the Illinois fleet is economically stable is to look at whether it is cash flow positive.*

Because the rule change will weaken environmental protections and allow for increased SO_2 emissions, the Board should only adopt this change if the existing rule is economically unreasonable. As IEPA witness Mr. Bloomberg testified, "When we look at economic reasonableness, we are looking to make sure that . . . we don't suggest a rule, propose a rule, that will shut companies down because that is not the goal."[51] Mr. Bloomberg went on to provide an example of rejecting a rule-change that would have placed a heavy financial burden on a company by requiring it to install new, expensive controls that would provide minimal environmental benefit.[52] The Board should not adopt the proposed mass-based cap, which will worsen air quality, if the existing rate-based limit does not impose unreasonable economic hardship on the company by causing economic instability that will jeopardize the Dynegy/Vistra Illinois fleet's ability to remain functional and able to support its operations.

[50] Mar. 6, 2018 R18-20 Tr. 32:13-33:9.
[51] Apr. 17, 2018 R18-20 Tr. 210:17-22.
[52] *Id.* at 210-211.

The Board can determine whether Dynegy/Vistra's Illinois fleet can remain functional and able to support its operations under the existing rule by determining whether the Illinois fleet is free cash flow positive. As Ms. Dzubay testified:

> Free cash flow is important because for a company to remain functional, it must have sufficient cash to meet short-term obligations needed to continue operating the business. Short term obligations are often referred to as working capital requirements. Additionally, for a company to grow, it must invest in capital expenditures. Free cash flow takes into account the expenses that are necessary to meet short-term obligations as well as the expenses that are necessary to invest in capital expenditures.[53]

Dynegy/Vistra has also pointed to cash flow as an important metric in its testimony in this case.[54] In targeting cash flow as the best indicator of economic health, Dynegy/Vistra has correctly identified the metric by which the Board should decide if the existing rule is economically reasonable.

Beyond this case, the Troubled Asset Relief Program administered by the federal government during the 2008 US financial crisis, was meant to restore economic stability to industries on the verge of collapse. Economic stability was measured by whether the financial assistance the government provided could make the individual companies financially viable. The Treasury Department's viability determination was based on whether a company could become cash flow positive in a normalized business environment and thus able to support its operations and obligations without continued government support.[55]

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[53] Ex. 42, Pre-Filed Testimony of Tamara Dzubay at 5, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018).
[54] *See* Jan. 18, 2018 R18-20 Tr. 156:17-157:5.
[55] *See Obama Administration New Path to Viability for GM & Chrysler*, U.S. Dept. of the Treasury, https://www.treasury.gov/initiatives/financial-stability/TARP-Programs/automotive-programs/Documents/autoFactSheet.pdf (last visited May 31, 2018).

There is, therefore, broad agreement on the use of cash flow as the best metric to determine financial viability and whether a company can function, support its operations and not be forced to shut down.

b) *The Illinois fleet is economically stable as demonstrated by its positive free cash flow position, and merger synergies further improve the financial picture.*

The only cash flow analysis in this case indicates that the Illinois fleet has a positive free cash flow of $123 million.[56] This demonstrates that under the existing rate-based MPS limit, Dynegy/Vistra's Illinois fleet can function and support its operations and is therefore not in need of relief sought by the proposed rulemaking.

When Dynegy/Vistra has been asked to provide an "analysis or evidence or calculations"[57] to justify the need for this rulemaking, Dynegy/Vistra witness Dean Ellis stated, "I would fall back on the information we provide in our SEC filings that shows that the fleet as a whole is losing money on an income basis and that doesn't include capital expenditures, as I mentioned before."[58] Ms. Dzubay conducted an analysis based on the company's SEC filings. Her analysis reveals that Dynegy/Vistra's Illinois fleet as a whole is not losing money even when taking into account capital expenditures. Ms. Dzubay summarizes why free cash flow is so important by noting that it "takes into account the expenses that are necessary to meet short-term obligations as well as the expenses that are necessary to invest in capital expenditures."[59] The Illinois fleet is economically stable and financially viable with a positive free cash flow of $123

[56] *See* Ex. 42, Pre-Filed Testimony of Tamara Dzubay at 16, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018).
[57] Jan. 18, 2018 R18-20 Tr. 128:22-23.
[58] Jan. 18, 2018 R18-20 Tr. 129:23-130:3.
[59] Ex. 42, Pre-Filed Testimony of Tamara Dzubay at 5, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018).

million.[60] Free cash flow is a financial metric that determines the amount of cash that is available after accounting for necessary expenses needed to run and grow a business. This demonstrates that the segment that represents the plants at issue is functional and able to support its operations without additional support or flexibility.

Not only does the positive free cash flow demonstrate the economic stability of the segment that represents the plants at issue, but additionally, Dynegy's merger with Vistra improves the financial picture for the Illinois fleet. The merger with Vistra creates significant value for the combined company's shareholders of $4 billion.[61] Part of this value comes in the form of operational synergies that Dynegy/Vistra stated will possibly flow[62] to the plants at issue. Specifically, the merger is expected to result in $350 million in annual EBITDA enhancements and an additional $65 million in after-tax free cash flow benefits.[63] These enhancements come from(1) streamlining general and administrative costs, (2) implementing fleet-wide efficient operating practices, (3) driving procurement efficiencies, (4) eliminating other duplicative costs, and (5) capital expenditure efficiencies.[64] The financial benefits of the merger result in an improved financial picture for the company and the plants at issue. The economic stability and operational flexibility that IEPA's proposed rule seeks to provide is unnecessary, and thus the Board should deny the revision.

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[60] *See id.* at 16.
[61] *See* Environmental Groups Mot. for Stay at 3, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Feb. 2, 2018).
[62] *See* Mar. 6, 2018 R18-20 Tr. 115:6-14.
[63] *See* Ex. 25, Environmental Groups' Prefiled Questions for Dynegy's Witnesses, Attch. C at 105-106, 117, 125, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Mar. 2, 2018).
[64] *See Id.* at 78.

c) *The "Must-Run" situation is not indicative of a need for increased operational flexibility.*

When discussing Dynegy/Vistra's need for operational flexibility, IEPA has referenced that at times Dynegy/Vistra has operated units at a temporary financial loss to comply with the rate-based MPS emissions limits.[65] For example, at the April 17, 2018 hearing, Agency witness David Bloomberg stated that the operational flexibility the Agency is seeking to provide Dynegy/Vistra is the flexibility to never operate "units at a loss when they would otherwise not need to do so."[66] When asked to clarify what he meant by loss, Mr. Bloomberg explained that the Agency was concerned with Dynegy/Vistra being required to operate individual units at a loss of money at specific times.[67] Dynegy/Vistra has referred to this practice as "must-run".

There has been no evidence presented in this case as to the magnitude of losses that any given plant experiences due to the MPS rule or whether those losses are material and lead to economic instability. The only evidence put forth by Dynegy/Vistra has been a chart and table showing what percentage of annual hours Coffeen 1, Coffeen 2, and Duck Creek have been dispatched as must-run from 2014-2017 and a table showing the number of days per year those units were dispatched as "must-run" and operated at a loss from 2015-2017.[68] This table is lacking critical information to determine if these events cause economic instability. The table and chart do not provide any dollar amount to describe the magnitude of the losses incurred by the units. The evidence does not even show whether the plants operated at net losses on those days. Nor does it provide any information on how much money the units made on the days that they did not operate as "must-run." Nor is it clear from either page of Dynegy/Vistra's exhibit that the

[65] *See, e.g.,* Apr. 17, 2018 R18-20 Tr. 183:3-185:11.
[66] Apr. 17, 2018 R18-20 Tr. 184:8-9.
[67] *See id.*
[68] *See* Ex. 24, Dynegy's Responses to Questions at Ex. B, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Feb. 16, 2018).

plants operated at net losses for the years described. Dynegy/Vistra witness Dean Ellis even clarified this, "Just to clarify, when Mr. Diericx says units losing money, he is referring to offering units at or below production cost so he is referring to having to operate units at an operational loss, not necessarily losing money on an annual basis."[69] Dynegy/Vistra's own testimony states that it needs the flexibility of a mass-based cap to "improv[e] the viability of the entire Illinois fleet."[70] Dynegy/Vistra goes on to state that this means making the "entire fleet, including each individual plant, cash-flow positive."[71] Dynegy/Vistra has not provided any additional information beyond this, leaving the unanswered question of whether this unspecified loss affects the viability of the individual units or the Illinois fleet as a whole. Dynegy/Vistra has merely claimed, without supporting evidence, that "[t]he practice of operating certain units at a loss is detrimental to the overall viability of Dynegy's fleet."[72]

In her April 17, 2018 testimony, Ms. Dzubay stated that because Dynegy/Vistra has declined to provide more detailed information, "the only way to determine whether the loss is material in each of the years presented is to look at the [Illinois fleet] segments' gross margin."[73] Dynegy/Vistra's SEC filings define gross margin as operating revenues minus operating costs.[74] During the period in which must-runs at Duck Creek and Coffeen were increasing, the profitability metric of gross margin for the Illinois fleet rose from $201 million in 2014 (a year in

[69] Mar. 6, 2018 R18-20 Tr. 29:5-10.
[70] Ex. 24, Dynegy's Responses to Questions at 3, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Feb. 16, 2018).
[71] *Id.*
[72] *Id.* at 6.
[73] Apr. 17, 2018 R18-20 Tr. 61:7-9.
[74] *See* Ex. 42, Pre-Filed Testimony of Tamara Dzubay at 5 and Ex. A, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018).

which Dynegy indicated must-runs were a non-issue) to $429 million in 2017 when must-runs were at their peak.[75] Ms. Dzubay testified:

> What this means is that while the chart represents that the situation of must-run has exacerbated each year since 2014, the profitability metric of gross margin has actually increased. Therefore, I would conclude that the must-run situation presented in the chart and table is immaterial.[76]

Dynegy/Vistra's claim that the rule change is necessary to provide operational flexibility necessary for economic stability is unsupported by the evidence in this rulemaking.[77] The Illinois fleet is free cash flow positive and any losses incurred by must-runs brought on by the existing rate-based MPS limits are immaterial to the fleet's overall viability and economic stability.

d) *Plant retirements are a mechanism to increase shareholder value.*

According to Dynegy/Vistra, MPS plants are going to retire whether the Board adopts IEPA's proposal or maintains the MPS as written. Dynegy/Vistra has claimed that the proposed rule will prevent plant retirements,[78] but Curt Morgan, Chief Executive Officer ("CEO") of Vistra has made it clear that the change in the rule will allow the regulated entity to determine "what assets are in, what assets are out."[79] We've have heard twice from Mr. Morgan that the amended MPS actually helps them retire plants.

> [A]t some point, when you don't get the reform and you are successful at doing what you need to do around the multi-pollutant standard and freeing up the assets, we've got a portfolio optimization exercise to do no different than what we did in

[75] *See* Apr. 17, 2018 R18-20 Tr. 61:15-62:12.
[76] Apr. 17, 2018 R18-20 Tr. 62:6-12.
[77] IEPA did not conduct any analysis of its own to determine the magnitude of the losses or their effect on the Illinois fleet's economic stability. *See* Ex. 6, IEPA Responses to Pre-Filed Questions at 22, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Jan. 12, 2018); Jan. 17, 2018 Tr. 93:2-22.
[78] "If the proposal is not adopted, Dynegy anticipates having to retire additional plants in its Downstate fleet." Ex. 15, Prefiled Testimony of Dean Ellis at 12, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Dec. 11, 2017); *see also id.* at 13 ("Another 3,000 megawatts in MPS is at risk of shutdown for the economic reasons I have described. If the energy and capacity market conditions continue in their present states and the MPS remains an emissions rate-based program, Dynegy will likely have to retire more plants.").
[79] Ex. 25, Environmental Groups' Prefiled Questions for Dynegy's Witnesses at Attch. D, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Mar. 2, 2018).

> Texas. And I think that may result in maybe shrinking our size of our generation, whether that means we're trying to sell assets or what, I don't know yet.[80]

Mr. Morgan goes on to state exactly what they did in Texas: "[W]e shut down 4,200 megawatts in Texas of challenged assets."[81] Retirements are not necessary in order to make the fleet economically stable as evidenced above. Rather, it appears Dynegy/Vistra views retirements as another alternative to free up capital to enhance shareholder value.[82]

This rulemaking, which was originally presented as a means to prevent retirements, is actually now about which plants retire. The "operational flexibility" at issue in this case, therefore, is about Dynegy/Vistra's ability to optimize its Illinois fleet to maximize returns for its shareholders. While it is Dynegy/Vistra's prerogative to earn a rate of return for its shareholders, the Board and IEPA are not responsible for helping Dynegy/Vistra maximize these returns, especially when this proposed rule will weaken environmental protections.

3. The MPS amendment must be denied because the potential increase in air pollution would pose a risk to human health.

The increase in air pollution that the proposed rule would allow would pose a risk to human health. Air pollution is defined in the Act as "the presence in the atmosphere of one or more contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life, to health, or to property, or to unreasonably interfere with the enjoyment of life or property." 415 ILCS 5/3.115. The increased SO_2 pollution at individual plants that the amendments would allow would pose a risk to human health.

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[80] *Id.*
[81] *Id.*
[82] *See* Ex. 25, Environmental Groups' Prefiled Questions for Dynegy's Witnesses at Attch. D, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Mar. 2, 2018); *id.,* Attch. C at 64.

High concentrations of SO_2, even for short periods of time, can pose the threat of respiratory problems and harm.[83] On the other hand, even low concentrations of SO_2 still cause harm to the respiratory health of children, the elderly, and asthmatics.[84] "SO_2 reacts with other compounds in the atmosphere to form small particles . . . (PM) pollution. . . . Studies have found significant evidence of adverse effects of exposure to fine particle pollution at levels below current national standards—the National Ambient Air Quality Standards (NAAQS)."[85] It is the consensus of the scientific community, including the U.S. Environmental Protection Agency ("U.S. EPA"), that is that there is no safe threshold for fine particle pollution.[86] This means that there is no level below which there is no risk to human health from exposure.[87] Even though U.S. EPA set the one hour NAAQS for SO_2 at 75 ppb, there were "demonstrated health effects down to 50 ppb levels," that is, below the level of the NAAQS.[88] The U.S. EPA noted that there were two studies, if not more, that documented health effects at levels down to 50 ppb, again below the level at which the NAAQS was set.[89] U.S.EPA's findings that there are negative health impacts from SO_2 pollution below the level of the one hour NAAQS is also detailed in the Federal Register notice for that NAAQS.[90]

Even though the proposed rule may only allow SO_2 increases below the level of the NAAQS, those pollution increases can still cause health impacts. The proposed rule's annual cap that will allow SO_2 emissions to increase at individual plants if other plants shut down thereby

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[83] *See* Ex. 34, Pre-Filed Testimony of Brian P. Urbaszewski at 2, *In re Amendments to 35 Ill. Adm. Code 225.233 Multi-Pollution Standards* , R18-20 (Feb. 6, 2018).
[84] *See id.*
[85] *Id.*
[86] *See id.* at 3.
[87] *See id.*
[88] *Id.* at 4.
[89] *See id.*
[90] *See id.* (citing Primary National Ambient Air Quality Standards, 75 Fed. Reg. 35,542 (Jun. 22, 2010) (to be codified at 40 C.F.R. pt. 50, 53 and 58)).

poses a risk of higher localized SO_2 emissions. "Higher localized SO_2 emissions (especially if they occur in short term spikes) pose a health threat, especially to sensitive subgroups and even if they do not exceed the NAAQS."[91] Likewise, an increase in PM formed from SO_2 would also be expected to cause negative health impacts.

4. If the Board chooses to amend the MPS, the amendment should be more limited than proposed.

If the Board is compelled to modify the rule to provide some relief to Dynegy/Vistra, changes should be limited to allowing Dynegy/Vistra to combine its two Multi-Pollutant Standard ("MPS") groups[92] under one rate-based standard of 0.23 lbs/mmBtu for SO_2 and a second rate-based standard of 0.11 for NO_X, which are the current standards for half of Dynegy/Vistra's Illinois fleet.[93] These amendments would: (1) remedy Dynegy/Vistra's concern with the rule—that its fleet of plants was divided into two separate MPS groups that had become too small for meaningful averaging due to retirements; and (2) provide Dynegy/Vistra with relief by allowing it to use the more lenient of the MPS limits imposed on the two separate MPS groups. The Attorney General's office also advocated for "limiting the changes to combining the MPS groups while maintaining a rate-based [limit]. This is a more modest incremental change to the MPS that would provide additional options to Dynegy through larger pool of plants from which to choose its compliance approach."[94] The Board should, however, reject the conversion of the MPS limits to mass-based caps for the combined MPS groups for all the reasons stated above.

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[91] *Id.; see also* Ex. A, Public Comment of *B. Louise Giles MD FRCPC, In re Amendments to 35 Ill. Adm. Code 225.233 Multi-Pollution Standards* , R18-20 (May 24, 2018).

[92] One group consists of the plants that Dynegy/Vistra has always owned: Baldwin, Havana and Hennepin. The second group are the plants formerly owned by Ameren and now owned by Dynegy/Vistra's subsidiary, Illinois Power Holdings ("IPH"): Duck Creek, Coffeen, E.D. Edwards, Newton, and Joppa.

[93] *See* 35 Ill. Adm. Code 225.233(e)(3).

[94] Jan. 17, 2018 R18-20 Tr. 174:6-12.

If the Board concludes that mass-based caps are justified for a combined MPS group, the caps must be set lower than those currently proposed by the IEPA. Under those circumstances, the Environmental Groups would subscribe to the caps proposed by the Attorney General's Office of 34,094 tons for SO_2 and 18,920 tons for NO_X because these caps would provide the environmental benefit required of rulemakings by the Act. MPS caps at those levels would ensure that emissions from the Dynegy/Vistra Illinois fleet do not exceed levels currently allowed by the MPS. As a result, the environmental benefit of the amended MPS would be the same as the environmental benefit from the current MPS. In addition, the rule must also include a provision proportionally reducing the caps when a unit retires in order to ensure that plants continue to use existing SO_2 controls on a plant-by-plant basis, maintain good pollution control practices, and prevent significant increases in emissions on a pounds-per-million-Btu basis (rate basis).

IEPA is claiming that it cannot impose a cap that would constrain capacity but the MPS as currently written restricts capacity. "The old Ameren group cannot operate at full capacity, or even actual 2002 heat inputs, and comply with the current MPS SO_2 emission rate limit."[95] The current MPS restricts capacity because Ameren abandoned pollution control projects that would have allowed it to meet the current MPS without a constraint on capacity. "Specifically, Dynegy abandoned the Newton flue gas desulfurization project it committed to the Board it would complete in variance proceeding PCB 14-10."[96]

In addition, if the Board chooses to promulgate a mass-based cap on the entire Dynegy/Vistra fleet, the cap must be reduced when an MPS unit retires. IEPA proposes that the MPS caps on Dynegy/Vistra's fleet should decline when it sells a plant, but not when it

[95] Apr. 17, 2018 R18-20 Tr. 27:14-17.
[96] Apr. 17, 2018 R18-20 Tr. 27:22-28:2.

mothballs or closes a unit. Allowing Dynegy/Vistra to maintain caps at the same level even when a plant is mothballed or closed, but not when sold, encourages higher pollution rates; that is, fewer plants, even if operating at the same capacity, are permitted to emit the same pollution tonnage as the larger fleet before the retirement. This actually leads to incentives to retire plants instead of selling them.[97]

> Under the current MPS standards, if Dynegy reduces operation of one or more MPS units, the amount of pollution their MPS group, as a whole, can emit, in compliance with the MPS, is reduced. That is because the current MPS standards are emission rate limits that take into account group-wide heat input. If group-wide heat input is reduced, then so are the emissions permitted by the current MPS standards. By contrast, under Illinois EPA's proposed standards, Dynegy could drastically reduce heat input, but still would be allowed to emit the same amount of pollution. . . . [L]etting Dynegy keep caps upon retirement or mothballing of a plant also would encourage greater pollution than under a rule that did not.[98]

If the Board concludes that mass-based caps are justified for a combined MPS group, the caps should be set at of 34,094 tons for SO_2 and 18,920 tons for NO_X. In addition, in order to remove the incentive to allow plants to become more polluting, the rule must include a provision to reduce a fleetwide pollution cap proportionally when a unit retires or is mothballed.

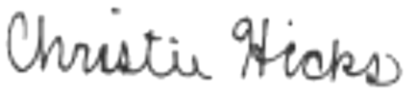
V. CONCLUSION

The facts are clear: IEPA's proposed rewrite of the MPS would not provide any environmental benefit to the residents of this state, and there has been no showing that the current MPS is economically unreasonable. Instead of furthering the stated purpose of the Illinois Environmental Protection Act "to restore, protect and enhance the quality of the environment," the proposed amendments would allow for emissions increases, as demonstrated by the fact that

[97] *See* Ex. 37, Pre-Filed Testimony of Andrew Armstrong on Behalf of the Illinois Attorney General's Office at 19, *In re Amendments to 35 Ill. Adm. Code 225.233, Multi-Pollutant Standards*, R18-20 (Apr. 3, 2018).
[98] Apr. 17, 2018 R18-20 Tr. 53:14-54:8.

IEPA's proposed caps consistently exceed emissions based on real-world inputs calculated over many years. 415 ILCS 5/2(b). The consequences here are real. Higher emissions would pose a serious health threat to residents of this state, particularly to members of sensitive subgroups. Rather than show that the current MPS is economically unreasonable, the record demonstrates that Dynegy/Vistra's fleet is economically stable. The Illinois fleet's economic stability is best evidenced by its positive free cash flow position, and its financial health has been bolstered by Dynegy's merger with Vistra. The merger created $4 billion in shareholder value and $350 million in additional annual operational enhancements that can flow to the plants at issue. The company's motivation for seeking the proposed rule change appears to be to maximize its profits by allowing for the decreased use of, or possible retirement of, scrubbed units in favor of the increased operation of cheaper, unscrubbed units. Adoption of IEPA's proposal would therefore directly contradict the purposes of the Environmental Protection Act and would be at odds with the Board's approach towards its previous decisions. As a result, the Board must decline to amend the MPS.

Respectfully Submitted,

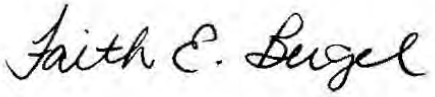


Christie Hicks
Manager, Clean Energy Regulatory Implementation
Environmental Defense Fund
18 S. Michigan Ave., 12th Fl.
Chicago, IL 60603
(314) 520-1035

Justin Vickers
Staff Attorney
Environmental Law & Policy Center
35 E. Wacker Drive, Suite 1600
Chicago, IL 60601
(312) 795-3736

Elizabeth Toba Pearlman
Staff Attorney/Clean Energy Advocate
Natural Resources Defense Council
20 North Wacker Drive, Suite 1600
Chicago, IL 60606
(312) 995-5907
tpearlman@nrdc.org

Brian P. Urbaszewski
Director, Environmental Health Programs
Respiratory Health Association
1440 W. Washington Blvd.
Chicago, IL 60607
(312) 628-0245



Faith Bugel
On Behalf of Sierra Club
Attorney at Law
1004 Mohawk
Wilmette, IL 60091
(312) 282-9119
fbugel@gmail.com

DATED: June 1, 2018

EXHIBIT A

THE UNIVERSITY OF CHICAGO MEDICINE
Comer Children's

DEPARTMENT OF PEDIATRICS
B. Louise Giles, MD FRCPC FAAP
Assistant Professor
Department of Pediatrics
Comer Children's Hospital

May 20, 2018

Mr. Don Brown
Clerk of the Board
Illinois Pollution Control Board
1021 North Grand Avenue East
P.O. Box 19274
Springfield, IL 62794-9274

Re: Case R2018-20

Dear Pollution Control Board Members,

I am a Pediatric Pulmonologist (Pediatrician specializing in children's lung health), practicing in this field for over 15 years. I am writing to strongly urge the Pollution Control Board to reject the proposed changes to Illinois' Multi-Pollutant Standard. This proposal would allow coal-fired power plants in Illinois to increase emissions and consequently increase the amount of particulate matter my patients are forced to breathe. Particulate matter ($PM_{2.5}$ & PM_{10}) is the deadliest form of air pollution, and there is no safe exposure level.

Air pollution is a major contributor to poor health & is responsible for ~7 million deaths worldwide. Research over the past two decades has found that the smaller the particle, the more dangerous it is. This critical finding led to the U.S. government requiring states to begin monitoring $PM_{2.5}$ levels in addition to PM_{10} levels back in 1997. The prime factor that makes $PM_{2.5}$ such a health concern is their size. While there is ongoing research being done to get a better understanding on the differing impacts of various materials that make up $PM_{2.5}$, the scientific record has conclusively found that the smaller particles cause the greatest health risk because they penetrate deeper into the lungs.

It is also worth noting that although the U.S. government sets standards for how much $PM_{2.5}$ is allowable before states must take action to reduce levels, peer-reviewed published research has found significant evidence of adverse effects of breathing $PM_{2.5}$ at levels significantly below the National Ambient Air Quality Standards (NAAQS) set by the U.S. EPA.

The smaller a fine particle is the further it can travel from its origin before being breathed in by a person. Gases emitted from large fossil fuel power plants, primarily nitrogen oxides (NOx) and sulfur dioxide (S02), are responsible for a large portion of the $PM_{2.5}$ measured as nitrate and sulfate fine particles. This is particularly true in the eastern half of the country where most coal power plants are located. These gases are emitted at high speeds from very tall chimneys and change into $PM_{2.5}$ as the wind blows. Thus especially vulnerable populations in Chicago neighborhoods – the people I treat daily - can suffer health effects from pollution emitted hundreds of miles away.

Asthma rates in Chicago exceed the national average (10%); in parts of Chicago (the South & West sides) rates (20%) far exceed even Chicago's average. Some Chicago communities report asthma symptoms in their children up to 45% (Puerto Rican children, some African-American schools on the South Side – Englewood for example). In some Chicago neighborhoods rates are as high as 1 in 2 or 1 in 3 children.

$PM_{2.5}$ causes inflammation & injury in the lungs. The normal cleansing mechanism in the lungs (mucociliary clearance) is impaired. $PM_{2.5}$ damages the cells responsible for protecting the lungs (alveolar macrophages).

Breathing $PM_{2.5}$ reduces lung function in children, and this persists into adult years. There is an association between $PM_{2.5}$ exposure and the development of asthma. Asthma is more prevalent in areas with high $PM_{2.5}$ (including in Chicago). Higher levels of $PM_{2.5}$ are associated with more asthma exacerbations (i.e. being sick with symptoms) and emergency room visits. This leads to lost days of school (children) and employment (for parent/caregivers). Asthma hospitalization rates in Chicago are nearly twice the national average.

Data suggests that the abnormal lung function in children who are exposed to high $PM_{2.5}$ may be reversed if the exposure is reduced/removed. Scientific research continues towards finding the exact biological mechanisms for these observed health effects, but pediatric pulmonologists (like myself) advocate for reducing exposure to $PM_{2.5}$ to protect our patients and minimize their symptoms.

Parents and caregivers can reduce triggers in the home that can lead to asthma exacerbations, but they can do nothing to prevent exposure to the air pollution from upwind power plants that blankets the Chicago area. Children and families with asthma are taught how to monitor air quality and reduce outdoor activity when air quality is poor, but this is a crisis protocol, not a solution to the ultimate problem which is air pollution.

In medicine, prevention is key. It reduces suffering. It reduces costs. It improves the quality of life and prolongs life itself. The Pollution Control Board should likewise focus on prevention as a means to improving health, particularly for already vulnerable populations including children with asthma. Reducing exposure to pollution can help children with asthma breathe easier.

The decision you are faced with is whether you will allow a change in the law that will allow these huge sources of air pollution to dramatically increase the amount of pollution above what they have been emitting for the last several years. This is not a theoretical exercise. Any action you take that will let those power plants increase air pollution will directly translate into children breathing more air pollution, and sadly, more medical care, lost time from school, harms to their families from parents losing time from work, and in some cases much more severe medical outcomes.

For the above reasons, I strongly urge the Pollution Control Board to reject the proposed changes to the Multi-Pollutant Standard. The proposed changes would allow NOx emissions to increase by nearly 80% and nearly double SO2 emissions. This would lead to Illinoisans breathing more $PM_{2.5}$ for which there is no safe level of exposure. The smarter course is to keep the current laws in place which help protect Illinois children.

B. Louise Giles MD FRCPC
Assistant Professor, Section of Pediatric Pulmonology
Director Pediatric Asthma Program, Comer Children's Hospital
Medical Director Respiratory Care Services, Comer Children's Hospital
Co-Director: South Side Pediatric Asthma Center
Core Faculty & Advisor, Pediatric Residency Program
Program Director, Pediatric Pulmonary Fellowship
The University of Chicago Medicine & Biological Sciences
Comer Children's Hospital
5841 S. Maryland Avenue |MC 4064 | Chicago, IL 60637
Office: 773.702.6178 Fax: 773.834.1444
AT THE FOREFRONT OF KIDS' MEDICINE. http://www.uchicagokidshospital.org

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:	)	
	)	R2018–20
AMENDMENTS TO	)	(Rulemaking – Air)
35 ILL. ADM. CODE 225.233,	)	
MULTI-POLLUTANT STANDARDS (MPS)	)	

CERTIFICATE OF SERVICE

The undersigned certifies that a true copy of the foregoing **NOTICE OF FILING** and **COMMENTS OF ENVIRONMENTAL GROUPS** in R2018-20 were served upon the attached service list by e-mail and by depositing said documents in the United States Mail, postage prepaid, in Chicago, Illinois on June 1, 2018.

Unimuke John Agada
Legal Assistant
Environmental Law & Policy Center
35 E. Wacker Dr., Suite 1600
Chicago, IL 60601
(312) 795-3719

SERVICE LIST:

Marie Tipsord, Hearing Officer
Mark Powell, Senior Attorney
Don Brown, Clerk of the Board
Illinois Pollution Control Board James R.
Thompson Center Suite 11-500
100 W. Randolph Street
312-814-3461
Chicago, Illinois 60601
don.brown@illinois.gov
mark.powell@illinois.Gov
marie.tipsord@illinois.Gov

Eric Lohrenz
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271
217-782-1809 (phone)
217-524-9640 (fax)
eric.lohrenz@illinois.gov

Gina Roccaforte
Dana Vetterhoffer
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276
217-782-5544 (phone)

Amy C. Antoniolli
Joshua R. More
Ryan Granholm
Schiff Hardin LLP
233 S. Wacker Drive
Suite 6600
Chicago, IL 60606

217-782-9807 (fax)
gina.roccaforte@illinois.gov
dana.vetterhoffer@illinois.gov

312-258-5769
aantoniolli@schiffhardin.com
jmore@schiffhardin.com
rgranholm@schiffhardin.com

Andrew Armstrong
Office of the Attorney General
500 South Second Street
Springfield, IL 62706
217-782-9031 (phone)
217-524-7740 (fax)
aarmstrong@atg.state.il.us

Greg Wannier
Staff Attorney
Sierra Club
2101 Webster St., Suite 1300
Oakland CA 94612
greg.wannier@sierraclub.org

James Gignac
Matthew J. Dunn
Stephen Sylvester
Office of the Attorney General
69 West Washington Street, Suite 1800
Chicago, IL 60602
312-814-2634 (phone)
312-814-2347 (fax)
jgignac@atg.state.il.us
mdunn@atg.state.il.us
ssylvester@atg.state.il.us

Faith Bugel
Attorney at Law
1004 Mohawk
Wilmette, IL 60091
fbugel@gmail.com

Katy Khayyat
Department of Commerce & Economic Opportunity
Small Business Office
500 East Monroe Street
217-785-6162 (phone)
Springfield, IL 62701
katy.khayyat@illinois.gov

Katherine D. Hodge
HelperBroom LLC
4340 Acer Grove Drive
500 East Monroe Street
Springfield, IL 62711
217-523-4900 (phone)
217-523-4948 (fax)
khodge@heplerbroom.com