

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:)
)
AMENDMENTS TO) **R18-20**
35 ILL. ADM. CODE 225.233,) **(Rulemaking – Air)**
MULTI-POLLUTANT STANDARDS (MPS))

NOTICE OF FILING

To: ALL PARTIES ON THE ATTACHED SERVICE LIST

PLEASE TAKE NOTICE that I have today electronically filed with the Office of the Clerk of the Illinois Pollution Control Board the attached **Response to Questions**, copies of which are herewith served upon you.

/s/ Ryan C. Granholm

Ryan C. Granholm

Dated: June 1, 2018

SCHIFF HARDIN LLP
Joshua R. More
Amy C. Antonioli
Ryan C. Granholm
Caitlin M. Ajax
233 South Wacker Drive, Suite 7100
Chicago, Illinois 60606
(312) 258-5500

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

| | | |
|--|---|---------------------------|
| In the Matter of: |) | |
| |) | |
| AMENDMENTS TO |) | R18-20 |
| 35 ILL. ADM. CODE 225.233, |) | (Rulemaking – Air) |
| MULTI-POLLUTANT STANDARDS (MPS) |) | |

RESPONSES TO QUESTIONS FILED FOR VISTRA ENERGY CORP.

NOW COME Dynegy Midwest Generation, LLC, Illinois Power Generating Company, Illinois Power Resources Generating, LLC and Electric Energy, Inc. (collectively, “Vistra” or the “Company”), by their attorneys, Schiff Hardin LLP, and hereby submit answers to questions filed by the Environmental Groups and the Illinois Attorney General on May 1, 2018.

Responses to Environmental Groups’ Questions:

- 1. Has Vistra conducted any analysis (financial or otherwise) of how the proposed MPS SO₂ cap of 49,000 tons per year will provide Vistra with operational flexibility and economic stability? If so, please provide that analysis.**

Vistra supports the Illinois Environmental Protection Agency’s (“IEPA”) original proposal to cap SO₂ emissions at 55,000 tons per year. Although a higher cap was originally proposed by Dynegy, the 55,000 ton cap was agreed to after negotiations with IEPA. For the reasons set forth in Mr. Diericx’s and Mr. Ellis’ written and oral testimony, a 55,000 ton SO₂ cap provides a sufficient level of operational flexibility to Vistra. IEPA’s original proposal was shown to substantially reduce allowable emissions, protect the NAAQS, be approvable by U.S. EPA as a revision to the Regional Haze SIP, and provide sufficient flexibility to the MPS fleet. *See, e.g.*, R18-20, Hearing 2 Transcript at 44:20-24, 146:1-5, 21:5-19 (Mar. 6, 2018).

A reduction in the original emissions cap proposed by IEPA could reduce the operational flexibility and constrain the capacity of the MPS fleet, potentially resulting in lost revenues. Using the methodology set forth on pages 15-16 of the Illinois Attorney General’s (“AGO”) December 11, 2017 testimony (Board Ex. 9) an SO₂ 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. R18-20, Hearing 3 Transcript at 18:20-19:1 (Apr. 17, 2018). That capacity factor is lower than the average annual capacity factor for the MPS fleet in three of the past ten years and, therefore, has the potential to constrain future operations below recent levels. R18-20, Pre-filed Testimony of Andrew Armstrong, at Attach. 1 (Apr. 3, 2018) (Board Ex. 37). However, given current market trends, Vistra agrees that a 49,000 ton SO₂ emissions cap would provide more operational flexibility than the current MPS.

- a. Has Vistra conducted any analysis (financial or otherwise) of how the Attorney General's Office's calculated MPS SO₂ cap of 34,094 tons per year will provide Vistra with operational flexibility and economic stability? If so, please provide that analysis.**

As the AGO testified during the third hearing, "An annual SO₂ cap of 34,094 tons corresponds to a hypothetical year in which both current MPS groups ran at a 51.4 percent capacity factor at exactly their MPS emission rate limits." R18-20, Third Hearing Trans at 19:21–20:1 (Apr. 17, 2018). Therefore, a cap of 34,094 tons has the potential to limit the MPS fleet's operations to only 51.4 percent of their potential capacity. That capacity factor is lower than *any* year in the past 10 years and could constrain operations of the MPS fleet. R18-20, Pre-filed Testimony of Andrew Armstrong, at Attach. 1 (Apr. 3, 2018) (Board Ex. 37). Furthermore, according to figures provided by the AGO, a 34,094 cap is lower than total annual SO₂ emissions from the MPS fleet in eight of the past ten years. *Id.* at Attach. 2. Thus, historical emissions data demonstrates that a cap of 34,094 tons would restrict operations to levels less than what the units have emitted in recent years. For these reasons, an SO₂ cap of 34,094 tons is inappropriate.

- b. Is it Vistra's position that an SO₂ cap of 49,000 tons per year will provide Vistra with operational flexibility and economic stability but an SO₂ cap of 34,094 tons per year will not provide it with sufficient operational flexibility and economic stability?**

- i. If so, what is the basis for that position?**

Although not ideal, justified or necessary, an SO₂ cap of 49,000 tons provides operational flexibility above the level that exists in the current MPS and is therefore preferable to no revision to the MPS at all. An SO₂ cap of 34,094 tons is unnecessary and inappropriate. See response to Question 1 & 1(a) above.

- 2. Is it Vistra's position that the multi-pollutant standard needs to change from a rate-based limit to a mass-based limit for the company's Illinois fleet to stay in business?**

Vistra only recently assumed control of the MPS fleet. It is reviewing each plant's performance and ways to make the plants more efficient and more cost effective. That review is ongoing and no conclusions have been reached yet. However, Vistra agrees with the arguments previously made by Dynegy that changing from a rate-based to a mass-based limit of either 55,000 tons or 49,000 tons will allow the MPS fleet to be dispatched better in response to economic factors, which is expected to improve profitability.

- a. Will Vistra be forced to shut down all operations in Illinois without the multipollutant standard changing from a rate-based limit to a mass-based limit?**

At this time Vistra does not know the answer to this question. If the MPS remains a rate-based limit then Vistra will evaluate the economic viability of the MPS fleet as a whole when it performs the performance analysis referenced in response to Question 2 above. However, Vistra

cannot predict the impacts of that study at this time. Additionally, Vistra operates other units in Illinois that are not part of the MPS fleet and the economics of those non-MPS units are not impacted by the proposed MPS changes.

b. Will Vistra be forced to shut down any operations in Illinois without the multipollutant standard changing from a rate-based limit to a mass-based limit?

Decisions about unit retirements depend on a number of factors. As Dean Ellis testified during the first hearing, relevant considerations include energy market pricing, capacity market design issues, and operating costs (including environmental compliance costs). R18-20, First Hearing Trans. at 166:8-17 (Jan. 17, 2018).

If current energy and capacity market conditions remain unchanged and the MPS is also unchanged, Vistra will likely have to retire some MPS units due to continued financial pressure of the MPS fleet. Vistra cannot say definitively at this time whether, or which, units will be retired. Moreover, as referenced in response to Question 2(a) above, continuation of a rate-based limit will require Vistra to evaluate the economics of the MPS fleet as a whole.

Currently, in order to comply with the SO₂ annual average emission rate, the Company is required to bid controlled units into MISO to offset the SO₂ emission rates of uncontrolled units. To maintain compliance with the existing rate-based MPS, any decision by Vistra to retire uneconomic, controlled units may force the Company to shut down uncontrolled, economic units as well. Therefore, changing the MPS to a mass-based limit would likely reduce the number of units at risk of shutdown.

3. In 2015, Dynegy placed a fair market value of zero on the Coffeen power plant.¹ Does this indicate that Coffeen has no current or future value to the company?

Vistra cannot comment on Illinois Power Generating Company's 2015 valuation of the Coffeen Power Station. That valuation occurred three years before Vistra acquired the plant. Furthermore, a 2015 valuation is not indicative of current or future valuations.

a. Does Vistra agree with this valuation?

See response to Question 3 above.

i. If so, assuming no regulation (including the rate-based caps of the current MPS), law, order, or must-run designation requires continuing to run the plant, would Vistra continue to run Coffeen if Vistra is valuing the plant as zero on its books?

See response to Question 3 above.

¹ See Illinois Power Generating Company (2015). Form 10-K 2015 at F-14. Attached as Attachment A.

ii. If so, under what circumstances would Vistra continue to run Coffeen?

See response to Question 3 above.

- 4. On a February 26, 2018 Vistra earnings call and in reference to the MISO segment, Curt Morgan said “And so at 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 Texas. And I think that may result in maybe a shrinking of the size of our generation.” In Texas, Vistra closed 4200 MW of coal-fired capacity, correct?**

Yes, faced with low natural gas prices, oversupplied generation, including subsidized renewables, and other factors, Vistra closed 4,167 MW of uneconomic coal-fired capacity in Texas following ERCOT's (the Texas ISO) review and approval of the closures. Vistra closed these units after a year-long, structured evaluation process that examined options to improve the plants' profitability through measures including cost savings, heat rate and operational improvements, and achieving lower minimum operating levels.

- 5. Vistra is reporting a new segment called the asset closure segment beginning with Q1 2018 financial results on May 4, 2018, correct?**

Yes.

- a. Will those results include more information on the asset closure segment?**

See Vistra's May 4, 2018 10Q, at Note 16.²

- b. What is the asset closure segment?**

The Asset Closure Segment was established effective January 1, 2018 to oversee decommissioning and reclamation of retired plants and mines in multiple states.

- c. What does the asset closure segment do?**

See Response to Question 5(b) above.

- d. Why was the asset closure segment created?**

See Response to Question 5(b) above. Reporting the segment separately on its financial disclosures will provide increased transparency into the costs associated with decommissioning and reclamation of retired plants and mines.

² <https://www.sec.gov/Archives/edgar/data/1692819/000169281918000022/vistra-2018331x10q.htm>

e. Will the asset closure segment operate in Illinois?

Yes.

i. If so, why?

Vistra owns several closed facilities in Illinois: Vermillion, Wood River, Stallings, and Oglesby.

ii. Also, if so, what will the asset closure segment do in Illinois?

See Response to Question 5(b) above.

6. In an interview with Jim Kramer of “Mad Money” on CNBC, Curt Morgan, Vistra’s CEO, stated “I don’t believe [coal] is going to have a renaissance. . . . I think it’s on its way out,” correct?

a. What did Mr. Morgan mean by this statement?

Mr. Kramer asked Mr. Morgan whether he expected coal to have a “renaissance.” While Mr. Morgan responded that he does not expect coal to have a renaissance, he further stated that coal-fueled generation remains an important part of Vistra’s diversified generating portfolio and that he expects coal-fueled generation to continue to be an important element of the U.S. energy sector for the foreseeable future.

Responses to Questions from the Illinois Attorney General

- 1. During the January 18, 2018 hearing in this proceeding, Rick Diericx, testifying for Dynegy, answered “no,” when asked whether Dynegy had “explored the installation of dry sorbent injection as an option to meet the current MPS in a more or less costly way than operating Duck Creek and Coffeen at a loss.” (Jan. 18, 2018 Trans. at 178, lines 8-12).**

Has any equipment of any kind been installed at Newton for the purpose of controlling SO₂ emissions?

No equipment has been permanently installed at Newton for the purpose of controlling SO₂ emissions. As IEPA testified during the April hearing, temporary, rented equipment is currently operating at Newton as part of a pilot evaluation regarding the effectiveness of dry sorbent injection (“DSI”) technology at that facility.

- 2. If the answer to Question No. 1 is yes, then:**

- a. What kind of equipment was installed?**

See answer to Question 1 above, as well as Attachments 1 & 2 to the Pre-filed Questions from the AGO. The leased equipment includes: mill and mill trailer, silo, blower trailer, lanceless injectors, cement pigs, air compressor and air dryer trailer.

- b. When was the equipment first installed, and for how long was it, or has it been, installed?**

Initial operations of the temporary, rented DSI equipment began in August 2016.

- c. Was the equipment installed to ease MPS compliance? If not, why was the equipment installed?**

As stated in the construction permits cited by the AGO, the equipment was installed for the purpose of evaluating the effectiveness of DSI technology at the Newton plant. The MPS does not require the installation of pollution controls.

- d. How much did the equipment cost to install? Please provide documentation of installation costs.**

Total costs for the temporary DSI equipment, including equipment leasing costs and operations and maintenance expenses, have exceeded \$10 million to date. Specific contract prices are confidential and are not reflective of actual construction or operations and maintenance costs associated with permanent DSI systems.

- e. Was the equipment operated during 2017? If yes, how many hours during 2017 was the equipment operated?**

The system operated for approximately 7,000 hours in 2017.

- f. What are the costs to operate and maintain the equipment on an annual basis? Please provide documentation of operation and maintenance costs.**

See response to Question 3(d) above.

- g. Has the equipment's removal efficiency for SO₂ been assessed? If yes, what were those findings?**

Assessments regarding the effectiveness of the DSI system are ongoing. To date, the temporary DSI system has achieved an average SO₂ removal efficiency of approximately 40%. The rate of sorbent injection and effectiveness of DSI technology are plant and fuel-specific, and any results of the Newton pilot evaluation will not necessarily indicate similar outcomes at other plants.

- h. Has the equipment been operated during 2018? If yes, then: (i) on what dates during 2018 has the equipment been operated?; (ii) how many hours during 2018 has the equipment been operated?; and (iii) what is the current running annual SO₂ emission rate for Newton Unit 1? If the equipment has not been operated during 2018, please explain why not.**

As of April 30, 2018 the system has operated for approximately 2,700 hours in 2018. As of that same date, the unit's average annual SO₂ emission rate is 0.294 lb/mmbtu.

- i. Has Dynegy performed any review or analysis concerning the installation and/or operation of the equipment? If so, please provide documentation.**

Reports have been prepared to evaluate the operation of the temporary DSI system, the results of which are confidential. Basic information regarding the temporary DSI system has been provided in response to the AGO's questions, including the system's approximate average removal efficiency for SO₂ at the Newton facility, provided in response to Question 3(g) above.

- 3. Please see the construction permits attached hereto as Attachments 1 and 2. Was the equipment described in these permits installed at Newton? If yes, then (i) please answer questions 2(b) – 2(i) for such equipment, and (ii) for any period during which such equipment was installed, is it accurate that Newton Unit 1 could be operated either with or without concurrent operation of the permitted equipment?**

Yes, please see Responses to Question 2 above. Yes, Newton Unit 1 can be operated either with or without operation of the temporary DSI equipment.

- 4. Has sorbent injection equipment been installed at any other MPS unit? If yes, then please answer questions 2(a) – 2(i) for any such equipment installed at any other MPS unit.**

DSI equipment has not been permanently installed at any MPS unit.

- 5. Has Dynegy performed any analysis of the potential installation of sorbent injection equipment on other MPS units? If so, please provide documentation.**

During the past five years, the only other unit at which a pilot evaluation of DSI equipment was conducted is Joppa Generating Station (“Joppa”). This one-week evaluation of DSI was conducted at Joppa in 2016 using limestone sorbent. That evaluation demonstrated that the amount of injected limestone required to achieve the test’s SO₂ removal goals might have resulted in undesirable levels of particulate matter emissions. This one-week test was conducted using rented equipment, with estimated total equipment, sorbet, and personnel costs of \$128,900.

- 6. During the March 6, 2018 hearing in this proceeding, Dean Ellis, testifying for Dynegy, stated: “Again, as we testified in the first proceeding, we generally don't generate plant-level financial statements and we definitely don't disclose those publicly for a number of reasons.” (Mar. 6, 2018 Trans. at 34, line 24 to 35, line 4).**

In the E&E News article admitted in this proceeding as Exhibit 41, Vistra’s CEO Curt Morgan is described as “noting that some of [Vistra’s Illinois] plants with advanced pollution controls ‘are hugely out of the money’ and are burning cash.” Specifically, which plants was Mr. Morgan referring to as being “hugely out of the money”? What was the basis for his statement? Are any MPS plants without SO₂ controls “out of the money”? If yes, which ones?

We refer the parties to the Company’s most recent final statements, which are available at <https://investor.vistraenergy.com/investor-relations/overview/default.aspx>. Plant level financial information is highly confidential, the disclosure of which could cause substantial harm to the competitive position of Vistra.

Responses to Questions from the Third Hearing:

- 1. Mr. Rao, the board's technical advisor, asked us to provide a list of all rate limits applicable to all MPS units.**

The chart attached as Attachment A to Dynegy's Prefiled Responses for the First Hearing (Jan. 12, 2018), contains all limits applicable to all MPS units, including the rate limits mentioned by Mr. Diericx during the Third Hearing.

- 2. IEPA was asked, and it was suggested that Vistra express its views, on appropriate amounts for transfer and retirement allocations at the various proposed cap levels. Board Member Zalewski, in particular, indicated that she would like all participants to weigh in.**

Vistra believes that adjustments to mass-based emissions caps in the event of retirements are inappropriate, for the reasons provided by both IEPA and Dean Ellis. R18-20, Hearing 2 Transcript at 185:13-22 (Mar. 6, 2018); R18-20, Prefiled Testimony of Dean Ellis at 14 (Dec. 11, 2017). IEPA has acknowledged that further reductions are not necessary to protect air quality in Illinois. R18-20, Hearing 2 Transcript at 188:22-189:4 (Mar. 6, 2018). Nevertheless, in an effort to directly respond to Board Member Zalewski's question, Vistra has conferred with IEPA regarding a methodology for calculating retirement allocations. Vistra believes the methodology IEPA will propose to the Board is acceptable because it provides an opportunity for the remaining units to operate more frequently to replace the lost generation from the retired units. However, to reiterate, Vistra believes that reductions in the emissions caps for unit retirements are unnecessary.

Respectfully submitted,

/s/ Joshua R. More

Attorney for Vistra

Dated: June 1, 2018

SCHIFF HARDIN LLP
Joshua R. More
Amy C. Antonioli
Ryan C. Granholm
Caitlin M. Ajax
233 South Wacker Drive, Suite 7100
Chicago, Illinois 60606
(312) 258-5500

CERTIFICATE OF SERVICE

I, the undersigned, certify that on this 1st day of June, 2018, I have electronically served the attached **Response to Questions**, upon all parties on the attached service list.

My e-mail address is rgranholm@schiffhardin.com;

The number of pages in the e-mail transmission is 12.

The e-mail transmission took place before 5:00 p.m.

/s/ Ryan C. Granholm

Ryan C. Granholm

SCHIFF HARDIN LLP

Joshua R. More

Amy C. Antonioli

Ryan C. Granholm

Caitlin M. Ajax

233 South Wacker Drive, Suite 7100

Chicago, Illinois 60606

(312) 258-5500

| <u>SERVICE LIST</u> | |
|---|--|
| <p>Don Brown, Assistant Clerk Don.brown@illinois.gov Mark Powell, Hearing Officer Mark.Powell@illinois.gov Marie Tipsord, Hearing Officer Marie.Tipsord@illinois.gov Illinois Pollution Control Board James R. Thompson Center Suite 11-500 100 West Randolph Chicago, Illinois 60601</p> | <p>Antonette Palumbo Antonette.palumbo@illinois.gov Dana Vetterhoffer Dana.vetterhoffer@illinois.gov Gina Roccaforte Gina.roccaforte@illinois.gov Division of Legal Counsel Illinois Environmental Protection Agency 1021 North Grand Avenue, East P.O. Box 19276 Springfield, Illinois 62794-9276</p> |
| <p>Eric Lohrenz Eric.lohrenz@illinois.gov Office of General Counsel Illinois Department of Natural Resources One Natural Resources Way Springfield IL 62702-1271</p> | <p>Katy Khayat Katy.Khayyat@illinois.gov Department of Commerce and Economic Opportunity Small Business Office 500 East Monroe Street Springfield, IL 62701</p> |
| <p>Stephen Sylvester ssylvester@atg.state.il.us 69 West Washington Street, Suite 1800 Chicago, IL 60602</p> <p>Andrew Armstrong aarmstrong@atg.state.il.us 500 South Second Street Springfield, IL 62706</p> | <p>Greg Wannier, Staff Attorney Greg.wannier@sierraclub.org Sierra Club Environmental Law Program 2101 Webster Street, Suite 3100 Oakland, CA 94612</p> |
| <p>Jean-Luc Kreitner jkreitner@elpc.org Justin Vickers jvickers@elpc.org 35 East Wacker Drive, Suite 1600 Chicago, IL 60601</p> | <p>Katherine D. Hodge HeplerBroom LLC khodge@heplerbroom.com 4340 Acer Grove Drive Springfield, IL 62711</p> |
| <p>Faith Bugel fbugel@gmail.com 1004 Mohawk Wilmette, IL 60091</p> | |