

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

PLEASE TAKE NOTICE that I have filed with the Illinois Pollution Control Board the Pre-Filed Questions of the Illinois Attorney General's Office for Dynegey's Witnesses, a copy of which is hereby served upon you.

Respectfully submitted,

PEOPLE OF THE STATE OF ILLINOIS,

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Attorney General of the State of Illinois

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CERTIFICATE OF SERVICE

I, STEPHEN J. SYLVESTER, an attorney, do certify that on January 2, 2018, I caused the Pre-Filed Questions of the Illinois Attorney General's Office for Dynegy's Witnesses, and the Notice of Filing to be served upon the persons listed in the attached Service List by email for those who have consented to email service and by U.S. Mail for all others.

/s/ Stephen J. Sylvester
STEPHEN J. SYLVESTER

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
AMENDMENTS TO 35 ILL. ADM.) R18-20
) (Rulemaking-Air)
CODE 225.233, MULTI-POLLUTANT)
STANDARDS)

**PRE-FILED QUESTIONS OF THE ILLINOIS ATTORNEY
GENERAL'S OFFICE FOR DYNEGY'S WITNESSES**

The Illinois Attorney General's Office, on behalf of the People of the State of Illinois ("People"), hereby files its pre-filed questions for Dynegy's witnesses in this matter, as provided by the Hearing Officer Order issued on November 8, 2017. The People submit the following questions:

I. Rick Diericx Testimony

1. Will the first notice proposal reduce actual emissions of air pollution? Please explain the rationale for your answer.
2. During development of the MPS in *In the Matter of Proposed New 35 Ill. Adm. Code 225, Control of Emissions from Large Combustion Sources (Mercury)*, R06-25, was Dynegy anticipating compliance with upcoming federal requirements to regulate mercury and other hazardous air pollutants from coal plants and SO₂ and NO_x emissions under the transport rule? If so, how did that anticipation inform the company's approach to negotiating the terms of the MPS?
3. With respect to your statement on page 3, which states have more stringent emission rate limits than Illinois?
4. If Dynegy operated pollution controls for SO₂ and NO_x at more of its units, would the structure of the MPS need to be changed? Please explain the rationale for your answer.
5. Did Dynegy assume that the Ameren plants would remain in their own MPS group when Dynegy decided to acquire the plants in 2013?
6. How much did Dynegy pay for the Ameren plants?
7. What is the status of Dynegy's compliance with the Mercury and Air Toxics Standards (MATS) at its Illinois plants? If MATS were to be vacated, would Dynegy reverse or turn off its compliance measures?

8. What portions of the Cross-State Air Pollution Rule (CSAPR) are in flux such that they “further complicate Dynegy’s compliance strategy?” (Dierix Testimony at 7-8.)

9. Does the phrase “operational flexibility” include the ability to operate less-controlled units more frequently and cleaner units less frequently? Please explain your answer.

10. Why did the MPS not include a mass-based cap? Did Dynegy and Ameren oppose a mass-based cap in R06-25?

11. Is Dynegy unable to calculate and report compliance under the current MPS?

12. Has IEPA ever expressed confusion or inability to comprehend Dynegy’s MPS compliance filings?

13. On pages 9-10 of your testimony, you discuss the sulfur content of coal:

a. Does the importance of the sulfur content of coal decrease if a unit has SO₂ pollution controls, such as flue gas desulfurization (FGD)?

b. How much does the sulfur content of coal delivered to Dynegy’s MPS units vary, and where does the coal come from?

c. Are Dynegy’s coal contracts for MPS units expiring soon?

d. Is Dynegy considering a switch to higher-sulfur coal providers for the MPS units?

14. On page 10 of your testimony, you describe a situation where an increase in coal sulfur content causes an increase in emission rates. Does Dynegy specify the maximum sulfur content of delivered coal in its coal procurement contracts?

15. Also on page 10 of your testimony, you describe a scenario in which a forced outage brings a scrubbed unit offline, which then requires Dynegy to reduce operations at an un-scrubbed unit to maintain compliance with emission rates. If Dynegy chose to invest in pollution controls at more units, wouldn’t this provide “operational flexibility” to run the units purely on an economic basis and maintain compliance with the MPS? Please explain the rationale for your answer.

16. Please elaborate and provide specific data on the extent to which units are operating “solely” to meet the current rate-based limits. Which units are these and how much are they operating for this reason?

17. Regarding the tonnage emissions on page 11 of your testimony, can the Dynegy MPS units actually emit that much today (*i.e.*, 66,354 tons of SO₂ per year and 32,841 tons of NO_x per year) without making physical or operational changes at the plants? If not, what *would* need to change to produce those results? Please explain the bases for your answer.

18. On page 12 of your testimony, you state: “And since the proposal also imposes new and additional requirements on the Dynegy fleet . . . it will achieve an even *greater* reduction in allowable emissions.” (Emphasis in original.) How much is “*greater*”? Please explain the bases for your answer.

19. You state that Dynegy could return to prior historic levels of emissions. What were those levels and what does Dynegy estimate as the likely percentage of that happening (*e.g.* 10% chance? 1% chance? Less than 1%)?

20. On page 15 of your testimony, where you reference 2014 tonnage numbers, does that include units that are now retired? If so, what would the tonnage numbers be with retired units removed? Assuming the ten year average SO₂ emissions number and the 2011 NO_x emissions number also includes units that are retired, please also update those similarly and provide a unit-by-unit table.

21. Why did Dynegy not address transfer of units in the original MPS rulemaking R06-25?

22. Where and when has USEPA agreed that there will be a reduction in “future allowable emissions” from the proposed rule? If you refer to any specific documents, the People request that you supplement the record with any such documents or communications.

II. Dean Ellis Testimony

1. Why did Dynegy switch to low-sulfur coal in the late 1990s/early 2000s?

2. How much of Dynegy’s emission reductions discussed on pages 2 and 3 of your testimony were due to: 1) items required by consent decree, and 2) plants Dynegy closed due to age or economic factors?

3. What pollution controls has Dynegy installed in the past 10 years? Please identify the type of controls, the pollutant controlled and the specific units where the pollution controls were installed.

4. Regarding the bullet points on page 5 of your testimony, how are potential regulatory determinations such as Best Available Retrofit Technology (BART) and 1-hour SO₂ NAAQS compliance relevant to the actions taken? Which of Dynegy’s actions, described as being taken “voluntarily,” were done in combination with the state’s need to comply with the Regional Haze Rule and to achieve attainment with the 1-hour SO₂ standard?

5. With respect to the expenditures on page 5 of your testimony, how much of this was required under the consent decree where Dynegy settled allegations of New Source Review (NSR) violations under the Clean Air Act?

6. What is your understanding of the Eastern Interconnection and how it functions?

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7. What is your understanding of the North American Electric Reliability Corporation (NERC) and what it does?
8. Please explain your understanding of why the Federal Energy Regulatory Commission (FERC) created regional transmission organizations (RTOs) and independent system operators (ISOs).
9. What is your understanding of the roles and obligations of the Mid-Continent Independent System Operator (MISO)?
10. Are you familiar with FERC Order 1000? If so, please explain your understanding of it.
11. What is your understanding of the trend for electricity demand in Downstate Illinois, the MISO region, and the United States generally?
12. What is your understanding of the results of the most recent MISO capacity auction in terms of total megawatts procured versus total megawatts available?
13. Does Dynegy believe that the Clinton nuclear plant is needed to address a capacity shortage in MISO Zone 4? Please explain the rationale for your answer.
14. Your statement on page 8 of your testimony regarding fuel costs driving the offer prices submitted by a generator applies only to fossil fuel-based generators, correct?
15. Do coal plants, generally, and the MPS plants in particular, sometimes suffer unexpected outages such as breakdowns, malfunctions, or fuel supply interruptions?
16. Could you please define what “marginal cost of generation” means?
17. Currently, which is a more economical fuel for generating power, coal or natural gas? Please explain the rationale for your answer.
18. Do nuclear plants emit greenhouse gases, SO₂, NO_x, or particulate matter (PM)?
19. Does Dynegy have any projections of how much the decline in energy prices over the last several years has saved Illinois consumers on their electricity bills? If not, would you agree that the decline in energy prices over the last several years has saved Illinois consumers money on their electric bills? Please explain the bases for your answer.
20. Regarding “selective bidding” described in the testimony: please elaborate on which units Dynegy has done this for and how many times.
21. If Dynegy chose to install pollution controls at other units, could “selective bidding” become unnecessary? Please explain the bases for your answer.

22. How do the average locational marginal prices for Coffeen and Duck Creek compare to E.D. Edwards, Joppa, and Newton?

23. How do the average locational marginal prices for Baldwin compare to Havana and Hennepin?

24. On page 11, you state that “Dynergy’s fleet operat[es] on a negative cash flow basis, that is, revenues received are less than the fuel and other operating costs incurred to operate the unit.”

- a. Is the entity that directly owns the Baldwin, Havana, and Hennepin plants profitable?
- b. Is the entity that directly owns the Coffeen, Duck Creek, E.D. Edwards, and Newton plants profitable?
- c. Is Electric Energy, Inc. profitable?
- c. Is the entity that directly owns the entities described in a., b., and c. above a profitable business unit?
- d. For the most recent fiscal year, how much in profits did each of the entities above produce?

25. Is it true that Dynergy may proceed to shut down additional units in the MPS group, even if the proposal is adopted (due to the fundamental market forces described in your testimony)? Please explain the bases for your answer.

26. Does Dynergy ever seek to reduce the amount of property taxes it pays to local communities in Illinois via negotiation or litigation?

27. How has coal plant automation generally reduced the number of employees per plant at Dynergy’s MPS facilities from when they were opened to today?

28. When Dynergy decides to retire or mothball a unit, please describe the process MISO goes through to review implications for electric grid reliability.

29. If Dynergy were to actually attempt to retire 3,000 MWs of coal-fired capacity, which you describe on page 13 as being “at risk of shutdown,” is it possible that MISO could designate a subset of such capacity as System Support Resources (SSR)? What is your understanding of what it means for a unit to be SSR?

30. What is Dynergy’s conception of “grid resiliency?” Are there any technical standards for what constitutes “grid resiliency?”

31. Is one of the primary purposes of spinning reserves to replace large centralized power stations, such as coal plants, when they suddenly drop off the grid? Please explain the bases for your answer.

32. You state that “[l]arge rotating mass units such as the Dynegy units provide voltage support (reactive power) and frequency response support to the bulk power system, and can provide spinning reserve, all of which are important attributes of grid resiliency and reliability.”

- a. What is your understanding of synchronous condensers and is Dynegy aware of any coal plants being repurposed into these?
- b. Can gas-fired power plants be equipped with clutches that decouple their turbines from their generators, allowing the generator to temporarily serve as a condenser? Please explain the bases for your answer.
- c. Can wind farms also supply reactive power? Please explain the bases for your answer.
- d. Please describe your understanding of the various processes underway at FERC, PJM, and MISO related to concerns expressed about coal plant retirements and electric grid reliability.

33. What are the average startup durations for Dynegy’s MPS units?

34. What is your understanding of the potential adverse consequences of human beings breathing SO₂ and smog?

35. Is it possible that Vistra Energy may have a different corporate outlook than Dynegy on the merits of owning coal-fired power plants in Illinois?

36. With respect to your testimony on page 14 that other Dynegy MPS units may be called upon when Dynegy retires a MPS unit, how does Dynegy know what type of generating resource will be dispatched to replace that unit? Is it possible the retired unit could be replaced by generating resources owned by entities other than Dynegy?

37. Could the first notice proposal result in Dynegy emitting more pollution than it did in 2016 and 2017? Please explain the bases for your answer.

38. Is part of the “operational flexibility” that Dynegy is seeking the ability to mothball or retire Baldwin Unit 2 once it would no longer be needed to support MPS compliance of the Hennepin and Havana facilities? Please explain the bases for your answer.

39. Would Dynegy obtain the “operational flexibility” it seeks if the two MPS groups were combined under one MPS group using a fleet-wide rate-based emission standard for SO₂ and NO_x? Please explain the bases for your answer.

40. Did Dynegy have plans in place to comply with the first notice proposal if it were approved as of January 1, 2018? At what point did Dynegy begin formulating its MPS compliance strategy for 2018?

Dated: January 2, 2018

Respectfully submitted,

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