BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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| | In | the | Matter | of: |
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AMENDMENTS TO 35 ILL. ADM. CODE PARTS 201, 202, AND 212

R2023-018 (Rulemaking – Air)

NOTICE OF FILING

To: Attached Service List

PLEASE TAKE NOTICE that today I have electronically filed with the Office of the Clerk

of the Illinois Pollution Control Board DYNEGY'S RESPONSES TO QUESTIONS

RECEIVED AT HEARING and a CERTIFICATE OF SERVICE, which are attached and

copies of which are herewith served upon you.

Dated: March 1, 2023

Respectfully submitted,

Dynegy Midwest Generation, LLC, Electric Energy, Inc., Illinois Power Generating Company, Illinois Power Resources Generating, LLC, Kincaid Generation, LLC

/s/ Sarah L. Lode One of its Attorneys

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

| In the Matter of: |)) | |
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| AMENDMENTS TO 35 ILL. ADM. |) | R2023-018 |
| CODE PARTS 201, 202, AND 212 |) | (Rulemaking – Air) |
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DYNEGY'S RESPONSES TO QUESTIONS RECEIVED AT HEARING

Dynegy Midwest Generation, LLC, Electric Energy Inc., Illinois Power Generating Company, Illinois Power Resources Generating, LLC; and Kincaid Generation, LLC (collectively, "Dynegy") by their attorneys, ArentFox Schiff LLP, hereby files these responses to certain questions asked of Dynegy at the public hearing held by the Illinois Pollution Control Board (the "Board") on February 16, 2023.

Question:

On page 13, you state that Dynegy's proposal provides an alternative averaging period for demonstrating compliance during SMB [startup, malfunction and breakdown] of the specific coal-fired boilers at Newton, Baldwin, and Kincaid generating stations.

26. If [Dynegy has opacity monitoring data from the affected units that illustrate the difference in opacity levels during normal operation and during SMB], please submit such illustrative opacity monitoring data for the affected boilers.

Response:

Average opacity data for calendar year 2022 is illustrative of each coal-fired boiler's opacity levels during normal operation. In 2022, average opacity for Baldwin boiler 1 was 3%, Baldwin boiler 2 was 3%, Kincaid boilers 1 and 2 (shared stack) was 2%, and Newton boiler 1 was 12%. These averages reflect *all* opacity data recorded from the Continuous Opacity Monitors for 2022—including any excess opacity resulting from startups, malfunctions and breakdowns.

Because excess opacity from SMB events occurs only a very small portion of the time, those events have a negligible impact on the overall annual averages.

Dynegy has enclosed illustrative opacity monitoring data for SMB events in Exhibit A. The first page of Exhibit A presents 6-minute block average opacity data for the Kincaid boilers, which exhaust through a common stack and are monitored by a single continuous opacity monitoring system ("COMS"). Those data begin at 4:00 PM on September 15, 2021, and continue for the following three hours. From 5:42 PM up to 6:48 PM, opacity exceeded 30% (the applicable standard pursuant to 35 Ill. Admin. Code § 212.123(a)) for eleven consecutive 6-minute periods as a result of SMB.

The second page of Exhibit A presents 6-minute block average opacity data from the Newton boiler. Those data begin at 4:00 AM on December 16, 2018, and continue for the following three hours. From 6:06 AM up to 6:42 AM, opacity exceeded 20% (the applicable standard pursuant to 35 III. Admin. Code § 212.122(a)) for six consecutive 6-minute periods as a result of SMB.

Notably, the SMB events at Newton and Kincaid resulting in the opacity exceedances in Exhibit A would result in opacity above 20% and 30%, respectively, when viewed on a 3-hour average basis, as described in response to Question 29, below.

While the Baldwin boilers have not exceeded the applicable opacity standard, they have come very close, even though their emissions are controlled by both electrostatic precipitators ("ESPs") and baghouses. The third page of Exhibit A presents 6-minute opacity data for Baldwin boiler 2 for the 3-hour period beginning at 9:00 AM on December 24, 2022. Four of those 6-minute periods (beginning at 10:06, 11:06, 11:24, and 11:48) recorded average opacity of 30%. While those periods are compliant with the 30% standard, they come very close to exceeding the

standard. None of the data from this three-hour period is flagged as SMB, given that opacity did not exceed the applicable standard. However, the cause of the higher-than-usual opacity may potentially have been a malfunction. These data demonstrate that even units equipped with both ESPs *and* baghouses have the potential to exceed 30% opacity.

Question:

On page 14 of your pre-filed testimony, you note that under Dynegy's proposal compliance "would be accomplished for a given six-minute block period when the Alternative Averaging Period is needed by taking the average opacity measurements from the COMS for those six minutes and the preceding 174 minutes of data."

29. Please provide examples using actual opacity monitoring data prior to startup, malfunction, or breakdown that supports MWG's contention that the proposed 3-hour averaging time would be necessary to meet the 30 percent opacity limitation during SMB.

Response:

Dynegy has enclosed actual opacity monitoring data to support its contention that the proposed 3-hour averaging period would be necessary. Exhibit B provides hourly average opacity data based on the six-minute average data contained in Exhibit A. Each 1-hour block average opacity value reflects the average opacity data for the identified hour. For example, on the first page of Exhibit B, the 1-hour data for "09/15/2021 18" is data for the 60-minute period beginning at 6:00 PM on September 15, 2021 (*i.e.*, 6:00 to 7:00 PM). The 2-hour value reflects the average opacity data for the identified hour, and the 3-hour value reflects the average opacity data for the identified hour.

The Kincaid and Newton 3-hour averages exceed 30% and 20%, respectively. While the Baldwin data does not exceed 30%, these averages come close. These examples show that not only is Dynegy's proposed 3-hour averaging period necessary, but also that it is not always

sufficient. Dynegy selected a 3-hour averaging period in order to align with its Compliance Assurance Monitoring ("CAM") Plans, even though this means that some events that currently constitute SMB and are authorized under Dynegy's Clean Air Act Permit Program ("CAAPP") permits would not qualify for relief under Dynegy's proposal. This further demonstrates that Dynegy's proposal is narrower than the current regulations and permit authorizations—both in principle and in practice. Consequently, Dynegy's proposal would not interfere with any applicable requirement concerning attainment and reasonable further progress.

Dated: March 1, 2023

Respectfully submitted,

Dynegy Midwest Generation, LLC, Electric Energy, Inc., Illinois Power Generating Company, Illinois Power Resources Generating, LLC, Kincaid Generation, LLC

/s/ Joshua R. More One of its Attorneys

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CERTIFICATE OF SERVICE

I, the undersigned, certify that on this 1st day of March, 2023:

I have electronically served true and correct copies of Dynegy's Responses to Questions Received at Hearing by electronically filing with the Clerk of the Illinois Pollution Control Board and by email upon each person listed in the attached service list.

My e-mail address is <u>Sarah.Lode@afslaw.com</u>.

The number of pages in the e-mail transmission is 15.

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

/s/ Sarah L. Lode Sarah L. Lode

Dated: March 1, 2023

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EXHIBIT A

| Date/Time | KINCAID Opacity % 6-min Block Average |
|-----------------|--|
| 9/15/2021 16:00 | 1 |
| 9/15/2021 16:06 | 1 |
| 9/15/2021 16:12 | 1 |
| 9/15/2021 16:18 | 1 |
| 9/15/2021 16:24 | 1 |
| 9/15/2021 16:30 | 1 |
| 9/15/2021 16:36 | 1 |
| 9/15/2021 16:42 | 1 |
| 9/15/2021 16:48 | 1 |
| 9/15/2021 16:54 | 1 |
| 9/15/2021 17:00 | 1 |
| 9/15/2021 17:06 | 1 |
| 9/15/2021 17:12 | 2 |
| 9/15/2021 17:18 | 1 |
| 9/15/2021 17:24 | 1 |
| 9/15/2021 17:30 | 1 |
| 9/15/2021 17:36 | 1 |
| 9/15/2021 17:42 | 43 |
| 9/15/2021 17:48 | 89 |
| 9/15/2021 17:54 | 91 |
| 9/15/2021 18:00 | 86 |
| 9/15/2021 18:06 | 86 |
| 9/15/2021 18:12 | 85 |
| 9/15/2021 18:18 | 83 |
| 9/15/2021 18:24 | 87 |
| 9/15/2021 18:30 | 85 |
| 9/15/2021 18:36 | 90 |
| 9/15/2021 18:42 | 78 |
| 9/15/2021 18:48 | 5 |
| 9/15/2021 18:54 | 4 |

| Date/Hour | NEWTON 1 Oacity % 6-min Block |
|-----------------|-------------------------------------|
| | Average |
| 12/16/2018 4:00 | 10 |
| 12/16/2018 4:06 | 9 |
| 12/16/2018 4:12 | 13 |
| 12/16/2018 4:18 | 12 |
| 12/16/2018 4:24 | 12 |
| 12/16/2018 4:30 | 14 |
| 12/16/2018 4:36 | 16 |
| 12/16/2018 4:42 | 15 |
| 12/16/2018 4:48 | 14 |
| 12/16/2018 4:54 | 12 |
| 12/16/2018 5:00 | 11 |
| 12/16/2018 5:06 | 14 |
| 12/16/2018 5:12 | 12 |
| 12/16/2018 5:18 | 12 |
| 12/16/2018 5:24 | 13 |
| 12/16/2018 5:30 | 12 |
| 12/16/2018 5:36 | 15 |
| 12/16/2018 5:42 | 13 |
| 12/16/2018 5:48 | 12 |
| 12/16/2018 5:54 | 13 |
| 12/16/2018 6:00 | 14 |
| 12/16/2018 6:06 | 30 |
| 12/16/2018 6:12 | 78 |
| 12/16/2018 6:18 | 100 |
| 12/16/2018 6:24 | 89 |
| 12/16/2018 6:30 | 43 |
| 12/16/2018 6:36 | 22 |
| 12/16/2018 6:42 | 18 |
| 12/16/2018 6:48 | 7 |
| 12/16/2018 6:54 | 7 |

| | Delduiz 0 |
|------------------|--|
| Date/Hour | Baldwin 2 Opacity % 6-min Block Average |
| 12/24/2022 9:00 | 18 |
| 12/24/2022 9:06 | 20 |
| 12/24/2022 9:12 | 21 |
| 12/24/2022 9:18 | 23 |
| 12/24/2022 9:24 | 24 |
| 12/24/2022 9:30 | 25 |
| 12/24/2022 9:36 | 27 |
| 12/24/2022 9:42 | 26 |
| 12/24/2022 9:48 | 27 |
| 12/24/2022 9:54 | 28 |
| 12/24/2022 10:00 | 27 |
| 12/24/2022 10:06 | 30 |
| 12/24/2022 10:12 | 27 |
| 12/24/2022 10:18 | 28 |
| 12/24/2022 10:24 | 29 |
| 12/24/2022 10:30 | 26 |
| 12/24/2022 10:36 | 23 |
| 12/24/2022 10:42 | 24 |
| 12/24/2022 10:48 | 24 |
| 12/24/2022 10:54 | 25 |
| 12/24/2022 11:00 | 26 |
| 12/24/2022 11:06 | 30 |
| 12/24/2022 11:12 | 29 |
| 12/24/2022 11:18 | 29 |
| 12/24/2022 11:24 | 30 |
| 12/24/2022 11:30 | 28 |
| 12/24/2022 11:36 | 28 |
| 12/24/2022 11:42 | 29 |
| 12/24/2022 11:48 | 30 |
| 12/24/2022 11:54 | 28 |

EXHIBIT B

| Date/Hour | KINCAID Opacity % 1-hr Average |
|---------------|---|
| 09/15/2021 18 | 69 |

| Date/Hour | KINCAID Opacity % 2-hr Average |
|---------------|---|
| 09/15/2021 18 | 46 |

| Date/Hour | KINCAID Opacity % 3-hr Average |
|---------------|---|
| 09/15/2021 18 | 31 |

| Date/Hour | NEWTON 1 Opacity % 1-hr Average |
|---------------|--|
| 12/16/2018 06 | 41 |

| Date/Hour | NEWTON 1 Opacity % 2-hr Average |
|---------------|--|
| 12/16/2018 06 | 27 |

| Date/Hour | NEWTON 1 Opacity % 3-hr Average |
|---------------|--|
| 12/16/2018 06 | 22 |

| Date/Time | BALDWIN 2 Opacity % 1-hr Average |
|---------------|---|
| 12/24/2022 11 | 29 |

| Date/Time | BALDWIN 2 Opacity % 2-hr Average |
|---------------|---|
| 12/24/2022 11 | 28 |

| Date/Time | BALDWIN 2 Opacity % 3-hr Average |
|---------------|---|
| 12/24/2022 11 | 26 |