# UNITED STATES COURT FOR THE SOUTHERN DISTRICT OF OHIO SOUTHERN DIVISION

Civ. No.

**CONSENT DECREE** 

## TABLE OF CONTENTS

I.	JURISDICTION AND VENUE	2
II.	APPLICABILITY	3
III.	DEFINITIONS	3
IV.	CIVIL PENALTY	13
V.	COMPLIANCE REQUIREMENTS	. 14
VI.	PROHIBITION ON NETTING CREDITS OR OFFSETS	38
VII.	SUPPLEMENTAL ENVIRONMENTAL PROJECT	39
VIII.	ENVIRONMENTAL MITIGATION PROJECT	43
IX.	SURVIVAL OF CONSENT DECREE REQUIREMENTS	45
<b>X.</b>	EPA REVIEW, COMMENT AND APPROVAL OF SUBMISSIONS	47
XI.	REPORTING REQUIREMENTS	49
XII.	STIPULATED PENALTIES	. 52
XIII.	FORCE MAJEURE	. 57
XIV.	DISPUTE RESOLUTION	60
XV.	INFORMATION COLLECTION AND RETENTION	62
XVI.	EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS	64
XVII.	COSTS	66
XVIII	NOTICES	66
XIX.	EFFECTIVE DATE	68
XX.	RETENTION OF JURISDICTION	68
XXI.	MODIFICATION	68
XXII.	SALES AND TRANSFERS OF THE ZIMMER STATION	69
XXIII	TERMINATION	70
XXIV.	PUBLIC PARTICIPATION	72
XXV.	SIGNATORIES/SERVICE	. 72
XXVI.	INTEGRATION	. 72
XXVI	I. APPENDICES	73
XXVI	II. 26 U.S.C. § 162(f)(2)(A)(ii) IDENTIFICATION	73
XXIX	FINAL HIDGMENT	73

WHEREAS, Plaintiff the United States of America (United States), by the authority of the Attorney General of the United States and through its undersigned counsel, acting at the request and on behalf of the United States Environmental Protection Agency (EPA), has simultaneously filed a complaint under the Clean Air Act (CAA), 42 U.S.C. § 7401 et seq. (the Complaint), and lodged this Consent Decree against Dynegy Zimmer, LLC (Dynegy Zimmer or Defendant) for alleged environmental violations at the William H. Zimmer Power Station (Zimmer Station) located in Moscow, Ohio.

WHEREAS the Complaint alleges that Defendant violated the following CAA requirements at the Zimmer Station:

- Certain opacity requirements set forth in the federally-enforceable state implementation plan of the State of Ohio (Ohio SIP) including OAC Chapter 3745-17-07(A)(1);
- Certain New Source Performance Standards promulgated at 40 C.F.R. Part 60, Subpart Da, 40 C.F.R. § 60.42Da(b);
- Certain SO<sub>2</sub> emission and opacity related provisions of the federally-enforceable Permit to Install (No. 14-1036) issued by the State of Ohio with respect to the Zimmer Station pursuant to the Ohio SIP; and
- Certain provisions of Title V of the CAA, 42 U.S.C. §§ 7661 et seq. and of the federally-enforceable Title V Permit (No. 14-13-09-0154) issued by the State of Ohio for the Zimmer Station incorporating the above-listed requirements.

WHEREAS Dynegy Zimmer and the former owners/operators of the Zimmer Station deny any violation or liability to the United States with respect to the allegations in the Complaint.

WHEREAS EPA has reviewed the root cause failure analysis (RCFA) Reports that Dynegy Zimmer submitted through the Date of Lodging pursuant to Paragraphs 45 and 47 of this Consent Decree and, based on the information in those reports, they satisfy the requirements for such reports set forth in Paragraphs 45 and 47.

WHEREAS the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation among the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I (Jurisdiction and Venue), and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

#### I. JURISDICTION AND VENUE

- 1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 113(b) of the CAA, 42 U.S.C. § 7413(b).
- Venue lies in this District pursuant to Section 113(b) of the CAA,
   U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b) and (c), and 1395(a). Defendant consents to the personal jurisdiction of this Court and waives any objections to venue in this District.
- 3. Solely for purposes of this Consent Decree, and without Defendant or the former owners/operators admitting any violation or liability, the Parties agree that the Complaint states a claim upon which relief may be granted for injunctive relief and civil penalties against Defendant under the CAA. Authority to bring this suit is vested in the United States Department of Justice by 28 U.S.C. §§ 516 and 519, and Section 305 of the CAA, 42 U.S.C. § 7605.
- 4. Notice of the alleged violations and notice of the commencement of this action has been given to the Defendant and State of Ohio in accordance with Section 113(a)(1) and (b) of the CAA, 42 U.S.C. § 7413(a)(1) and (b).

#### II. APPLICABILITY

- 5. The obligations of this Consent Decree apply to and are binding upon the United States and upon Defendant and any of their successors, assigns, or other entities or persons otherwise bound by law.
- 6. Dynegy Zimmer shall provide a copy of this Consent Decree (in hard copy or electronically) to all of its officers, managerial employees, and those employees and agents whose duties might reasonably include compliance with any provision of this Decree, as well as to any contractor retained by Dynegy Zimmer to perform work required under this Consent Decree. Dynegy Zimmer shall condition any such contract executed after the Effective Date upon performance of the work in conformity with the terms of this Consent Decree. The obligations of this Paragraph, however, shall not apply with respect to any person or firm retained solely to supply material or equipment to satisfy obligations of this Consent Decree.
- 7. In any action to enforce this Consent Decree, Defendant shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree unless such failure constitutes a Force Majeure Event as defined in Paragraph 109 below, and Defendant has complied with the procedures set forth in Paragraph 110 below.

#### III. <u>DEFINITIONS</u>

- 8. Terms used in this Consent Decree that are defined in the CAA or in regulations promulgated pursuant to the CAA shall have the meanings assigned to them in the CAA or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Decree, the following definitions shall apply:
- a. "3-Hour Rolling Average" for both of the SO<sub>2</sub> Emissions Rate Triggers as defined by this Consent Decree shall be expressed in lbs/mmBTU and calculated in accordance

with the following procedure: (1) first, sum the total pounds of pollutant emitted from the Unit during the current Operating Hour and the previous two Operating Hours; (2) second, sum the total heat input to the Unit in mmBTU during the current Operating Hour and the previous two Operating Hours; and (3) third, divide the total number of pounds of pollutant emitted during the three Operating Hours by the total heat input during those three Operating Hours. Calculation of each 3-Hour Rolling Average for the SO<sub>2</sub> Initiation Period Emissions Rate Trigger and the SO<sub>2</sub> Normal Operation Emissions Rate Trigger shall include all SO<sub>2</sub> emissions that occur during the respective periods covered by such triggers per their definitions including any emissions from startup, shutdown, and malfunction that occur during the respective trigger coverage periods.

- b. "12-Hour Rolling Average" with respect to determining the sulfuric acid emissions rate for MSFD Operating Hours under Paragraph 16.a of this Decree shall be calculated as the arithmetic average of all hourly rates of sulfuric acid emissions in lbs/mmBTU for the current MSFD Operating Hour and the previous eleven (11) Operating Hours (including both non-MSFD Operating Hours and MSFD Operating Hours). A new 12-Hour Rolling Average shall be calculated for each new MSFD Operating Hour. Each such 12-Hour Rolling Average shall include emissions that occurred during any included Operating Hours, including any emissions from startup, shutdown, malfunction, and MSFD Operating Hours during the MSFD Event at issue.
- c. "12-Hour Rolling Average" with respect to determining the average acid dew point temperature for MSFD Operating Hours pursuant to Paragraph 27.b below shall be expressed in degrees Fahrenheit and calculated as the arithmetic average of all hourly acid dew point temperature averages from the Dew Point Monitor at Unit 1 for the current MSFD

Operating Hour and the previous eleven (11) Operating Hours. A new 12-Hour Rolling Average shall be calculated for each new MSFD Operating Hour.

- d. "24-Hour Rolling Average" for determining compliance with the 24-Hour Rolling Average PM Emissions Rate pursuant to Paragraphs 52-55 below shall be calculated as the arithmetic average of all hourly PM emission rates expressed as lbs/mmBTU for the current Operating Hour and the previous twenty-three (23) Operating Hours. A new 24-Hour Rolling Average shall be calculated for each new Operating Hour. Each 24-Hour Rolling Average for a PM Emissions Rate shall include all PM emissions that occur during any included Operating Hour, including emissions from startup, shutdown, and malfunction.
- e. "24-Hour Rolling Average" with respect to determining the average acid dew point temperature pursuant to Paragraph 27.a below shall be expressed in degrees Fahrenheit and calculated as the arithmetic average of all hourly acid dew point temperature averages from the Dew Point Monitor at Unit 1 for the current Operating Hour and the previous twenty-three (23) Operating Hours, excluding any MSFD Operating Hours. A new 24-Hour Rolling Average shall be calculated for each Operating Hour that is not a MSFD Operating Hour. When MSFD Operating Hours are excluded, the averaging period shall remain twenty-four (24) Operating Hours, and the 24-Hour Rolling Average calculation shall be made for any Operating Hour that is not a MSFD Operating Hour by including in the twenty-four (24) Operating Hour average the current Operating Hour and the prior twenty-three (23) Operating Hours that are not MSFD Operating Hours.
- f. "24-Hour Rolling Average" for determining compliance with the Interim and Final Sulfuric Acid Emissions Rates set forth in Paragraphs 13 and 14 below shall be calculated as the arithmetic average of all hourly rates of sulfuric acid emissions in lbs/mmBTU

for the current Operating Hour and the previous twenty three (23) Operating Hours, excluding any MSFD Operating Hours. A new 24-Hour Rolling Average shall be calculated for each new Operating Hour that is not an MSFD Operating Hour. When MSFD Operating Hours are excluded, the averaging period shall remain twenty-four (24) Operating Hours, and the 24-Hour Rolling Average calculation shall be made for any Operating Hour that is not a MSFD Operating Hour by including in the twenty-four (24) Operating Hour average the current Operating Hour and the prior twenty-three (23) Operating Hours that are not MSFD Operating Hours. Except for exempting MSFD Operating Hours in calculating the Interim or Final Sulfuric Acid Emission Rate, calculation of each 24-Hour Rolling Average to determine compliance with the Interim or Final Sulfuric Acid Emissions Rate shall include all emissions that occur during any included Operating Hour, including emissions from startup, shutdown, and malfunction.

- g. "Available FGD ARP" means a Flue Gas Desulfurization System

  Absorber Recirculation Pump that is able to operate as designed and in a manner that is

  consistent with technological limitations and manufacturer specifications and that does not:

  (1) create an unsafe working condition, or (2) adversely impact SO<sub>2</sub> emissions. An FGD ARP

  shall not be considered "available" if the pump and/or associated equipment (e.g., piping/valves)

  are undergoing maintenance or are inoperable due to mechanical or electrical issues. An FGD

  ARP shall not be considered unavailable due to: (1) the facility's failure to perform any

  necessary maintenance and electrical repairs on a pump and/or associated equipment, or

  (2) increased cost of operation.
- h. "CEMS" or "Continuous Emission Monitoring System" means all equipment (including, but not limited to, a pollutant concentration monitor, flow monitoring system, and automated data acquisition and handling system) necessary to sample, analyze,

measure, record, and retain emission data and stack gas volumetric flow rates. The Dew Point Monitor is not a CEMS.

- i. "Clean Air Act" or "CAA" means the federal Clean Air Act,42 U.S.C. §§ 7401-7671q.
- j. "Complaint" means the complaint filed contemporaneously herewith by the United States in this action.
- k. "Consent Decree" or "Decree" means this Decree and all appendices attached hereto as listed in Section XXVII (Appendices).
- "Date of Lodging" means the date this Consent Decree is lodged with the
   United States District Court for the Southern District of Ohio for public comment pursuant to
   Paragraph 154.
- m. "Day" means a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day.
  - n. "Defendant" means Dynegy Zimmer, LLC (Dynegy Zimmer).
- o. "Dew Point Monitor" means equipment used to measure the acid dew point temperature of the flue gas stream at Unit 1.
- p. "Effective Date" shall have the definition provided in Section XIX (Effective Date).
- q. "Energize" when used in Paragraph 51 of this Consent Decree, means to supply electrical power at some level.

- r. "EPA" means the United States Environmental Protection Agency and any of its successor departments or agencies.
- s. "ESP" or "Electrostatic Precipitator" means a device at Unit 1 for removing PM from combustion gases by imparting an electric charge to the particles and then attracting them to a metal plate or screen of opposite charge before the combustion gases are exhausted to the atmosphere.
- t. "FGD" or "Flue Gas Desulfurization System" means a pollution control device that removes sulfur compounds from the Unit 1 flue gas stream, including such devices using a series of FGD Absorber Modules with FGD ARPs.
- u. "FGD Absorber Module" means one of the six vessels (including associated FGD ARP and other components) located at the Zimmer Station that removes sulfur compounds from the flue gas stream at Unit 1, utilizing lime or limestone based slurry, for the reduction of SO<sub>2</sub> emissions.
- v. "FGD ARP" or "FGD System Absorber Recirculation Pumps" means the mechanical device utilized at each of the FGD Absorber Modules to circulate the slurry material.
- w. "Final Sulfuric Acid Emissions Rate" means the rate of sulfuric acid emissions in lbs/mmBTU applicable pursuant to Paragraph 14 below.
- x. "Interim Sulfuric Acid Emissions Rate" means the rate of sulfuric acid emissions in lbs/mmBTU applicable pursuant to Paragraph 13 below.
- y. "Initiation Period" means the thirty-six (36) consecutive hours of coal firing, or lesser number of consecutive hours if coal combustion ceases before thirty-six consecutive hours of coal firing, following the initial firing of coal in Unit 1 after each cessation of coal firing.

- z. "Interest" means interest calculated at the rate set forth at 28 U.S.C. § 1961 as of the Date of Lodging.
- aa. "lbs/mmBTU" means pounds per million British Thermal Units (BTUs) of heat input.
- bb. "MSFD" or "Mitigation System Failure or Degradation" means a failure or degradation of the Sulfuric Acid Mitigation System at Unit 1.
- cc. "MSFD Operating Hour" and "MSFD Operating Hours" means those

  Operating Hours that are excluded in accordance with Paragraph 16.a of this Consent Decree

  from the Interim and Final Sulfuric Acid Emissions Rates and related 24-Hour Rolling Average
  dew point temperatures under this Consent Decree.
- dd. "MSFD Event" shall mean any sudden, infrequent, and not reasonably preventable failure or degradation of the Sulfuric Acid Mitigation System, in whole or in part, despite following good engineering, operation, and maintenance practices. Failures or degradation that are caused in part by poor maintenance or careless operation are not MSFD Events. Multiple MSFD Events occurring during a 12-month period does not necessarily make such events "reasonably preventable" or "frequent." However, multiple MSFD Events that have the same root failure or degradation cause may result in such MSFD Events being considered "frequent" or "reasonably preventable".
- ee. "MSFD Sulfuric Acid Emissions Rate" means the rate of sulfuric acid emissions applicable to MSFD Operating Hours under Paragraph 16.a of this Consent Decree.
- ff. "Netting" means the process of determining whether a particular physical change or change in the method of operation of a major stationary source results in a net

emissions increase, as that term is defined at 40 C.F.R. § 52.21(b)(3)(i) and at OAC 3745-31-01 of the Ohio SIP.

- gg. "Ohio EPA" shall mean the Ohio Environmental Protection Agency, or such other local agency within the State of Ohio to whom permitting authority under the CAA is delegated.
- hh. "Operational or Ownership Interest" means part or all of Dynegy

  Zimmer's legal or equitable operational or ownership interest in Unit 1 at the Zimmer Station.
- ii. "Operating Day" means any Day during which fuel is combusted inUnit 1.
- jj. "Operating Hour" means any hour or hours (or fraction thereof) during which fuel is combusted in Unit 1.
- kk. "Paragraph" means a portion of this Consent Decree identified by an Arabic numeral, including subparagraphs thereof (Subparagraph) identified by lower case English letters, small Roman numerals, and all of the above listed indicators in parentheses.
  - ll. "Parties" means the United States and Defendant.
- mm. "PM Emissions Rate" means the number of pounds of filterable particulate matter (PM) emitted per million British Thermal Units (BTUs) of heat input (lbs/mmBTU).
- nn. "RCFA Report" means a root cause failure analysis report required to be submitted to EPA pursuant to Paragraph 47.
- oo. "Reagent Injection Compliance Curve" means Table 1 set forth in Appendix B to this Decree, as it may be modified pursuant to Paragraph 30 of this Decree.
  - pp. "Section" means a portion of this Decree identified by a roman numeral.

- qq. "Significant Change to the Unit 1 Sulfuric Acid Mitigation System," for purposes of Paragraph 28.b of this Decree, means a change (1) in the chemical composition of the reagent used in the Sulfuric Acid Mitigation System, or (2) to a reagent injection location at that system from pre air heater to post ESP, or from post ESP to pre air heater.
- rr. "SIP" or "Ohio SIP" means the State Implementation Plan for Ohio, approved by EPA and codified at Chapter 3745 of the Ohio Administrative Code (OAC).
- ss. "SO<sub>2</sub> Emissions Rate" means the rate of sulfur dioxide emissions in lbs/mmBTU.
- tt. "SO<sub>2</sub> Emissions Rate Trigger" or "SO<sub>2</sub> Emissions Rate Triggers" means the SO<sub>2</sub> Initiation Period Emissions Rate Trigger and/or the SO<sub>2</sub> Normal Operation Emissions Rate Trigger as applicable.
- uu. "SO<sub>2</sub> Normal Operation Emissions Rate Trigger" means an SO<sub>2</sub> Emissions Rate of 0.70 lbs/mmBTU on a 3-Hour Rolling Average basis applicable during all Unit 1 Operating Hours except for any Operating Hour included in an Initiation Period.
- vv. "SO<sub>2</sub> Initiation Period Emissions Rate Trigger" means an SO<sub>2</sub> Emissions Rate of 0.85 lbs/mmBTU on a 3-Hour Rolling Average basis applicable during all Unit 1 Operating Hours included in an Initiation Period.
  - ww. "State" means the State of Ohio.
- xx. "Sulfuric Acid CEMS" shall mean a CEMS that measures sulfuric acid emissions in lbs/mmBTU from Unit 1.
- yy. "Sulfuric Acid Stack Test" or "Sulfuric Acid Stack Testing" means a stack test or test(s) performed on Unit 1 in accordance with Paragraphs 20-24 below that measures the rate of sulfuric acid emissions in lbs/mmBTU.

- zz. "Sulfuric Acid Mitigation System" means a control system consisting of the injection of a reagent into the flue gas stream to react with the acid gases and reduce the outlet rate of sulfuric acid emissions, such as the control system in place at Unit 1 as of the Date of Lodging. The term may also include another type of control system proposed by Defendant and approved by EPA that reduces the outlet rate of sulfuric acid emissions.
- aaa. "Termination" means the termination of this Consent Decree by the Court as provided in Section XXIII (Termination).
- bbb. "Title V Permit" means an operating permit issued by Ohio EPA for the Zimmer Station under Subchapter V of the CAA, 42 U.S.C. §§ 7661-7661e.
- ccc. "Unit 1" or "the Unit" means the coal-fired unit located at the Zimmer Station with an ESP, an FGD, a Sulfuric Acid Mitigation System, and a selective catalytic reduction system (SCR), also referred to as B006.
- ddd. "United States" means the United States of America, acting on behalf of EPA.
- eee. "Validated Emission Data" means data that is reliable and accurate consistent with U.S. EPA Guidance on Environmental Data Verification and Data Validation, EPA QA/G-8.
- of a single coal-fired boiler (Unit 1), two auxiliary gas and oil-fired boilers, and the associated material handling systems and emission control devices currently owned and operated by Dynegy Zimmer and located in Moscow, Ohio.

#### IV. CIVIL PENALTY

- 9. Within thirty (30) Days after the Effective Date, Dynegy Zimmer shall pay the sum of \$600,000 (six hundred thousand dollars) as a civil penalty, together with Interest accruing from December 15, 2015.
- 10. Dynegy Zimmer shall pay the civil penalty due at <a href="www.pay.gov">www.pay.gov</a> or by FedWire Electronic Funds Transfer (EFT) to the U.S. Department of Justice account, in accordance with instructions provided to Defendant by the Financial Litigation Unit (FLU) of the United States Attorney's Office for the Southern District of Ohio after the Effective Date. The payment instructions provided by the FLU will include a Consolidated Debt Collection System (CDCS) number, which Defendant shall use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide the payment instructions to:

Kris Moldovan 6555 Sierra Dr. Irving, TX. 75039 214-812-4140 Kris.moldovan@vistraenergy.com

on behalf of Dynegy Zimmer. Dynegy Zimmer may change the individual to receive payment instructions on its behalf by providing written notice of such change to the United States and EPA in accordance with Section XVIII (Notices). At the time of payment, Dynegy Zimmer shall send notice that payment has been made: (1) to EPA via email at <a href="mailto:cinwd\_acctsreceivable@epa.gov">cinwd\_acctsreceivable@epa.gov</a> or via regular mail at EPA Cincinnati Finance Office, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268; and (2) to the United States in accordance with Section XVIII (Notices) via email or regular mail; and (3) to EPA in accordance with Section XVIII (Notices). Such notice shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in *United States v. Dynegy Zimmer* and shall reference the civil action number, CDCS Number, and DOJ case number 90-5-2-1-11425.

11. Dynegy Zimmer shall not deduct any penalties paid under this Decree pursuant to this Section or Section XII (Stipulated Penalties) in calculating its federal income tax.

#### V. COMPLIANCE REQUIREMENTS

- 12. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997)) concerning the use of data for any authorized purpose under the CAA or regulations promulgated thereunder.
  - A. Sulfuric Acid Emissions Requirements
  - i. Emissions Rates
- 13. <u>Interim Sulfuric Acid Emissions Rate</u>. By signing this Consent Decree, Dynegy Zimmer certifies that from April 1, 2019, to July 14, 2019:
- a. it achieved and maintained a sulfuric acid emissions rate expressed as H<sub>2</sub>SO<sub>4</sub> for Unit 1 no greater than 0.016 lbs/mmBTU on a 24-Hour Rolling Average basis; and
- b. it achieved and maintained a 24-Hour Rolling Average acid dew point temperature of 263 degrees Fahrenheit as measured by the Dew Point Monitor at Unit 1.
- 14. <u>Final Sulfuric Acid Emissions Rate</u>. Subject to Paragraphs 15 and 16 below, beginning on July 15, 2019, and continuing thereafter, Dynegy Zimmer shall achieve and maintain a sulfuric acid emissions rate expressed as H<sub>2</sub>SO<sub>4</sub> for Unit 1 no greater than 0.010 lbs/mmBTU on a 24-Hour Rolling Average basis, except during a Sulfuric Acid Stack Test conducted in accordance with Paragraphs 20 through 24 below when compliance shall be determined on a 3-hour block average.
- 15. <u>Testing Exception</u>. Dynegy Zimmer may exceed the Final Sulfuric Acid Emissions Rate set forth in Paragraph 14 above during the following events: (1) limited and

infrequent testing of an alternative sulfuric acid mitigation system reagent approved by EPA; and (2) limited and infrequent periods of a Sulfuric Acid Stack Test when determining Reagent Injection Compliance Curves in accordance with Paragraph 30 below.

- Degradation Events in Calculating the Sulfuric Acid Emission Rate and Average Acid Dew

  Point Temperature. Subject to Subparagraphs 16 a-d below, Dynegy Zimmer may in its

  discretion exclude emissions and dew point temperatures, respectively, directly related to an

  MSFD Event in hour increments (each such excluded hour is an "MSFD Operating Hour") from

  calculation of: (1) sulfuric acid emissions to determine compliance with the Final Sulfuric Acid

  Emissions Rate set forth in Paragraph 14 above, and (2) the average acid dew point temperature

  to determine compliance with the dew point temperature set forth in Paragraph 27.a below,

  provided that the event meets the definition of an MSFD Event set forth in Paragraph 8.dd above

  and that Dynegy Zimmer complies with the limits and requirements set forth in Paragraphs 16.a
  d below.
- a. Sulfuric Acid Emissions During an MSFD Event. For MSFD Operating Hours, Dynegy Zimmer shall achieve and maintain a sulfuric acid emissions rate expressed as H<sub>2</sub>SO<sub>4</sub> for Unit 1 no greater than 0.020 lbs/mmBTU on a 12-Hour Rolling Average basis (MSFD Sulfuric Acid Emissions Rate). Emissions during any MSFD Operating Hour shall not be included in any 24-Hour Rolling Average used to determine compliance with the Final Sulfuric Acid Emissions Rate, but instead shall be subject to the MSFD Sulfuric Acid Emissions Rate specified in this Paragraph 16.a.
- b. <u>Limit on Exclusion of MSFD Operating Hours</u>. Dynegy Zimmer may exclude no more than 130 MSFD Operating Hours each calendar year from the 24-Hour Rolling

Average used to determine compliance with the Final Sulfuric Acid Emissions Rate set forth in Paragraph 14 above and the average acid dew point temperature set forth in Paragraphs 27.a below.

- c. <u>Corrective Action for MSFD Events</u>. Upon the occurrence of an MSFD Event for which Dynegy Zimmer claims excluded MSFD Operating Hours, as soon as reasonably practicable, Dynegy Zimmer shall restore normal operation of the Sulfuric Acid Mitigation System or drop load to an operating level so as to meet the Final Sulfuric Acid Emissions Rate in Paragraph 14 above unless Dynegy Zimmer documents that such a drop in load would be expected to cause reliability issues or cause a risk to human health, safety, or property damage and provides such documents to EPA upon request.
- d. <u>Reporting of MSFD Events</u>. For each MSFD Event associated with one or more MSFD Operating Hours, Dynegy Zimmer shall provide to EPA by the end of the calendar month following the calendar quarter in which the MSFD Event occurred a written report that:
- i. identifies the start and end dates and times when the MSFD Event
   occurred and the Sulfuric Acid Emissions Rate calculated for that event;
- ii. describes the MSFD Event (including the determined cause of the MSFD Event);
- iii. identifies the following rolling average sulfuric acid emissions rates in lbs/mmBTU for the MSFD Event: (1) during all 24-Hour Rolling Average periods that include the MSFD Event, including all Operating Hours during the MSFD Event (such information to be provided for informational purposes only since MSFD Operating Hours are not included in 24-Hour Rolling Averages for compliance purposes); (2) during all 24-Hour Rolling Average periods that include the MSFD Event but excluding MSFD Operating Hours; and (3)

during all 12-Hour Rolling Average periods that include the MSFD Event and Operating Hours during the MSFD Event;

- iv. identifies the total number of MSFD Operating Hours exempted from the 24-Hour Rolling Average periods in accordance with this Paragraph 16 in the subject calendar year to date;
- v. describes the action(s) taken to minimize sulfuric acid emissions during the MSFD Event; and
- vi. describes the action(s) taken to restore normal operation of the Sulfuric Acid Mitigation System or end the MSFD Event and return Unit 1's rate of sulfuric acid emissions to a level at or below the Final Sulfuric Acid Emissions Rate under Paragraph 14 above.
  - ii. Compliance Demonstration and Assurance for the Final Sulfuric Acid Emissions Rate
- 17. Dynegy Zimmer shall demonstrate compliance with the Final Sulfuric Acid Emissions Rate set forth in Paragraph 14 above using one of the following compliance demonstration methods:
- a. Option 1: by conducting a Sulfuric Acid Stack Test in accordance with Paragraphs 20-24 below, and monitoring and adhering to the applicable acid dew point temperatures as set forth in Paragraphs 25-29 below; or
- b. Option 2: by conducting a Sulfuric Acid Stack Test in accordance with Paragraphs 20-24 below and injecting reagent at the rates and, where liquid reagent is used, concentration (i.e. molar ratio), in compliance with the applicable Reagent Injection Compliance Curve for the corresponding load and Final Sulfuric Acid Emission Rate as set forth in Paragraphs 30-33 and Appendix B; or

- c. Option 3: by continuously monitoring the rate of sulfuric acid emissions using a Sulfuric Acid CEMS in accordance with Paragraphs 34-39 below.
- 18. Beginning on July 15, 2019, and continuing thereafter, unless Dynegy Zimmer changes its compliance option in accordance with Paragraphs 19.a or b below, Dynegy Zimmer shall demonstrate compliance with the Final Sulfuric Acid Emission Rate using Option 1, set forth in Paragraph 17.a above (stack testing and average acid dew point temperatures).

### 19. <u>Changes of Compliance Options.</u>

- a. Temporary Changing of Compliance Demonstration Options. When compliance determination Option 1 as set forth in Paragraph 17.a above applies, during malfunction of the Dew Point Monitor or when there is a reasonable indication that the monitor is not providing accurate data, Dynegy Zimmer shall use either Option 2 or Option 3 as set forth in Paragraphs 17.b and c above as its compliance demonstration option. Where Dynegy Zimmer has selected Option 2 (Sulfuric Acid Stack Test and reagent injection) as set forth in Paragraph 17.b above, during malfunction of the Sulfuric Acid Mitigation System that prevents reagent injection at rates and, if liquid reagent is used, concentration, consistent with the applicable Reagent Injection Compliance Curve, Dynegy Zimmer shall use either Option 1 or Option 3 as set forth in Paragraphs 17.a and c above as its compliance demonstration option. In any case where there is a malfunction of the Dew Point Monitor or Sulfuric Acid Mitigation System, Dynegy Zimmer shall diligently work to correct the malfunction as soon as practical and then return to the applicable compliance option.
- b. Except with respect to temporarily changing compliance options pursuant to Paragraph 19.a above, Dynegy Zimmer may change its compliance demonstration option provided that it gives EPA written notice, pursuant to Section XVIII (Notices) of this Consent

Decree, thirty (30) Days before the change becomes effective and only if the prior compliance demonstration method has been in effect for at least a 6-month period.

- iii. Sulfuric Acid Stack Tests
- 20. When Compliance Option 1 or 2 in Paragraphs 17.a or b applies, Dynegy Zimmer shall comply with the stack testing requirements in Paragraphs 21-24.
- Zimmer shall conduct a Sulfuric Acid Stack Test to measure the rate of sulfuric acid emissions in lbs/mmBTU from Unit 1 no less than once every six (6) months. Beginning on October 1, 2021, Dynegy Zimmer shall perform Sulfuric Acid Stack Testing at least once per twelve-month period, provided that the two most recently completed Sulfuric Acid Stack Tests conducted in accordance with the methods and procedures specified in Paragraphs 23 and 24 below demonstrate that the rate of sulfuric acid emissions on a 3-hour block average basis are equal to or less than the Final Sulfuric Acid Emissions Rate set forth in Paragraph 14 above. Otherwise, Dynegy Zimmer shall continue to conduct Sulfuric Acid Stack Tests once every six months. In the event that an outage of Unit 1 prevents Dynegy Zimmer from conducting a stack test on the schedule set forth above, then Dynegy Zimmer shall be in compliance with this Paragraph 21 so long as it conducts a Sulfuric Acid Stack Test within thirty (30) Operating Days of Unit 1 commencing operation after the outage.
- 22. If any significant changes are made to the Sulfuric Acid Mitigation System or the associated injected reagent(s) utilized that may reasonably be expected to result in a reduction in the removal efficiency of the Sulfuric Acid Mitigation System, then Dynegy Zimmer shall conduct a Sulfuric Acid Stack Test, in accordance with Paragraphs 23 and 24 below within sixty (60) Operating Days of completion of such change. This testing may be conducted at the same

time as other required testing; however, it shall still be conducted within sixty (60) Operating Days of completion of the change.

- 23. In conducting any Sulfuric Acid Stack Test required by Paragraphs 20-22 above, Dynegy Zimmer shall use the reference methods and procedures specified in 40 C.F.R. Part 60, Appendix A-4, EPA Conditional Test Method (CTM) 013 or an alternative reference method or procedure requested by Dynegy Zimmer and approved by EPA in accordance with Section X (EPA Review, Comment and Approval of Submissions). Unless otherwise approved by EPA:
- a. each Sulfuric Acid Stack Test shall be conducted isokinetically at a location in the stack where the gas velocity is average and the sampling rate is the same linear velocity as the gas going up the stack; and
- b. Dynegy Zimmer shall verify that the stack configuration is such that stack flue gases are not stratified at the sampling location. If stack flue gases are stratified, then Dynegy Zimmer shall propose an alternative test methodology to EPA for approval in accordance with Section X (EPA Review, Comment and Approval of Submissions).

#### 24. <u>Stack Test Protocol and Report.</u>

a. Dynegy Zimmer has submitted for the first Sulfuric Acid Stack Test, pursuant to Paragraph 21 above, a stack test protocol (using EPA GD-042 as guidance) to EPA for approval pursuant to Section X (EPA Review, Comment and Approval of Submissions). EPA has approved that protocol, which approval shall remain in force notwithstanding any change in stack test vendors used for the stack test. Dynegy Zimmer shall provide notice of the first stack test date or dates at least thirty (30) Days prior to the commencement of the stack test. The approved protocol includes: identifying: (1) the proposed testing methodologies to be utilized; (2) the Unit operating loads proposed for the high, mid, and low-to-mid load ranges; and

- (3) the anticipated reagent injection rates (and if applicable concentrations), locations, and the basis for such rates/locations. All subsequent Sulfuric Acid Stack Tests may be conducted pursuant to a protocol previously approved by EPA under this Paragraph, except as provided for in Paragraph 24.b below.
- b. If Dynegy Zimmer elects to conduct a Sulfuric Acid Stack Test under a protocol different from a protocol previously approved by EPA under Paragraph 24.a above, then at least sixty (60) Days prior to conducting such stack test, Dynegy Zimmer shall submit a new protocol to EPA for approval pursuant to Section X (EPA Review, Comment and Approval of Submissions) identifying the enumerated items in Paragraph 24.a above.
- c. All Sulfuric Acid Stack Tests conducted pursuant to Paragraphs 21-23 above shall be conducted while the SCR is operating.
- d. The sulfuric acid emissions rate during each Sulfuric Acid Stack Test shall be reported in lbs/mmBTU. Each Sulfuric Acid Stack Test shall consist of three separate runs each performed under representative operating conditions at the three or more load ranges submitted in the protocol. The average acid dew point temperature as recorded by a Dew Point Monitor at Unit 1 and flow rate shall also be reported with the results of each test. Dynegy Zimmer shall calculate the sulfuric acid emissions rate from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each Sulfuric Acid Stack Test required by this Consent Decree shall be submitted to EPA within sixty (60) Days after completion of each test.
  - iv. Acid Dew Point Temperature Monitoring
- 25. When compliance with the applicable Sulfuric Acid Emissions Rate using

  Option 1 in Paragraph 17.a (stack testing and average acid dew point temperature) applies, then

Dynegy Zimmer shall comply with the acid dew point temperature monitoring requirements in Paragraphs 26-29 below.

- 26. Beginning on April 1, 2019, Dynegy Zimmer shall continuously operate a Dew Point Monitor at all times Unit 1 is combusting coal, except for periods of monitor malfunction, maintenance, and calibration.
- 27. Except as provided in Paragraphs 28 and 29 below, Dynegy Zimmer shall not exceed the following average acid dew point temperatures measured at the Unit 1 Dew Point Monitor while the corresponding sulfuric acid emission rates are applicable under this Consent Decree:
- a. 24-Hour Rolling Average acid dew point temperature of 256 degrees

  Fahrenheit for the Final Sulfuric Acid Emissions Rate set forth in Paragraphs 14 above, except as

  provided in Paragraphs 15 and 16 above:
- b. 12-Hour Rolling Average acid dew point temperature of 271 degrees Fahrenheit for the MSFD Sulfuric Acid Emissions Rate set forth in Paragraph 16.a above.
  - 28. Revision of Applicable Average Acid Dew Point Temperature.
- a. After the completion of each Sulfuric Acid Stack Test required by this

  Decree and as part of the related stack test report submitted to EPA in accordance with

  Paragraph 24 above, Dynegy Zimmer shall conduct a new statistical analysis in accordance with

  Paragraph 28.b below, and develop and submit to EPA for comment in accordance with

  Section X (EPA Review, Comment and Approval of Submissions) the analysis including any
  revised average acid dew point temperature limitations for Paragraph 27 that reflect the average
  acid dew point temperatures for the Final Sulfuric Acid Emission Rate in Paragraphs 14 and for
  the MSFD Sulfuric Acid Emissions Rate in Paragraph 16.a above or confirmation that no

revision is necessary (e.g., as a result of there being no change in the calculated temperature). Provided that Dynegy Zimmer followed the stack test requirements in Paragraphs 21-24 and average acid dew point temperature calculation requirements in Subparagraph 28.a, from the period of submittal of the stack test report forward, the average acid dew point temperatures presented in that submittal shall apply to Unit 1, unless and until modified to reflect EPA comments through agreement of the parties or by order of a Court pursuant to Section X (EPA Review, Comment and Approval of Submissions). Notwithstanding Paragraph 28.b, Dynegy Zimmer may request that EPA approve a finding that no revision to an acid dew point temperature is necessary or an extended deadline for acid dew point temperature revision under this Paragraph 28 (for example by making an enforceable commitment to operate at a significantly reduced load to Unit 1) pursuant to Section X (EPA Review, Comment and Approval of Submissions).

b. In the new statistical analysis referenced in Paragraph 28.a, Dynegy Zimmer shall use the most recent Sulfuric Acid Stack Test Validated Emission Data, all previous Validated Emission Data from prior Sulfuric Acid Stack Test(s) performed under this Decree, and the Validated Emission Data from Unit 1 Sulfuric Acid test(s) performed in 2016 and 2017. Provided, however, that if there is a Significant Change to the Unit 1 Sulfuric Acid Mitigation System that substantially impacts the correlation between sulfuric acid emissions and monitored dew point temperature at Unit 1, Dynegy Zimmer shall only use the Validated Emission Data generated after that change to generate a new best fit polynomial equation. Using Validated Emission Data, Dynegy Zimmer shall perform a regression analysis and create a least squares, 'best fit polynomial equation.' Dynegy Zimmer shall insert the exact Final Sulfuric Acid Emission Rate in Paragraph 14 and MSFD Sulfuric Acid Emissions Rate in Paragraph 16.a (i.e.,

without rounding or additional significant digits), and calculate an associated acid dew point temperature rounded to the nearest whole degrees (for example if 0.010 lbs/mmbtu was inserted into the polynomial equation and returned 255.4, it would be rounded to 255 and 255.6 would be rounded to 256). If the rounded, whole degree acid dew point temperature is the same as the last rounded, whole degree acid dew point temperature utilized under this Paragraph, then Dynegy Zimmer may continue to use the last best fit polynomial equation in its calculations. If the rounded, whole degree acid dew point temperature differs, then Dynegy Zimmer shall use the new best fit polynomial equation.

- 29. When the compliance determination Option 1 in Paragraph 17.a (stack testing and average acid dew point temperature) applies, then any exceedance of an applicable average acid dew point temperature set forth in Paragraph 27 above or revised in accordance with Paragraph 28 above, as measured by the Dew Point Monitor, shall constitute a violation of Final Sulfuric Acid Emissions Rate set forth in Paragraph 14 above, or the MSFD Sulfuric Acid Emissions Rate in Paragraph 16.a above if applicable, unless Dynegy Zimmer can demonstrate both of the following conditions existed:
- a. the Dew Point Monitor malfunctioned or there is a reasonable indication (for example, the observed dew point temperature at the monitor differs from what is expected based upon the level of reagent injection and the correlation between reagent injection rates (and if applicable concentrations) and dew point temperatures as determined from Sulfuric Acid Stack Tests or other relevant information) that the Dew Point Monitor is not providing accurate data; and
- b. Dynegy Zimmer was using the applicable reagent injection rate and, if liquid reagent is used, concentration, at that time based on the Reagent Injection Compliance

Curve in Appendix B to this Consent Decree, as may be revised pursuant to Paragraph 30 below. In such cases, Dynegy Zimmer shall provide to EPA in the next semi-annual report submitted in accordance with Section XI, written notice that identifies: the date and time in which the exceedance(s) occurred; an explanation of the Dew Point Monitor malfunction; and/or why Dynegy Zimmer reasonably believed the Dew Point Monitor data was inaccurate; and data supporting that it was using the applicable reagent injection rate and, if liquid reagent is used, concentration, based on the applicable Reagent Injection Compliance Curve during this period.

#### v. Reagent Injection Compliance Curve

30. As of April 1, 2019, Appendix B sets forth the Reagent Injection Compliance Curve for the Final Sulfuric Acid Emission Rate in Paragraph 14 above based on reagent injection rates for solid reagents. After the completion of each Sulfuric Acid Stack Test required by this Decree and as part of the related stack test report submitted in accordance with Paragraph 24 above, Dynegy Zimmer shall develop and submit to EPA for comment in accordance with Section X (EPA Review, Comment and Approval of Submissions) a proposed revised Appendix B or confirmation that no revision of Appendix B is necessary. Any revised Appendix B shall reflect the Reagent Injection Compliance Curve for the Final Sulfuric Acid Emission Rate in Paragraph 14 above based on the Sulfuric Acid Stack Test, and prior stack tests as appropriate. Provided that Dynegy Zimmer followed the stack test requirements in Paragraphs 21-24 and determination of the Reagent Injection Compliance Curve in accordance with this Paragraph 30, from the period of submittal of the stack test report forward, the Reagent Injection Compliance Curve presented in that submittal shall apply to Unit 1, unless and until it is modified to reflect EPA comments through agreement of the parties or by order of a Court pursuant to Section X (EPA Review, Comment and Approval of Submissions). If Dynegy

Zimmer plans to use a liquid reagent, then the Reagent Injection Compliance Curve in any revised Appendix B shall set forth the hourly average liquid reagent rates and reagent concentrations (i.e., molar ratio) for the Final Sulfuric Acid Emission Rate in Paragraph 14 above. Dynegy Zimmer may not use liquid reagent unless it has submitted for EPA comment, a Reagent Injection Compliance Curve that sets forth the reagent injection rate and concentration for the liquid reagent.

- 31. If Dynegy Zimmer elects to demonstrate compliance with the Final Sulfuric Acid Emission Rate in Paragraph 14 above using Option 2 in Paragraph 17.b (Sulfuric Acid Stack Test and reagent injection), then Dynegy Zimmer shall utilize an hourly average reagent injection rate for solid reagents or the hourly average reagent injection rate and reagent concentration (i.e., molar ratio) for liquid reagents that corresponds to the operating load on the Reagent Injection Compliance Curve in Appendix B as may be modified pursuant to Paragraph 30 above, for the Final Sulfuric Acid Emissions Rate.
- 32. No later than June 1, 2018, and continuing thereafter, Dynegy Zimmer shall maintain the following information related to the reagent injection rates utilized at Unit 1 while combusting coal: (1) date and time; (2) average hourly unit load (MWg); (3) average hourly reagent injection rate (and concentration if applicable) in tons per hour at each injection point; (4) the Dew Point Monitor acid temperature readings (°F); and (5) the NOx emissions rate.
- 33. Except for MSFD Events, if Dynegy Zimmer has selected compliance demonstration Option 2 in Paragraph 17.b (Sulfuric Acid Stack Test and reagent injection) then an hourly average reagent injection rate (and concentration if applicable) less than the rate in Appendix B for the corresponding operating load and Final Sulfuric Acid Emissions Rate shall constitute an exceedance of the Final Sulfuric Acid Emission Rate in Paragraph 14 above unless

at that time the acid dew point temperature from the Dew Point Monitor complied with the applicable acid dew point temperatures under Paragraphs 27 and 28 above and the Dew Point Monitor was functioning properly.

#### vi. Sulfuric Acid CEMS

- 34. If Dynegy Zimmer elects to demonstrate compliance with the applicable Sulfuric Acid Emissions Rate using Option 3 in Paragraph 17.c above (a Sulfuric Acid CEMS), then Dynegy Zimmer shall comply with the Sulfuric Acid CEMS requirements in Paragraphs 35-39 below.
- 35. Dynegy Zimmer shall install, certify, and maintain a Sulfuric Acid CEMS on the stack serving Unit 1 in accordance with 40 C.F.R. Part 60, Appendix F.
- 36. The Sulfuric Acid CEMS shall include, but is not limited to, a pollutant concentration monitor, flow monitoring system, and automated data acquisition and handling system. The Sulfuric Acid CEMS and flow monitoring system shall, while Unit 1 is combusting fuel, record both emissions and stack gas volumetric flow rates every 15 minutes, measure the sulfuric acid concentration, and calculate the rate of sulfuric acid emissions in lbs/mmBTU to determine compliance with the applicable Sulfuric Acid Emissions Rate above.
- 37. Dynegy Zimmer shall maintain in an electronic database all hourly average stack gas volumetric flow rates and rate of the sulfuric acid emissions in lbs/mmBTU while Unit 1 is combusting fuel. Except for periods of monitor malfunction, maintenance, or repair, Dynegy Zimmer shall operate the Sulfuric Acid CEMS at all times when Unit 1 is combusting fuel, including periods of Unit 1 startup, shutdown, and malfunction. Dynegy Zimmer shall report, pursuant to Section XI (Reporting Requirements), the stack gas volumetric flow rates and 24-

Hour Rolling Average rate of sulfuric acid emissions recorded by the Sulfuric Acid CEMS, in electronic format (e.g., Microsoft Excel compatible) to EPA.

- 38. Dynegy Zimmer shall submit to EPA for approval in accordance with Section X (EPA Review, Comment and Approval of Submissions) a plan for the installation and initial certification of the Sulfuric Acid CEMS (Installation and Initial Certification Plan) and an ongoing Quality Assurance/Quality Control protocol (QA/QC Protocol) that shall be followed for such Sulfuric Acid CEMS at all times.
- a. The proposed QA/QC Protocol may include a process for streamlined revisions to stay current with regulatory changes and Sulfuric Acid CEMS vendor recommendations.
- b. In developing both the Installation and Initial Certification Plan and the QA/QC Protocol, Dynegy Zimmer shall use the procedures and criteria set forth in 40 C.F.R. Part 60, Appendix B, Performance Specification 18, and Appendix F, Procedure 6, and 40 C.F.R. § 63.8(c)(6). Dynegy Zimmer shall use the reference method approved in the QA/QC Protocol, for performing relative accuracy tests or audits. Dynegy Zimmer shall use the Final Sulfuric Acid Emissions Rate as the emission standard for purposes of assessing performance criteria and selection of span, provided however that any exceedance of the applicable Sulfuric Acid Emissions Rate that occurs during any Sulfuric Acid CEMS certification testing, relative accuracy testing, or other testing of the CEMS required by the Decree or otherwise by law shall not be a violation of this Decree, provided that Dynegy Zimmer has notified EPA at least twenty-four (24) hours in advance of such testing. Dynegy Zimmer shall develop additional QA/QC procedures and criteria for the generation of sulfuric acid reference gas standards of a known concentration and uncertainty for use in the initial certification, daily calibration, and ongoing

QA/QC procedures. The QA/QC Protocol shall also include written procedures that describe: the initial and subsequent calibrations of the CEMS; determination and adjustment of the calibration drift for the CEMS; preventative maintenance to be completed for the CEMS (including spare parts inventory); data recording, calculations, and reporting capabilities; accuracy audit procedures; and a program of corrective action for a malfunctioning CEMS.

39. No later than one hundred and eighty (180) Days after EPA's approval of the Installation and Initial Certification Plan for the Sulfuric Acid CEMS in accordance with that plan and 40 C.F.R. Part 60, Appendix F, Dynegy Zimmer shall install, certify, commence operation of, and operate and maintain the Sulfuric Acid CEMS in conformance with 40 C.F.R. Part 60, Appendix F and the EPA-approved QA/QC Protocol. After commencement of operation, the Sulfuric Acid CEMS shall be used to demonstrate compliance with the applicable Sulfuric Acid Emissions Rate above.

#### vii. Opacity Limitation and Compliance Demonstration

40. Beginning with the first full calendar month after the Effective Date, and continuing thereafter, based upon EPA Method 9 (40 C.F.R. Part 60, Appendix A, Method 9) observations, including such observations pursuant to Paragraph 41 below, Dynegy Zimmer shall not discharge into the atmosphere any gases from the Unit 1 stack that both: (1) exhibit greater than 20% opacity, as a six-minute average, except for one six-minute period per hour of not more than 27%; and (2) that violate an opacity requirement applicable to Unit 1 under any federal or state regulation or permit in effect at that time. Compliance with the Final or MSFD Sulfuric Acid Emissions Rates set forth in Paragraphs 14 or 16.a above does not constitute an exception or defense to this requirement.

41. Dynegy Zimmer shall demonstrate compliance with the opacity limit in Paragraph 40 by conducting Unit 1 stack visible emissions observations in accordance with EPA Method 9 at the following frequency starting with the first full calendar month after the Effective Date and continuing through Consent Decree termination. In any calendar month during which there are fifteen (15) or more Operating Days, Dynegy Zimmer shall conduct at least two (2) Method 9 observations at least five (5) Days apart. For any calendar month during which there are between five (5) and fifteen (15) Operating Days, Dynegy Zimmer shall conduct at least one Method 9 observation. No Method 9 observations are required in any calendar month in which there are less than five (5) Operating Days.

#### **B.** SO<sub>2</sub> Emissions Requirements

- i. SO<sub>2</sub> Emissions Rate
- 42. Dynegy Zimmer shall comply with the 1.0 lbs/mmBTU, 3-hour average, SO<sub>2</sub> emission limit set forth in the Permit to Install issued in 1987 for the Zimmer Station; however, any violation of such permit limit shall not be subject to or cause any stipulated penalty under this Consent Decree except as provided in Paragraph 99.f.

#### ii. SO<sub>2</sub> Emissions Rate Triggers and Control Protocol

- 43. Beginning on January 1, 2018, and continuing thereafter, Dynegy Zimmer shall adhere to the following procedures and requirements with respect to the Unit 1 FGD:
- a. During the Initiation Period, and starting upon the initial firing of coal at the Unit for startup, Dynegy Zimmer shall place in service and operate at Unit 1 all Available FGD ARPs on each in-service FGD Absorber Module.
- b. As the number of FGD Absorber Modules in service changes as the Unit progresses through the Initiation Period, Dynegy Zimmer shall ensure that all Available FGD

ARPs associated with an in-service FGD Absorber Module are placed in service and are operated for the duration of the Initiation Period.

- c. Dynegy Zimmer shall maintain all FGD ARPs in accordance with good maintenance practices to help ensure that all FGD ARPs are Available FGD ARPs.
- d. For each Unit 1 startup after the Effective Date, Dynegy Zimmer shall record and report, in accordance with Section XI (Reporting Requirements), the most likely reason(s) why any FGD ARP on an in-service FGD Absorber Module is not an Available FGD ARP during the Initiation Period.
- 44. Beginning no later than January 1, 2018, and continuing thereafter, if the SO<sub>2</sub> Emissions Rate at Unit 1 is equal to or greater than the applicable (1) SO<sub>2</sub> Initiation Period Emissions Rate Trigger, or (2) SO<sub>2</sub> Normal Operation Emissions Rate Trigger, Dynegy Zimmer shall implement the following procedures:
- a. Within one (1) hour of meeting or exceeding the SO<sub>2</sub> Initiation Period Emissions Rate Trigger or the SO<sub>2</sub> Normal Operations Emissions Rate Trigger, whichever is applicable, and subject to Paragraph 44.b below, Dynegy Zimmer shall (if it has not already) place in service all Available FGD ARPs on each in-service FGD Absorber Module until the Unit's SO<sub>2</sub> Emissions Rate is less than the SO<sub>2</sub> Emissions Rate Trigger, as determined by the SO<sub>2</sub> CEMS.
- b. In the event that use of all the Available FGD ARPs on each in-service FGD Absorber Module cannot reduce emissions below the applicable SO<sub>2</sub> Emissions Rate Trigger at Unit 1, Dynegy Zimmer shall utilize an alternative method, if available, such as, but not limited to, adjusting the absorber's pH, absorber reaction tank operating level, or absorber

densities, to lower the Unit's SO<sub>2</sub> Emissions Rate to less than the applicable SO<sub>2</sub> Emissions Rate Trigger.

- 45. Beginning on January 1, 2018, and continuing thereafter, within thirty (30) Days of the end of a calendar quarter in which SO<sub>2</sub> emissions exceed an applicable SO<sub>2</sub> Emissions Rate Trigger, Dynegy Zimmer shall conduct a root cause failure analysis (RCFA) for each period that the Unit's SO<sub>2</sub> Emissions Rate is equal to or greater than the applicable SO<sub>2</sub> Emissions Rate Trigger. The RCFA shall be summarized in an RCFA Report that contains the following information:
- a. A narrative summary of the period in which SO<sub>2</sub> emissions exceeded the applicable SO<sub>2</sub> Emissions Rate Trigger, including the date and time ranges of any applicable Initiation Period;
- b. An Excel compatible spreadsheet which contains, on an hourly basis, the date and time, the SO<sub>2</sub> emissions rate, the heat input, the operating load, the number of FGD ARPs operating, and flue gas temperature in each case for the period between five Operating Hours prior to the exceedance of the applicable SO<sub>2</sub> Emissions Rate Trigger to five Operating Hours after the exceedance of the SO<sub>2</sub> Emissions Rate Trigger;
- c. Identification of any steps taken to minimize SO<sub>2</sub> emissions during the time period when the applicable SO<sub>2</sub> Emissions Rate Trigger was exceeded;
- d. A detailed analysis that sets forth the identified root cause(s) and any contributing cause(s) of SO<sub>2</sub> emissions in excess of the applicable SO<sub>2</sub> Emission Rate Trigger, and an explanation, if applicable, that the use of all the Available FGD ARPs on each in-service FGD Absorber Module would not have prevented Unit 1 from meeting or exceeding the applicable SO<sub>2</sub> Emissions Rate Trigger.

- e. An analysis of the measures, if any, that are reasonably available to prevent or reduce the likelihood of a recurrence of SO<sub>2</sub> emissions in excess of the applicable SO<sub>2</sub> Emissions Rate Trigger from the same root cause(s) and contributing cause(s) in the future. The analysis shall evaluate: operational and maintenance measures, if any; the probable effectiveness of each such measure; and the likely cost of each measure. This Consent Decree does not require Dynegy Zimmer to undertake any corrective measures identified or that could have been identified provided, however, that if the cause of an exceedance of an applicable SO<sub>2</sub> Emissions Rate Trigger was Dynegy Zimmer's failure to comply with any procedure set forth in Paragraphs 43-44 above or the exceedance was also a violation of the SO<sub>2</sub> Emissions Rate set forth in Paragraph 42 above as determined by a stack test pursuant to Method 6 (40 C.F.R. Part 60, Appendix A, Method 6), the United States reserves the right to assert that an identified corrective measure should be required under this Consent Decree to the extent it is reasonable to avoid a future exceedance. Such corrective measures may also be required by other applicable federal or state law.
- 46. SO<sub>2</sub> emissions equal to or greater than the applicable SO<sub>2</sub> Emissions Rate Trigger is not in itself a violation of the Consent Decree; however failure to follow the procedures required in Paragraphs 43-45 above is a violation of the Consent Decree. Compliance with the procedures required in Paragraphs 43-45 above is not a defense to a violation of the SO<sub>2</sub> Emissions Rate in Paragraph 42 above.

#### 47. RCFA Report.

a. Dynegy Zimmer shall submit the RCFA Report required by Paragraph 45 above, including supporting documents, to EPA for review and comment in accordance with Section X (EPA Review, Comment, and Approval of Submissions).

- b. Dynegy Zimmer shall submit this report within thirty (30) Days of the end of the calendar quarter in which the exceedance of the applicable SO<sub>2</sub> Emissions Rate Trigger has occurred. If Dynegy Zimmer's investigation of the causes of the exceedance and/or possible corrective measures is still ongoing on the due date of the RCFA Report, Dynegy Zimmer shall provide in the report the information it has obtained thus far and shall submit a supplemental report fully conforming to the requirements of this Paragraph within thirty (30) Days thereafter (unless EPA approves an extension of this due date). Any extension of the time for Dynegy Zimmer to submit its RCFA Report does not excuse Dynegy Zimmer from its investigation and reporting obligations under Paragraph 45 above.
- 48. Dynegy Zimmer shall provide all Zimmer Station personnel with responsibilities related to FGD operation a copy of the procedures required by Paragraphs 43-47 above.
  - iii. Compliance Demonstration with SO<sub>2</sub> Emissions Rate Trigger
- 49. Beginning no later than January 1, 2018, and continuing thereafter, starting from the initial firing of Unit 1 for startup and continuing through shutdown of the Unit, Dynegy Zimmer shall monitor Unit 1's SO<sub>2</sub> Emissions Rate as provided for in Paragraph 50 below.
- 50. To determine whether SO<sub>2</sub> emissions from Unit 1 exceed an applicable SO<sub>2</sub> Emissions Rate Trigger, Dynegy Zimmer shall obtain SO<sub>2</sub> emissions data from a CEMS in accordance with the procedures of 40 C.F.R. Part 75, except that the SO<sub>2</sub> emissions data need not be bias adjusted and the missing data substitution procedures of 40 C.F.R. Part 75 shall not apply to such determinations. Diluent capping (i.e., 5% CO<sub>2</sub>) will be applied to the SO<sub>2</sub> Emissions Rate for any hours where the measured CO<sub>2</sub> concentration is less than 5% following the procedures in 40 C.F.R. Part 75, Appendix F, Section 3.3.4.1.

# **C. PM** Emissions Requirements

- i. PM Emissions Rate and Control
- 51. Beginning no later than April 1, 2019, and continuing thereafter, Dynegy Zimmer shall Energize each available field of the ESP on Unit 1 at all times the Unit is combusting fuel, subject to the technological and safety limitations, load levels, manufacturers' specifications, and good engineering and maintenance and pollution control practices for such control equipment and Unit 1 so as to minimize emissions to the greatest extent practicable.
- 52. Beginning no later than April 1, 2019 and continuing thereafter, Dynegy Zimmer shall operate Unit 1 such that the Unit achieves and maintains a PM Emissions Rate of no greater than 0.030 lbs/mmBTU. Dynegy Zimmer shall determine compliance with this PM Emissions Rate either based on 3-hour block average PM emissions from a stack test conducted in compliance with Paragraph 54.a-b below, or based on a 24-Hour Rolling Average of PM emissions using CEMS data generated in accordance with Paragraph 55.a-d below.

### ii. PM Stack Test and CEMS Requirements

- 53. Dynegy Zimmer at its option shall either conduct annual stack testing on Unit 1 in accordance with Paragraph 54.a-b below or shall install and operate a PM CEMS on Unit 1 in accordance with Paragraph 55.a-d below.
- 54. In accordance with Paragraph 53 above, if Dynegy Zimmer elects to use a PM stack test to determine compliance with the PM Emissions Rate set forth in Paragraph 52 above, Dynegy Zimmer shall conduct an annual stack test on Unit 1 for PM.
- a. The annual stack test requirement imposed by this Paragraph may be satisfied by any PM stack test at Unit 1 during the relevant year, including any PM stack test required by and conducted in accordance with any Dynegy Zimmer permit issued by the State of Ohio, which satisfies the requirements of Paragraph 54.b below. Dynegy Zimmer may perform

testing every other year, rather than every year, provided that the two most recent PM stack tests conducted in accordance with the methods and procedures specified in this Consent Decree demonstrate that the PM emissions are equal to or less than 0.015 lbs/mmBTU. Dynegy Zimmer shall perform testing every year, rather than every other year, beginning in the year immediately following any stack test result demonstrating that the PM emissions are greater than 0.015 lbs/mmBTU.

- b. To determine compliance through stack testing with the PM Emissions Rate established in Paragraph 52 above, Dynegy Zimmer shall use the applicable reference methods and procedures (filterable portion only) specified in 40 C.F.R. Part 60, Appendix A-3, Method 5, or alternative tests or methods that are approved by EPA. PM stack testing that complies with PM stack testing requirements of Mercury Air Toxics Standard, 40 C.F.R. § 63, Subpart UUUUU, shall satisfy the requirements of this Paragraph. Each test shall consist of three separate runs performed under representative operating conditions not including periods of startup, shutdown, or malfunction. The sampling time for each run shall be at least sixty (60) minutes and the volume of each run shall be at least 30 dry standard cubic feet. Dynegy Zimmer shall calculate the PM Emissions Rate from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each PM stack test shall be submitted to EPA within sixty (60) Days of completion of each test.
- 55. If Dynegy Zimmer elects at any time to install and operate a PM CEMS in lieu of PM stack testing, to determine compliance with the PM Emissions Rate set forth in Paragraph 52 above, then Dynegy Zimmer shall provide written notice of that intent to EPA, and shall install, correlate, maintain, and operate the PM CEMS on the stack serving Unit 1 in accordance with the following Paragraph 55.a-c below. Nothing in this Decree shall prohibit Dynegy Zimmer

from returning to the use of stack testing, in lieu of a PM CEMS, to determine compliance with the PM Emissions Rate set forth in Paragraph 52 above upon written notice to EPA.

- a. The PM CEMS shall be comprised of a continuous particle mass monitor measuring filterable PM concentrations, directly or indirectly, on an hourly average basis and a diluent monitor or monitors used to convert the concentration to units expressed in lbs/mmBTU. The PM CEMS installed must be appropriate for the anticipated stack conditions and capable of measuring PM concentrations on an hourly average basis. Dynegy Zimmer shall maintain, in an electronic database, the hourly average PM CEMS emission values when Unit 1 is combusting coal in lbs/mmBTU. Except for periods of monitor malfunction, maintenance, calibration, or repair, Dynegy Zimmer shall operate the PM CEMS at all times when Unit 1 is combusting coal.
- b. No less than six (6) months prior to operation of the PM CEMS, Dynegy Zimmer shall submit to EPA for review and comment pursuant to Section X (EPA Review, Comment and Approval of Submissions) a plan for the installation and correlation of the PM CEMS and a QA/QC protocol that shall be followed for such PM CEMS at all times. The proposed QA/QC protocol may include a process for streamlined revisions to stay current with regulatory changes (e.g., EPA Performance Specification 11 or PS-11) and PM CEMS vendor recommendations.
- c. In developing both the plan for installation and correlation of the PM CEMS and the QA/QC protocol, Dynegy Zimmer shall use the criteria set forth in 40 C.F.R. Part 60, Appendix B, Performance Specification 11, and Appendix F, Procedure 2, or equivalent criteria specified in and allowed by applicable Ohio State Implementation Plan (SIP) provision(s).

d. Any exceedance of the PM Emissions Rate required by Paragraph 52 above, during PM CEMS correlation testing required under PS-11 or during any other testing reviewed and approved by EPA (including testing for Activated Carbon Injection controls of mercury emissions), shall not be a violation of this Decree.

## VI. PROHIBITION ON NETTING CREDITS OR OFFSETS

- 56. Emission reductions at the Zimmer Station that result from actions to be taken by Dynegy Zimmer to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a Netting credit or offset under the CAA's Nonattainment New Source Review and Prevention of Significant Deterioration programs.
- 57. The limitations on the generation and use of Netting credits and offsets set forth in the previous Paragraph do not apply to emission reductions achieved at the Zimmer Station that are earlier or greater than those required under this Consent Decree. For illustrative purposes, emission reductions at the Zimmer Station are greater than those required under this Consent Decree if they result from emission levels that are lower than those imposed on the Zimmer Station under this Consent Decree.
- 58. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by the State of Ohio or EPA as creditable contemporaneous emission decreases for the purpose of attainment demonstrations submitted pursuant to Section 110 of the CAA, 42 U.S.C. § 7410, or in determining impacts on National Ambient Air Quality Standards, Prevention of Significant Deterioration increment, or air quality related values, including visibility, in a Class I area.

## VII. SUPPLEMENTAL ENVIRONMENTAL PROJECT

- 59. Dynegy Zimmer shall implement a Supplemental Environmental Project (SEP), consisting of a school energy efficiency light emitting diode (LED) Retrofit (School Energy Efficiency SEP or SEP), in accordance with all provisions of this Paragraph 59 through Paragraph 71 below. The SEP shall replace standard incandescent bulbs with high-efficiency LED luminaries at a nearby public school. This SEP will increase lighting efficiency thus reducing consumption of electricity and associated SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> emissions in the local area impacted by the violations alleged in the Complaint relating to sulfuric acid mist plumes from the Zimmer Plant.
- 60. Dynegy Zimmer shall spend no less than \$45,000 on the SEP (SEP Dollars) and through the SEP to reduce school lighting energy use to the maximum extent practicable. Dynegy Zimmer shall prioritize lighting energy efficiency work within the school with the highest energy reductions per SEP Dollar to ensure the greatest SEP emission reductions feasible. No greater than ten percent of the total SEP Dollars shall be used for administrative support and outreach costs and SEP Dollars shall not include Dynegy Zimmer's personnel and/or administrative costs in overseeing the implementation of the SEP.
  - 61. Dynegy Zimmer shall meet the following requirements in implementing the SEP:
- a. The school energy efficiency LED luminaries and their controls shall be listed on the Design Lights Consortium Qualified Product List (QPL) or the ENERGY STAR product list, or a comparable list. LED controls may include functionality for dimming, daylight harvesting or photocell control, occupancy sensing and zoning.
- b. A qualified lighting certified professional, such as a professional that is certified or credentialed by the National Council on Qualifications for the Lighting Professions or International Association of Lighting Designers, shall be used in the design and

implementation of the SEP to ensure that the correct luminaries are selected for the specific lighting situation. Considerations for luminary selection include type (i.e., ceiling surface, ceiling recessed, ceiling pendant), directional nature of lighting needs (i.e., flood vs. spot), lumens and lumens per watt, color temperature, and color rendering index.

- Date, except that Dynegy Zimmer may request an extension of time to complete the SEP if it appears likely that all the SEP Dollars will not be spent within such 18-month period despite Dynegy Zimmer's best efforts to implement the SEP within such period.
- 63. Dynegy Zimmer is responsible for the satisfactory completion of the SEP in accordance with the requirements of this Decree. Dynegy Zimmer may use contractors or consultants in planning and implementing the SEP.
- 64. With regard to the SEP, Dynegy Zimmer certifies the truth and accuracy of each of the following:
- a. that all cost information provided to EPA in connection with EPA's approval of the SEP is complete and accurate and that Dynegy Zimmer in good faith estimates that the cost to implement the SEP is equal or greater than the SEP Dollars specified in Paragraph 60 above;
- b. that, as of the date of executing this Decree, Dynegy Zimmer is not required to perform or develop the SEP by any federal, state, or local law or regulation and is not required to perform or develop the SEP by agreement, grant, or as injunctive relief awarded in any other action in any forum;

- c. that the SEP is not a project that Dynegy Zimmer was planning or intending to construct, perform, or implement other than in settlement of the claims resolved in this Decree;
- d. that Dynegy Zimmer has not received and will not receive credit for the SEP in any other enforcement action;
- e. that Dynegy Zimmer is not a party to any open federal financial assistance transaction that is funding or could fund the same activity as the SEP described in above (for purposes of this certification, the term "open federal financial assistance transaction" refers to a grant, cooperative agreement, loan, federally-guaranteed loan guarantee, or other mechanism for providing federal financial assistance whose performance period has not yet expired); and
- f. that Dynegy Zimmer will not receive any reimbursement for any portion of the SEP from any other person.
- 65. <u>SEP Completion Report</u>. Within thirty (30) Days after the deadline for completion of the School Energy Efficiency SEP under Paragraph 62 above, Dynegy Zimmer shall submit a SEP completion report to the United States, in accordance with Section XVIII (Notices). The SEP completion report shall contain the following information:
  - a. a detailed description of the SEP as implemented;
- b. a certification that Dynegy Zimmer has inquired of the recipient school district as to whether it is a party to an open federal financial assistance transaction that is funding or could fund the same activity as the SEP and has been informed by the recipient school district that it is not a party to such a transaction. For purposes of this certification, the term "open federal financial assistance transaction" refers to a grant, cooperative agreement, loan,

federally-guaranteed loan guarantee, or other mechanism for providing federal financial assistance whose performance period has not yet expired.

- c. a description of any problems encountered in completing the SEP and the solutions thereto;
  - d. an itemized list of all eligible SEP costs expended;
- e. certification that the SEP has been fully implemented pursuant to the provisions of this Decree; and
- f. a description of the estimated energy cost reductions and associated environmental and public health benefits resulting from implementation of the SEP (with a quantification of the benefits and pollutant reductions, if feasible).
- 66. EPA may, in its sole discretion, require information in addition to that described in the preceding Paragraph, in order to evaluate Dynegy Zimmer's SEP completion report.
- 67. After receiving the SEP completion report, the United States shall notify Dynegy Zimmer whether or not Dynegy Zimmer has satisfactorily completed the SEP. If Dynegy Zimmer has not completed the SEP in accordance with this Consent Decree, stipulated penalties may be assessed under Section XII.
- 68. Each submission required under this Section shall be signed by a Dynegy Zimmer official with knowledge of the SEP and shall bear the certification language set forth in Paragraph 94.
- 69. Any public statement, oral or written, in print, film, or other media, made by Dynegy Zimmer making reference to the SEP under this Decree shall include the following language: "This project was undertaken in connection with the settlement of an enforcement

action, United States v. Dynegy Zimmer, LLC, taken on behalf of the U.S. Environmental Protection Agency under the Clean Air Act."

- 70. For federal income tax purposes, Dynegy Zimmer agrees that it will neither capitalize into inventory or basis nor deduct any costs or expenditures incurred in performing the SEP.
  - 71. [Reserved]

# VIII. <u>ENVIRONMENTAL MITIGATION PROJECT</u>

- 72. Dynegy Zimmer shall implement an Environmental Mitigation Project (Mitigation Project) to replace three older school buses operating within the area around the Zimmer station with lower emitting buses as described in Appendix A to this Consent Decree and in compliance with the approved plans and schedules for such Mitigation Project and other terms of this Consent Decree.
- 73. Dynegy Zimmer shall maintain, and present to EPA upon request, all documents reasonably necessary to substantiate the completion of the Mitigation Project described in Appendix A and shall provide these documents to EPA within thirty (30) Days following a request for the documents.
- 74. All reports prepared by Dynegy Zimmer pursuant to the requirements of this Section of the Consent Decree and required to be submitted to EPA shall be publicly available from Dynegy Zimmer without charge in paper or electronic format.
- 75. Dynegy Zimmer shall certify, as part of each report submitted to EPA for the Project,
- a. That, as of the date of executing this Decree, Defendant is not required to perform or develop the Mitigation Project by any federal, state, or local law or regulation and is

not required to perform or develop the Mitigation Project by agreement, grant, or as injunctive relief awarded in any other action in any forum;

- b. That the Mitigation Project is not a project that Defendant was planning or intending to construct, perform, or implement other than in settlement of the claims resolved in this Decree;
- c. That Defendant has not received and will not receive credit for the
   Mitigation Project in any other enforcement action; and
- d. That Defendant shall not use any pollutant reductions from the Mitigation Project as netting reductions, pollutant offsets, or to apply for, obtain, trade, or sell any pollutant reduction credits.
- 76. Dynegy Zimmer shall use good faith efforts to secure as much environmental benefit as possible for the implemented Mitigation Project, consistent with the applicable requirements and limits of this Consent Decree.
- 77. Dynegy Zimmer shall comply with the reporting requirements described in Appendix A.
- 78. Beginning with the first semi-annual report due under Paragraph 90, and continuing until completion of the Mitigation Project (including any applicable periods of demonstration or testing), Dynegy Zimmer shall provide EPA with semi-annual updates concerning the progress of the Mitigation Project.
- 79. In the semi-annual report following the completion of the Mitigation Project required under this Consent Decree (including any applicable periods of demonstration or testing), Dynegy Zimmer shall submit to EPA a report that documents the date that the

Mitigation Project was completed, and Dynegy Zimmer's results from implementing the Mitigation Project, including the emission reductions or other environmental benefits achieved.

# IX. SURVIVAL OF CONSENT DECREE REQUIREMENTS

80. No later than one hundred and eighty (180) Days after the Effective Date, Dynegy Zimmer shall either apply for a federally enforceable permit (other than a Title V Permit) (hereinafter non-Title V permit) or a site-specific amendment to the Ohio State Implementation Plan (SIP) to require Dynegy Zimmer's compliance with the following performance, operational, maintenance, and control technology requirements established by this Consent Decree:

<b>Description of Consent Decree Provision</b>	<b>Consent Decree Paragraph Numbers</b>
Final Sulfuric Acid Emissions Rates	Paragraphs 14-39.
SO <sub>2</sub> Emissions Requirements	Paragraphs 43-50.
Prohibition on Netting Credits and Offsets	Paragraphs 56-58.

The Force Majeure and Dispute Resolution provisions of this Consent Decree (Sections XIII and XIV) shall not be included in the request for a federally enforceable non-Title V permit or request for a site-specific amendment to the Ohio SIP. For any requirement in this Consent Decree that provides for Defendant's submission of a protocol, plan, variance, report, or other document to EPA for EPA approval or comment, the permit application or rule request under this Paragraph shall propose that after Termination of the Consent Decree, the Ohio EPA shall be substituted for EPA as the receiving, reviewing, and/or approving authority.

81. Within one hundred eighty (180) Days after the: (1) issuance by a state permitting authority of a non-Title V permit in response to an application submitted pursuant to Paragraph 80 of this Consent Decree, or (2) EPA's approval of a state rule issued pursuant to an application or request submitted pursuant to Paragraph 80 of this Consent Decree, Dynegy Zimmer shall submit an application to amend any applicable Title V Permit application(s), or apply for an amendment of its current Title V Permit, to include the Consent Decree provisions

and requirements set forth in Paragraph 80 above that have been incorporated into any such non-Title V permit or state rule. The Force Majeure and Dispute Resolution provisions of this Consent Decree (Sections XIII and XIV) shall not be included in the application to amend any applicable Title V Permit.

- 82. Within thirty (30) Days of any application, request, or submission pursuant to Paragraphs 80 and 81 above, Dynegy Zimmer shall provide the United States with a copy of each application for a Title V Permit amendment, or for amendment to a Title V Permit application required by Paragraph 81 above, and any other request or application for a federally enforceable permit or SIP amendment application required by Paragraph 80 above, as well as a copy of any permit or SIP amendment proposed as a result of any such application, to allow for timely participation in any public comment opportunity. Dynegy Zimmer shall also provide to the United States a copy of any application to amend any requirement set forth in an issued Title V Permit that is based upon this Consent Decree.
- 83. Where any compliance obligation under this Section requires Dynegy Zimmer to obtain a federal, state, or local permit or approval, Dynegy Zimmer shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. Any failure to obtain a required permit is not a violation of this Decree although as provided by Paragraph 150 below, Termination of this Consent Decree cannot occur until non-Title V permit(s) (or rule amendment) and a Title V Permit(s) or amendment have been issued that contain the Decree requirements and provisions listed in Paragraph 80 above. Dynegy Zimmer may seek relief under the provisions of Section XIII (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Dynegy Zimmer has submitted timely

and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

84. Obligations that Shall Survive Consent Decree Termination. Dynegy Zimmer shall not request any deletion or substantive modification of a Consent Decree requirement or provision listed in Paragraph 80 above from or in any state-issued permit or rule amendment unless EPA has agreed in writing to such deletion or modification. This provision shall survive Termination of this Consent Decree.

### X. EPA REVIEW, COMMENT AND APPROVAL OF SUBMISSIONS

- 85. Where any provision of this Consent Decree specifically requires the submission of a plan, notification, report, procedure, protocol, or other deliverable (hereinafter referred to as a submission) by Dynegy Zimmer to be subject to EPA approval or subject to EPA comment, or where any provision of this Consent Decree specifically references this Section X, the submission shall be subject to the provisions of this Section.
- 86. For each submission subject to this Section X, Dynegy Zimmer shall submit one copy of the submission to the EPA addressee listed in Section XVIII (Notices) along with any associated data in hard-copy paper and one copy of the submission to EPA along with any underlying electronic data, documents or other information that this Decree requires accompany the submission in a widely-recognized electronic format (such as .pdf or Microsoft® Excel).

## 87. Submissions Subject to EPA Approval.

- a. Unless otherwise provided herein, for submissions subject to EPA approval, EPA may approve the submission or decline to approve it, in whole or in part, and may provide written comments.
- b. Unless otherwise provided herein, if EPA disapproves a submission, in whole or in part, it shall state in writing the basis for such disapproval.

- c. Unless otherwise provided herein, upon receiving EPA's written comments or written notice that EPA disapproves a submission, in whole or in part, Dynegy Zimmer shall have forty-five (45) Days to: (1) alter the submission consistent with EPA's written comments or notice of disapproval and provide the submission to EPA for final approval, or (2) to invoke Dispute Resolution under Section XIV.
- d. If EPA fails to approve or disapprove a submission in writing within ninety (90) Days of the submission, Dynegy Zimmer may invoke Dispute Resolution under Section XIV for EPA's failure to act on the submission.

### 88. Submissions Subject to EPA Comment.

- a. Unless otherwise provided herein, for submissions under any provision of this Consent Decree that are subject to EPA comment, EPA may provide written comments on the submission, in whole or in part, or may decline to comment. If EPA provides written comments within ninety (90) Days of receiving a submission, Dynegy Zimmer shall within forty-five (45) Days of receiving such comments either: (1) alter and implement the submission consistent with EPA's written comments and re-submit the submission to EPA, or (2) submit the matter for Dispute Resolution under Section XIV.
- b. EPA may provide written comments requiring changes to the submission after ninety (90) Days of receiving the submission in which case Dynegy Zimmer shall implement the comments within sixty (60) Days of receiving EPA's comments unless it would be unduly burdensome to do so given the degree to which Dynegy Zimmer has proceeded with implementing the submission or otherwise unreasonable. If Dynegy Zimmer determines that implementation of the written comments is unduly burdensome or otherwise unreasonable, it

may invoke Dispute Resolution under Section XIV within sixty (60) Days of receiving EPA comments.

Subject to EPA Comment or Approval. Unless otherwise provided for herein, upon receipt of EPA's final approval of, or comments on, a submission, or upon the expiration of ninety (90) Days from the date of a submission subject to EPA comment (not approval) or upon completion of any Dispute Resolution process under Section XIV regarding a submission, Dynegy Zimmer shall implement the submission in accordance with the requirements and schedule within the submission as approved by, or commented on by EPA, or as submitted if ninety (90) Days have passed since the submission with no EPA's comments received, or as altered through the Dispute Resolution process under Section XIV if invoked. Nothing herein shall prevent Dynegy Zimmer from implementing a submission earlier subject to change to incorporate EPA comments as provided for herein.

## XI. REPORTING REQUIREMENTS

90. No later than January 31 and July 31 of each calendar year, Dynegy Zimmer shall submit to EPA pursuant to Section XVIII (Notices) in both electronic and hard copy a semi-annual report which shall cover, respectively, the time periods of July 1 through December 31, and January 1 through June 30 of each calendar year. Notwithstanding the preceding sentence, Dynegy Zimmer shall submit to EPA the first semi-annual report due under this Consent Decree on or before January 31st following the end of the calendar year in which the Consent Decree becomes effective under Section XIX and the reporting period for this first semi-annual report shall include all of the calendar months after the Effective Date in that calendar year, which may be less or more than six months. Each semi-annual report shall include with respect to the reporting period:

- a. all information necessary to determine compliance with the requirements of Section V (Compliance Requirements);
- all information required by Section VII (Supplemental Environmental Project);
- c. all information required by Section VIII (Environmental Mitigation Project) and Appendix A of this Consent Decree;
- d. a description of any violation of this Consent Decree and an explanation of the violation's likely cause and of any remedial steps taken, or to be taken, to prevent or minimize such violation; and
- e. Dynegy Zimmer may incorporate by reference information previously submitted under its Title V Permit requirements, provided that Dynegy Zimmer attaches the Title V Permit report (or the pertinent portions of such report) and provides a specific reference to the provisions of the Title V Permit report that are responsive to the information required in the periodic report.
- 91. If Dynegy Zimmer violates, or has reason to believe that it may violate, any requirement of this Consent Decree, Dynegy Zimmer shall notify the United States of such violation and its likely duration, in writing, within ten (10) Days of the Day Dynegy Zimmer first became aware, or through due diligence should have become aware, of the violation, with an explanation of the violation's likely cause and of any remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, Dynegy Zimmer shall so state in the report. In such case, Dynegy Zimmer shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within thirty (30) Days of the Day

Dynegy Zimmer became aware, or through due diligence should have become aware, of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves Dynegy Zimmer of its obligation to provide the notice required by Section XIII (Force Majeure).

- 92. Whenever any violation of this Consent Decree or of any requirement in 40 C.F.R. Parts 60, 61, or 63, or any permit issued by EPA or a state or local agency under the CAA or OAC Chapter 3745, may reasonably pose an immediate threat to the public health or welfare or the environment, Dynegy Zimmer shall notify EPA orally or by electronic or facsimile transmission as soon as possible, but no later than twenty-four (24) hours after Dynegy Zimmer first knew, or through due diligence should have known, of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.
- 93. All reports required by this Section of the Decree shall be submitted to the persons designated in Section XVIII (Notices).
- 94. Each report submitted by Dynegy Zimmer under this Section shall be signed by a Dynegy Zimmer official and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

95. This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

- 96. The reporting requirements of this Consent Decree do not relieve Dynegy Zimmer of any reporting obligations required by the CAA or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.
- 97. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

# XII. STIPULATED PENALTIES

- 98. Dynegy Zimmer shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, unless excused under Section XIII (Force Majeure) and subject to Section XIV (Dispute Resolution). A violation includes failing to perform any obligation required by the terms of this Decree, including any obligation in or requirement of a plan or schedule approved (or incorporating EPA comments) under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.
- 99. For any failure by Dynegy Zimmer to comply with the terms of this Consent Decree, and subject to the provisions of Sections XIII (Force Majeure) and XIV (Dispute Resolution), Dynegy Zimmer shall pay the following stipulated penalties to the United States.

<b>Consent Decree Violation</b>	Period of Delay or Non- Compliance Per Violation	Penalty Per Violation Per Day
a. Failure to pay the civil penalty as specified in Section IV (Civil Penalty) of this Consent Decree.	Per Day Late or Unpaid	\$10,000

b. Failure to comply with the Final Sulfuric Acid Emission Rate set forth in Paragraph 14 of this Consent Decree. For clarity, only one penalty shall accrue per Day per violation even when there are multiple hours in each applicable averaging period or multiple applicable averaging or block periods in the Day on which the violation occurred.	Per Day	\$3,000
c. Failure to comply with any other requirement pertaining to sulfuric acid	Days 1-10	\$1,000
emissions set forth in Paragraphs 14 through 39 of this Consent Decree. For	Days 11-30	\$2,000
clarity, only one penalty shall accrue per Day per violation even when there are multiple hours in each applicable averaging period or multiple applicable averaging or block periods in the Day on which the violation occurred.	Days 31 and beyond	\$5,000
d. Failure to comply with the opacity limit set forth in Paragraph 40 of this Consent Decree.	Per Day for emissions less than 10% in excess of the limit.	\$1,000
	Per Day for emissions equal to or greater 20% in excess of the limit.	\$3,000
e. Failure to comply with opacity observation requirements set forth in	Days 1-10	\$1,000
Paragraph 41 of this Consent Decree.	Days 11-30	\$2,000
	Days 31 and beyond	\$4,000
f. Failure to comply with the SO <sub>2</sub> Emissions Rate set forth in Paragraph 42 of this Consent Decree provided that stipulated penalties for such violation shall accrue and be due only where such violation is proven by a stack test conducted in accordance with EPA Method 6 (40 C.F.R. Part 60, Appendix A, Method 6). In such case, however, the United States expressly	Per Day for emissions less than 5% in excess of the limit set forth in Paragraph 42 of this Consent Decree	\$2,500
	Per Day for emissions equal to or greater than 5% but less than 10% in excess of the limit set forth in Paragraph 42 of this Consent Decree	\$5,000

reserves its right to bring a new civil action for exceedance of the SO <sub>2</sub> emissions limit based on other credible evidence and Dynegy Zimmer reserves the right to assert inapplicability of the Credible Evidence Rule and other defenses.	Per Day for emissions equal to or greater 10% in excess of the limit set forth in Paragraph 42 of this Consent Decree	\$10,000
g. Failure to comply with any other SO <sub>2</sub> emissions requirements set forth in Paragraphs 43 through 50 of this Consent Decree.	Days 1-10	\$1,000
	Days 11-30	\$2,000
	Days 31 and beyond	\$5,000
h. Failure to Energize all ESP fields as required by Paragraph 51 of this Consent Decree.	Days 1-10	\$1,000
	Days 11-30	\$2,000
	Days 31 and beyond	\$5,000
i. Failure to comply with the PM Emissions Rate set forth in Paragraph 52 of this Consent Decree. For clarity, only one penalty shall accrue per Day per violation even when there are multiple hours in an applicable averaging period or multiple applicable averaging or block periods in the Day on which the violation occurred.	Per Day for emissions less than 5% in excess of the limit set forth in Paragraph 52 of this Consent Decree	\$2,500
	Per Day for emissions equal to or greater than 5% but less than 10% in excess of the limit set forth in Paragraph 52 of this Consent Decree	\$5,000
	Per Day for emissions equal to or greater 10% in excess of the limit set forth in Paragraph 52 of this Consent Decree	\$10,000
j. Failure to comply with the PM stack testing and CEMS requirements as set forth in Paragraphs 53-55 of this Consent Decree.	Days 1-10	\$1,000
	Days 11-30	\$2,000
	Days 31 and beyond	\$5,000
k. Failure to undertake and complete the SEP in accordance with Section VII of this Consent Decree.	Days 1-30	\$1,000
	Days 31 and beyond	\$5,000

1. Failure to undertake and complete the Mitigation Project in accordance	Days 1-10	\$1,000
with Paragraphs 72 through 79 and Appendix A of this Consent Decree.	Days 11-30	\$2,000
Appendix II of this consent Beeree.	Days 31 and beyond	\$5,000
m. Failure to comply with any other requirement of this Consent Decree not enumerated in Paragraph 99.a-l above.	Per Day	\$1,000

- 100. Except as provided in Paragraph 103 below, stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.
- 101. Subject to the Dispute Resolution provisions of this Consent Decree, Dynegy Zimmer shall pay any stipulated penalty within thirty (30) Days of receiving the United States' written demand.
- 102. The United States may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due to it under this Consent Decree.
- 103. Stipulated penalties shall continue to accrue as provided in Paragraph 100 above, during any Dispute Resolution, but need not be paid until the following:
- a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to the Court, Dynegy Zimmer shall pay accrued penalties determined to be owing, together with Interest, to the United States within thirty (30) Days of the Effective Date of the agreement or the receipt of EPA's decision or order.
- b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Dynegy Zimmer shall pay all accrued penalties determined by the Court to be

owing, together with Interest, within sixty (60) Days of receiving the Court's decision or order, except as provided in Paragraph 103.c below.

- c. If any Party appeals the District Court's decision, Dynegy Zimmer shall pay all accrued penalties determined to be owing, together with Interest, within fifteen (15) Days of receiving the final appellate court decision.
- 104. Obligations Prior to the Effective Date. Upon the Effective Date, the stipulated penalty provisions of this Decree shall be retroactively enforceable with regard to any and all violations of Paragraphs 14 through 39, and 43 through 55 of this Decree that have occurred prior to the Effective Date. Stipulated penalties for pre-entry violations shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases, but are not required to be paid until thirty (30) Days after the Effective Date or thirty (30) Days after the date of a written demand for such penalties, whichever is later, and no Interest on such penalties shall begin to accrue until that date such penalties are required to be paid.
- 105. Dynegy Zimmer shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 10, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.
- 106. If Dynegy Zimmer fails to pay stipulated penalties according to the terms of this Consent Decree, Dynegy Zimmer shall be liable for Interest on such penalties accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from seeking any remedy otherwise provided by law for Dynegy Zimmer's failure to pay any stipulated penalties.

- 107. The payment of penalties and Interest, if any, shall not alter in any way Dynegy Zimmer's obligation to complete the performance of the requirements of this Consent Decree.
- 208. Non-Exclusivity of Remedy. Stipulated penalties are not the United States' exclusive remedy for violations of this Consent Decree. Subject to the provisions of Section XVI (Effect of Settlement/Reservation of Rights), the United States expressly reserves the right to seek any other relief it deems appropriate for Dynegy Zimmer's violation of this Decree or applicable law, including but not limited to an action against Dynegy Zimmer for statutory penalties, additional injunctive relief, mitigation or offset measures, and/or contempt. However, Dynegy Zimmer expressly reserves the right to contest any such action by the United States, to assert any and all defenses to such an action, and to oppose statutory penalties, additional injunctive relief, mitigation or offset measures, contempt and/or any other relief beyond that expressly provided in this Consent Decree. The amount of any statutory penalty assessed for a violation of a statute or regulation that is also a violation of this Consent Decree shall be reduced by an amount equal to the amount of any stipulated penalty assessed and paid pursuant to this Consent Decree.

## XIII. FORCE MAJEURE

event arising from causes beyond the control of Dynegy Zimmer, of any entity controlled by Dynegy Zimmer, or of Dynegy Zimmer's contractors that delays or prevents the performance of any obligation under this Consent Decree despite Dynegy Zimmer's best efforts to fulfill the obligation. The requirement that Dynegy Zimmer exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential Force Majeure Event and best efforts to address the effects of any potential Force Majeure Event (1) as it is occurring, and (2) following the event, such that the compliance delay and any adverse effects of the compliance delay or

violation are minimized. "Force Majeure Event" does not include Dynegy Zimmer's financial inability to perform any obligation under this Consent Decree.

110. If any event occurs or has occurred that may delay compliance with or otherwise causes or may cause a violation of this Consent Decree as to which Dynegy Zimmer may assert a claim of Force Majeure Event, Dynegy Zimmer shall provide notice orally or by email to EPA, within four (4) Days of when Dynegy Zimmer first knew that the event caused or may cause a compliance delay or violation of the Consent Decree. Within fourteen (14) Days thereafter, Dynegy Zimmer shall provide in writing to EPA an explanation and description of the reasons for the compliance delay or violation; the anticipated duration of the compliance delay or violation; all actions taken or to be taken to prevent or minimize the compliance delay or violation; a schedule for implementation of any measures to be taken to prevent or mitigate the compliance delay or violation, or the effect of the compliance delay or violation; Dynegy Zimmer's rationale for attributing such compliance delay or violation to a Force Majeure Event; and a statement as to whether, in the opinion of Dynegy Zimmer, such event may cause or contribute to an endangerment to public health, welfare, or the environment. Dynegy Zimmer shall include with any notice all available documentation supporting the claim that the compliance delay or violation was attributable to a Force Majeure Event. Failure to comply with the above requirements shall preclude Dynegy Zimmer from asserting any claim of force majeure for that event for the period of time of such delay or failure to comply, and for any additional compliance delay or violation caused by such failure. Dynegy Zimmer shall be deemed to know of any circumstance of which any entity controlled by Dynegy Zimmer, or Dynegy Zimmer's contractors, knew or should have known.

- violation is attributable to a Force Majeure Event, the time for performance of the obligations under this Consent Decree that are affected by the Force Majeure Event will be extended by EPA for such time as is necessary to complete those obligations or to come into compliance. An extension of the time for performance of the obligations affected by the Force Majeure Event shall not, of itself, extend the time for performance of any other obligation. EPA will notify Dynegy Zimmer in writing of the length of the extension, if any, for performance of the obligations affected by the Force Majeure Event.
- 112. If EPA does not agree that the compliance delay or anticipated compliance delay or violation has been or will be caused by a Force Majeure Event, EPA will notify Dynegy Zimmer in writing of its decision.
- 113. If Dynegy Zimmer elects to invoke the Dispute Resolution procedures set forth in Section XIV, it shall do so no later than fifteen (15) Days after receipt of EPA's notice under Paragraphs 111 or 112 above. In any such proceeding, Dynegy Zimmer shall have the burden of demonstrating by a preponderance of the evidence that the compliance delay or anticipated compliance delay or violation has been or will be caused by a Force Majeure Event, that the duration of any compliance delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the compliance delay or violation, and that Dynegy Zimmer complied with the requirements of Paragraphs 109-110. If Dynegy Zimmer carries this burden, the compliance delay at issue or other violation shall be deemed not to be a violation by Dynegy Zimmer of the affected obligation of this Consent Decree identified to EPA and the Court.

#### XIV. DISPUTE RESOLUTION

- 114. Unless otherwise expressly provided for in this Consent Decree, the Dispute Resolution procedures of this Section shall be the exclusive mechanism for Dynegy Zimmer to resolve disputes arising under or with respect to this Consent Decree. Dynegy Zimmer's failure to seek resolution of a dispute under this Section shall preclude Dynegy Zimmer from raising any such issue as a defense to an action by the United States to enforce any obligation of Dynegy Zimmer arising under this Decree.
- 115. <u>Informal Dispute Resolution</u>. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Dynegy Zimmer sends the United States a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed twenty (20) Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within thirty (30) Days after the conclusion of the informal negotiation period, Dynegy Zimmer invokes formal Dispute Resolution procedures as set forth below.
- Resolution procedures, within the time period provided in the preceding Paragraph 115, by serving on the United States a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Dynegy Zimmer's position and any supporting documentation relied upon by Dynegy Zimmer.
- 117. The United States shall serve its Statement of Position within forty-five (45) Days of receipt of Dynegy Zimmer's Statement of Position. The United States' Statement of Position

shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position shall be binding on Dynegy Zimmer, unless Dynegy Zimmer files a motion for judicial review of the dispute in accordance with the following Paragraph 118.

- Dynegy Zimmer may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XVIII (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within thirty (30) Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph unless that deadline is extended by agreement of the Parties. The motion shall contain a written statement of Dynegy Zimmer's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.
- 119. The United States shall respond to Dynegy Zimmer's motion within the time period allowed by the Local Rules of this Court. Dynegy Zimmer may file a reply memorandum, to the extent permitted by the Local Rules.

#### 120. Standard of Review.

a. <u>Disputes Concerning Matters Accorded Record Review.</u> Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 118 above pertaining to a matter that involves EPA's exercise of discretion under this Consent Decree, Dynegy Zimmer shall have the burden of proof based on the administrative record (including the Parties' Statements of Position) and the applicable standard of review as set forth in the Administrative Procedure Act, 5 U.S.C. § 500 et seq.

- b. <u>Other Disputes</u>. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 118 above, Dynegy Zimmer shall bear the burden of demonstrating that its position complies with this Consent Decree.
- 121. The invocation of Dispute Resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Dynegy Zimmer under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance as provided in Paragraph 100 above, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 103. If Dynegy Zimmer does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XII (Stipulated Penalties).

### XV. INFORMATION COLLECTION AND RETENTION

- 122. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into any facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:
  - a. monitor the progress of activities required under this Consent Decree;
- b. verify any data or information submitted to the United States in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by Dynegy Zimmer or its representatives, contractors, or consultants pursuant to this Consent Decree;
- d. obtain documentary evidence, including photographs and similar data related to compliance with this Consent Decree; and
  - e. assess Dynegy Zimmer's compliance with this Consent Decree.
- 123. Upon request by EPA prior to sampling, Dynegy Zimmer shall provide EPA or its authorized representative's splits of any samples, as applicable, taken by Dynegy Zimmer

pursuant to this Consent Decree. Upon request prior to sampling, EPA shall provide Dynegy Zimmer splits of any samples, as applicable, taken by EPA related to this Consent Decree.

- 124. Until five years after Termination of this Consent Decree, Dynegy Zimmer shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that substantially relate to Dynegy Zimmer's performance of its obligations under this Consent Decree. This information retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States, Dynegy Zimmer shall provide copies of any documents, records, or other information required to be maintained under this Paragraph, subject to Paragraph 126 below, including privilege claims.
- 125. At the conclusion of the information-retention period provided in the preceding Paragraph 124, Dynegy Zimmer shall notify the United States at least ninety (90) Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States, Dynegy Zimmer shall deliver any such documents, records, or other information to EPA.
- 126. Dynegy Zimmer may withhold documents, records, or other information that are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Dynegy Zimmer asserts such a privilege in response to a request for such information or documents, it shall provide the following information to the United States: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the

name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Dynegy Zimmer. However, no documents, records, or other information created or generated to satisfy the requirements of this Consent Decree shall be withheld on grounds of privilege.

- 127. Dynegy Zimmer may also assert that information required to be provided under this Consent Decree is protected as Confidential Business Information (CBI) under 40 C.F.R. Part 2. As to any information that Dynegy Zimmer seeks to protect as CBI, Dynegy Zimmer shall follow the procedures set forth in 40 C.F.R. Part 2.
- 128. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal laws, regulations, or permits, nor does it limit or affect any duty or obligation of Dynegy Zimmer to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

#### XVI. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

29. This Consent Decree resolves the civil claims of the United States against Dynegy Zimmer for: (1) the violations alleged in the Complaint filed in this action occurring through the Date of Lodging, and (2) for the following violations asserted in the March 10, 2008, November 4, 2010 and December 16, 2014 Notices of Violation (NOV) including such violations that have continued through the Date of Lodging: (a) all violations asserted in the December 16, 2014 NOV; (b) violations that occurred at Unit 1 (Boiler 006) asserted in Paragraphs 26-31, 33 and 35 of the November 4, 2010 NOV; and (c) all violations asserted in Paragraphs 2-4 of the March 10, 2008 NOV. Dynegy Zimmer does not admit any factual or

legal assertion set forth in any of the NOVs, whether asserted in one of the NOV paragraphs listed here or not.

- 130. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree. Except as specified in Paragraph 129 above, this Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the CAA or implementing regulations, or under other federal or federally-enforceable laws, regulations, or permit conditions. The United States further reserves all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, the Zimmer Station, whether related to the violations addressed in this Consent Decree or otherwise.
- 131. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, or other appropriate relief relating to the Zimmer Station, Dynegy Zimmer shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 129 above.
- 132. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Dynegy Zimmer is responsible for achieving and maintaining complete compliance with this Consent Decree and such compliance shall be no defense to any action commenced pursuant to any federal, State or local laws, regulations, or permits, except as set forth herein. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that Dynegy Zimmer's compliance with any

aspect of this Consent Decree will result in compliance with provisions of the CAA, or with any other provisions of federal, State, or local laws, regulations, or permits.

- 133. This Consent Decree does not limit or affect the rights of Dynegy Zimmer or of the United States against any third parties, not party to this Consent Decree, nor does it limit or expand the rights of third parties, not party to this Consent Decree, against Dynegy Zimmer, except as otherwise provided by law.
- 134. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

#### XVII. COSTS

135. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Dynegy Zimmer.

#### XVIII. NOTICES

- 136. Each report, study, notification, or other communications between Parties to this Consent Decree shall be submitted as specified in this Paragraph and Paragraphs 137 through 141 below.
- 137. The Parties shall submit reports, notifications, certifications, or other communications required by this Consent Decree by U.S. mail, postage pre-paid, overnight delivery service or, if an email address is provided below, by electronic mail (except that submission of a permit application required by this Consent Decree, payment of penalties under Sections IV or XII (Civil Penalty and Stipulated Penalties), and notices under Sections XIII or XIV (Force Majeure and Dispute Resolution) shall be sent by U.S. mail or overnight delivery

service). Where Parties initially email a submission, they shall provide hard copies via U.S. mail or overnight delivery upon request.

- 138. Submissions shall be deemed to have been submitted on the Day they are sent.
- 139. Where this Consent Decree requires that notices and submissions are to be made to the "United States" they shall be made to the U.S. Department of Justice and the EPA Region 5 at the addresses set forth below. Where this Consent Decree requires that notices and submissions are to be made to "EPA," Dynegy Zimmer need not send copies to the U.S. Department of Justice.
- 140. Submissions shall be made to the following Party representatives at the following addresses:

#### As to the United States:

Environment and Natural Resources Division U.S. Department of Justice P.O. Box 7611 Washington, D.C. 20044-7611 eescdcopy.enrd@usdoj.gov Re: DJ # 90-5-2-1-11425

Attn: Compliance Tracker, AE-18J
Air Enforcement and Compliance Assurance Branch
U.S. Environmental Protection Agency
Region 5
77 W. Jackson Blvd.
Chicago, Illinois 60604
Empily 75 piron forcement @ ang gay.

Email: r5 airen forcement@epa.gov

Documents shall be submitted to EPA in both hard copy and electronically to the email above, unless an alternative process is requested by EPA

### As to Dynegy Zimmer:

Stephanie Moore Executive Vice President & General Counsel Dynegy Zimmer, LLC 6555 Sierra Drive Irving, TX 75039

Email: Stephanie.Moore@vistraenergy.com

141. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

## XIX. <u>EFFECTIVE DATE</u>

142. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket; provided, however, that Dynegy Zimmer hereby agrees that it shall be bound to perform duties and take actions prior to the Effective Date where so required by certain provisions of this Consent Decree prior to the Effective Date. In the event the United States withdraws or withholds consent to this Consent Decree before the Effective Date, or the Court declines to enter the Consent Decree, then any preceding requirement to perform duties required before the Effective Date shall terminate.

# XX. <u>RETENTION OF JURISDICTION</u>

143. The Court shall retain jurisdiction over this case until Termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XIV and XXI (Dispute Resolution and Modification), or effectuating or enforcing compliance with the terms of this Decree.

#### XXI. MODIFICATION

144. The terms of this Consent Decree, including any Appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court. Revision of the applicable dew point acid temperatures and the Reagent Injection

Compliance Curve, Table 1 in Appendix B, pursuant to Paragraphs 28 and 30 above do not constitute modifications of this Consent Decree subject to this Paragraph.

145. Any disputes concerning modification of this Decree shall be resolved pursuant to Section XIV (Dispute Resolution), provided however, that instead of the standard of review provided by Paragraph 120, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

### XXII. SALES AND TRANSFERS OF THE ZIMMER STATION

- 146. If Dynegy Zimmer proposes after the Date of Lodging to sell or transfer an Operational or Ownership Interest in the Zimmer Station to another unrelated entity (Third Party Purchaser), Dynegy Zimmer shall advise the Third Party Purchaser in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the United States pursuant to Section XVIII (Notices) of this Consent Decree at least sixty (60) Days before such proposed sale or transfer is to occur.
- 147. No such sale or transfer of an Operational or Ownership Interest in the Zimmer Station shall take place before the Third Party Purchaser and the United States have executed, and the Court has approved, a modification pursuant to Section XXI (Modification) of this Consent Decree making the Third Party Purchaser a party to this Consent Decree and jointly and severally liable with Dynegy Zimmer for all the requirements of this Consent Decree that may be applicable to the transferred or purchased Operational or Ownership Interests.
- 148. This Consent Decree shall not be construed to impede the transfer of any
  Operational or Ownership Interests in the Zimmer Station between Dynegy Zimmer and any
  Third Party Purchaser so long as the requirements of this Consent Decree are met. This Consent
  Decree shall not be construed to prohibit a contractual allocation as between Dynegy Zimmer

and any Third Party Purchaser of Operational or Ownership Interests – of the burdens of compliance with this Consent Decree, provided that Dynegy Zimmer remains, and such Third Party Purchaser becomes, jointly and severally liable to the United States for the obligations of this Consent Decree applicable to the transferred or purchased Operational or Ownership Interests in the Zimmer Station.

Party Purchaser that has become a party to this Consent Decree pursuant to Paragraph 147, may execute a modification that relieves Dynegy Zimmer of its liability under this Consent Decree for, and makes the Third Party Purchaser liable for, all obligations and liabilities applicable to the purchased or transferred Operational or Ownership Interests in the Zimmer Station.

Notwithstanding the foregoing, however, Dynegy Zimmer may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Operational or Ownership Interests, including the obligations set forth in Sections IV (Civil Penalty), VIII (Environmental Mitigation Project) and XII (Stipulated Penalties). Dynegy Zimmer may propose and the United States may agree to restrict the scope of the joint and several liability of any purchaser or transferee for any obligations of this Consent Decree that are not specific to the transferred or purchased Operational or Ownership Interests, to the extent such obligations may be adequately separated in an enforceable manner.

#### XXIII. TERMINATION

- 150. This Consent Decree may be terminated when all of the following conditions have been satisfied:
- a. Dynegy Zimmer has maintained satisfactory compliance with all requirements of Section V (Compliance Requirements) for a period of 24 months;

- b. Dynegy Zimmer has completed the requirements of Section VII
   (Supplemental Environmental Project) and Section VIII (Environmental Mitigation Project); and
- c. The requirements and limitations enumerated in Paragraph 80 of this Consent Decree have been incorporated into a federally-enforceable non-Title V permit or rule and Title V Permit(s), as required by Section IX (Survival of Consent Decree Requirements) of this Consent Decree to ensure that such requirements and limitations become and remain "applicable requirements" as that term is defined in 40 C.F.R. Part 70.2; and
- d. Dynegy Zimmer has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree.
- 151. When all of the conditions set forth in Paragraph 150.a-d above have been satisfied, Dynegy Zimmer may serve upon the United States a Request for Termination, stating that Dynegy Zimmer has satisfied those requirements, together with all necessary supporting documentation.
- 152. Following receipt by the United States of Dynegy Zimmer's Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether Dynegy Zimmer has satisfactorily complied with the requirements for Termination of this Consent Decree. If the United States agrees that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.
- 153. If the United States does not agree that the Decree may be terminated, then Dynegy Zimmer may invoke Dispute Resolution under Section XIV. However, Dynegy Zimmer shall not seek Dispute Resolution of any dispute regarding Termination until ninety (90) Days after service of its Request for Termination.

### XXIV. <u>PUBLIC PARTICIPATION</u>

154. This Consent Decree shall be lodged with the Court for a period of not less than thirty (30) Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Dynegy Zimmer consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Dynegy Zimmer in writing that it no longer supports entry of the Decree. This Decree may not be revised prior to entry, including in response to any public comments, without Dynegy Zimmer's written consent.

## XXV. <u>SIGNATORIES/SERVICE</u>

- 155. Each undersigned representative of Dynegy Zimmer and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.
- 156. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Dynegy Zimmer agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

#### XXVI. <u>INTEGRATION</u>

157. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and

supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Consent Decree.

#### XXVII. APPENDICES

158. The following Appendices are attached to and part of this Consent Decree:

"Appendix A" is the Environmental Mitigation Project; and

"Appendix B" is the Reagent Injection Compliance Curve.

## XXVIII. <u>26 U.S.C. § 162(f)(2)(A)(ii) IDENTIFICATION</u>

159. Solely for purposes of the identification requirement of Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), performance of Section II

(Applicability) Paragraph 6, Section V (Compliance Requirements) Paragraphs 13-55 and related Appendix B, Section VIII (Environmental Mitigation Project) Paragraphs 72-79 and related Appendix A, Section IX (Survival of Consent Decree Requirements) Paragraphs 80-83, Section XI (Reporting Requirements) 90-91, except with respect to the SEP, and Section XV (Information Collection and Retention) Paragraphs 122-125, is restitution or required to come into compliance with law.

#### XXIX. FINAL JUDGMENT

160. Upon approval and entry of this Consent Decree by the Court, this Consent

Decree shall constitute a final judgment of the Court as to the United States and Dynegy

Zimmer. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

Dated and entered this	day of	, 2020
		_
UNITED STATES DIS'	TRICT JUDGE	_

The Undersigned Party enters into this Consent Decree under the Clean Air Act.

FOR THE UNITED STATES OF AMERICA:

Date:

BRUCE S. GELBER

Deputy Assistant Attorney General

KAREN S. DWORKIN

Deputy Section Chief

**Environmental Enforcement Section** 

Environment and Natural Resources Division

U.S. Department of Justice

ELIZABETH L. LOEB

Senior Attorney

**Environmental Enforcement Section** 

**Environment and Natural Resources** 

Division

P.O. Box 7611

Washington, D.C. 20044-7611

(202) 616-8916

DAVID M. DEVILLERS

United States Attorney

s/ Matthew J. Horwitz

MATTHEW J. HORWITZ (0082381)

Assistant United States Attorney

Attorney for Defendant

221 East Fourth Street, Suite 400

Cincinnati, Ohio 45202

Office: (513) 684-3711

Fax: (513) 684-6972

E-mail: Matthew.Horwitz@usdoj.gov

The Undersigned Party enters into this Consent Decree under the Clean Air Act.

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

Date:

T. LEVERETT NELSON

Regional Counsel

U.S. Environmental Protection Agency, Region 5

SABRINA ARGENTIERI

Assistant Regional Counsel

U.S. Environmental Protection Agency, Region 5

Office of Regional Counsel

The Undersigned Party enters into this Consent Decree under the Clean Air Act.

FOR DEFENDANT DYNEGY ZIMMER, LLC

Date: 1/28/20

STEPHANIE MOORE

Executive Vice President & General Counsel

Dynegy Zimmer, LLC 6555 Sierra Drive Irving, TX 75039

# APPENDIX A

#### APPENDIX A

#### ENVIRONMENTAL MITIGATION PROJECT

Defendant shall complete the following environmental mitigation project in accordance with the requirements of this Appendix and with Section VIII of this Consent Decree (the "Project") to secure the associated environmental air quality benefits.

## I. Overall Schedule and General Requirements

- A. Pursuant to Paragraphs 72-79 of the Consent Decree, Defendant shall implement the following Project in accordance with this Appendix:
  - A school bus replacement project set forth in Section II below.
- B. Within one hundred twenty (120) Days of the Effective Date, unless otherwise specified by this Appendix, Defendant shall submit a proposed plan for the Project ("Project Plan") to EPA for approval describing how the Defendant plans to meet the requirements of Section VIII of the Consent Decree and this Appendix with respect to the Project.
- C. The proposed Project Plan shall include the following:
  - 1. An implementation plan and detailed description of the Project.
  - 2. A summary-level budget for the Project.
  - 3. A time line for implementation of the Project.
  - 4. A description of the anticipated environmental benefits of the Project including an estimate of any emission reductions (e.g., SO<sub>2</sub>, NO<sub>x</sub>, PM, mercury, CO<sub>2</sub>) expected to be realized.
- D. Upon Defendant's receipt of EPA's written approval of the submitted Project Plan, Defendant shall complete the approved Project according to the approved Project Plan within the time specified in Section II.F below.
- E. Commencing with its first semi-annual report due pursuant to Section XI (Reporting Requirements) of the Consent Decree, and continuing annually thereafter until completion of the Project, Defendant shall include in the semi-annual reports a progress report, describing the progress of the Project to date.
- F. In accordance with the requirements of Paragraph 79 of the Consent Decree, in the next semi-annual report following the completion of the Project required by this Appendix, Defendant shall submit to the United States for review and approval, a report that documents:
  - 1. The date the Project was completed.

United States v. Dynegy Zimmer, LLC Consent Decree Appendix A

- 2. The results of implementation of the Project, including the estimated emission reductions or other environmental benefits achieved and milestones completed (e.g. school buses replaced).
- 3. The costs incurred by Defendant in implementing the Project.

## II. School Bus Replacement Project

- A. Defendant shall replace no less than three older public school buses ("Eligible School Buses") with new, cleaner burning, more energy-efficient buses ("New School Buses"). Defendant shall ensure that both the engine and chassis of the replaced Eligible School Buses are fully scrapped and removed from service in accordance with the procedures outlined below in Section II.E. The Project will reduce the emissions of particulate matter in the area impacted by alleged excess H<sub>2</sub>SO<sub>4</sub> emissions from the Zimmer Station. H<sub>2</sub>SO<sub>4</sub> is a particulate.
- B. To be eligible to participate in the school bus replacement project, the participant school district must own the older school bus(es) that will be replaced as part of this Project, subject to the following exceptions:
  - 1. Public school districts may replace state-owned buses as long as they receive an authorized letter from the state agency that owns the buses;

and

- 2. Buses owned by Federal agencies are not eligible.
- C. An Eligible School Bus is a bus that satisfies all of the following criteria
  - 1. Is primarily used for the purpose of transporting 10 or more pre-primary, primary, or secondary school students to schools or homes;
  - 2. Is rated Class 3-8, as defined by the Department of Transportation's vehicle service classifications;
  - 3. Has a Gross Vehicle Weight Rating (GVWR) of 10,001 lbs. or above;
  - 4. Has accumulated at least 10,000 or more miles transporting students over the most recent twelve (12) months, or have been in use for at least three days per week transporting students during the current school year;
  - 5. Is operated within 25 miles of Defendant's facility;
  - 6. Has a diesel-powered engine with a model year of 2006 or older; and

- 7. Is able to start, move in all directions and have all operational parts.
- D. For a replacement to be considered eligible, the New School Bus must:
  - 1. Be model year 2019 or later;
  - 2. Operate in the same manner and over similar routes as the Eligible School Bus it is replacing; and
  - 3. Meet Federal safety standards and required warranties.
- E. Scrappage: Each bus being replaced must be scrapped or rendered permanently disabled prior to the selectee submitting the payment request to EPA. Scrappage may be completed by Defendant, the school participant or by a salvage yard, or similar service, provided all scrappage requirements are met and all necessary documentation is provided. The bus being replaced must be scrapped and permanently disabled by:
  - 1. Drilling a three-inch by three-inch hole completely through the engine block; and
  - 2. Cutting the chassis rail in half.

Proof of scrappage must be provided with the final Project report under Section I.F of this Appendix. Scrappage documentation must include JPEG images of the following: Side profile of the bus; Vehicle Identification Number (VIN) label; Engine plate showing the EPA engine family name; Chassis rail cut in half; Engine block, prior to hole being drilled; Engine block after hole has been drilled.

Defendant or the school participant must also provide a letter on their letterhead or the letterhead of the salvage yard that performed the service confirming the scrappage requirements have been met. The letter must be signed by the salvage yard that performed the service, if any. The letter must include:

- 1. The date the buses were scrapped;
- 2. A listing of the buses with engine model year and VIN; and
- 3. The name and contact information for the entity that scrapped the buses

Equipment and vehicle components that are not part of the engine or chassis may be salvaged from the bus being replaced (e.g., seats, tires, etc.). The engine and chassis may be sold for scrap metal, provided that the bus is disposed of in accordance with federal and state requirements for vehicle disposal.

F. Completion Date: Defendant shall complete the Project within eighteen (18) months after receipt of EPA's written approval of the Project Plan pursuant to Section I.D of this Appendix, except that Defendant may request an extension of time to complete the Project if it appears likely that all Project Dollars will not be spent within such 18-month period despite Defendant's best efforts to implement the Project within such period.

## APPENDIX B

## APPENDIX B—REAGENT INJECTION COMPLIANCE CURVE

<u>Table 1 (Final Sulfuric Acid Emissions Rate = 0.010 lbs/mmBTU; Consent Decree</u>

<u>Paragraph 17.b)</u>

Unit Generation	Reagent Injection Rate (lbs/hr)		
Output	(1-hour average)*		
(Gross MW)	Pre-APH		Pre-SCR
From – To		R	or Combination Pre-SCR & Pre-APH
0 - 800	0		0
801 - 850	570		464
851 - 900	1,062		898
901 - 950	1,418		1,256
951 - 1,000	1,669		1,567
1,001 - 1,050	1,847		1,856
1,051 - 1,100	1,983		2,151
1,101 - 1,150	2,109		2,479
1,151 - 1,200	2,257		2,865
1,201 - 1,250	2,458		3,338
1,251 - 1,300	2,743		3,924
1,301 - 1,350	3,144		4,649
1,351 - 1,400	3,693		5,541

1,401 - 1,450	4,421	6,625

<sup>\*</sup> For the applicable power generation level in the "Unit Generation Output" column, either (i) the Pre-APH (air preheater) reagent injection rate must be at or above the corresponding lbs/hr value in the "Pre-APH" column, or (ii) the Pre-SCR reagent injection rate or the combined Pre-SCR and Pre-APH reagent injection rate must be at or above the corresponding lbs/hr value in the "Pre-SCR or Combination Pre-SCR & Pre-APH" column