STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Mississippi Power Company Sweatt Electric Generating Plant 5118 Valley Road Meridian, MS (Lauderdale County)

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

| Permit Issued: JUN 2 8 2010 | |
|--------------------------------------|------------------------|
| Effective Date: As specified herein. | |
| MISSISSIPPI ENVIRONMENTA | L QUALITY PERMIT BOARD |
| | |
| AUTHORIZET | |
| MISSISSIPPI DEPARTMENT OF | ENVIRONMENTAL QUALITY |
| Expires: May 31, 2015 | Permit No.: 1460-00032 |
| EXDITES: MAY 31, 4013 | 1 ci iiit 1400-0003. |

TABLE OF CONTENTS

| SECTION 1. GENERAL CONDITIONS | 3 |
|--|------------|
| SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES | 12 |
| SECTION 3. EMISSION LIMITATIONS & STANDARDS | 13 |
| SECTION 4. COMPLIANCE SCHEDULE | 16 |
| SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS. | 17 |
| SECTION 6. ALTERNATIVE OPERATING SCENARIOS | 20 |
| SECTION 7. TITLE VI REQUIREMENTS | 21 |
| SECTION 8. ACID RAIN | 2 3 |
| | |
| APPENDIX A: LIST OF ABBREVIATIONS USED IN THIS PERMIT | |

APPENDIX B: ACID RAIN PERMIT

SECTION 1. GENERAL CONDITIONS

- 1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (Ref.: APC-S-6, Section III.A.6.a.)
- 1.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (Ref.: APC-S-6, Section III.A.6.b.)
- 1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (Ref.: APC-S-6, Section III.A.6.c.)
- 1.4 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: APC-S-6, Section III.A.6.d.)
- 1.5 The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. (Ref.: APC-S-6, Section III.A.6.e.)
- 1.6 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref.: APC-S-6, Section III.A.5.)
- 1.7 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation APC-S-6.
 - (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct

measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgements where such judgements are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: APC-S-6, Section VI.A.2.)

- (b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee. (Ref.: APC-S-6, Section VI.A.2.) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time. (Ref.: APC-S-6, Section VI.D.2.)
- (c) The fee shall be due September 1 of each year. By July 1 of each year the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the DEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due. (Ref.: APC-S-6, Section VI.D.)
- (d) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition. (Ref.: APC-S-6, Section VI.C.)
- 1.8 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (Ref.: APC-S-6, Section III.A.8.)
- 1.9 Any document required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (Ref.: APC-S-6, Section II.E.)
- 1.10 The permittee shall allow the DEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- (a) enter upon the permittee's premises where a Title V source is located or emissionsrelated activity is conducted, or where records must be kept under the conditions of this permit;
- (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. (Ref.: APC-S-6, Section III.C.2.)
- 1.11 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere. (Ref.: APC-S-1, Section 3.9(a))
- 1.12 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970. (Ref.: APC-S-1, Section 3.9(b))
- 1.13 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source. (Ref.: APC-S-6, Section III.F.1.)
- 1.14 Nothing in this permit shall alter or affect the following:
 - (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
 - (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - (c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
 - (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act. (Ref.: APC-S-6, Section III.F.2.)

- 1.15 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan. (Ref.: APC-S-6, Section III.H.)
- 1.16 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application. (Ref.: APC-S-6, Section IV.C.2., Section IV.B., and Section II.A.1.c.)
- 1.17 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:
 - (a) the changes are not modifications under any provision of Title I of the Act;
 - (b) the changes do not exceed the emissions allowable under this permit;
 - (c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:
 - (1) a brief description of the change(s),
 - (2) the date on which the change will occur,
 - (3) any change in emissions, and
 - (4) any permit term or condition that is no longer applicable as a result of the change;
 - (d) the permit shield shall not apply to any Section 502(b)(10) change. (Ref.: APC-S-6, Section IV.F.)
- 1.18 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in Regulation APC-S-3, "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared. (Ref.: APC-S-3)
- 1.19 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations APC-S-2, "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require

modification of this permit in accordance with Regulations APC-S-6, "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". Modification is defined as "[a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:

- (a) routine maintenance, repair, and replacement;
- (b) use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
- (d) use of an alternative fuel or raw material by a stationary source which:
 - (1) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; or
 - (2) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;
- (e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or
- (f) any change in ownership of the stationary source."
- 1.20 Any change in ownership or operational control must be approved by the Permit Board. (Ref.: APC-S-6, Section IV.D.4.)
- 1.21 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission. (Ref.: APC-S-6, Section III.B.1)
- 1.22 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to

infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.

- (a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.
- (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.
- (c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator. (Ref.: APC-S-1, Section 3.7)
- 1.23 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies.
 - (a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 - (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.
 - (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) the permitted facility was at the time being properly operated;

- (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (4) the permittee submitted notice of the emergency to the DEQ within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein. (Ref.: APC-S-6, Section III.G.)
- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, shutdowns and maintenance.
 - (a) Upsets (as defined by APC-S-1, Section 2.34)
 - (1) The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the permittee demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (i) an upset occurred and that the permittee can identify the cause(s) of the upset;
 - (ii) the source was at the time being properly operated;
 - (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
 - (iv) the permittee submitted notice of the upset to the DEQ within 5 working days of the time the upset began; and
 - (v) the notice of the upset shall contain a description of the upset, any steps taken to mitigate emissions, and corrective actions taken.
 - (2) In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

- (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (b) Startups and Shutdowns (as defined by APC-S-1, Sections 2.31 & 2.26)
 - (1) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows:
 - (i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above;
 - (ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or
 - (iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit.
 - (2) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof.
 - (3) In the event this startup and shutdown provision conflicts with another applicable requirement, the more stringent requirement shall apply.

(c) Maintenance.

- (1) Maintenance should be performed during planned shutdown or repair of process equipment such that excess emissions are avoided. Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards, or other regulatory requirements if the permittee can demonstrate the following:
 - (i) the permittee can identify the need for the maintenance;
 - (ii) the source was at the time being properly operated;

- (iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
- (iv) the permittee submitted notice of the maintenance to the DEQ within 5 working days of the time the maintenance began or such other times as allowed by DEQ; and
- (v) the notice shall contain a description of the maintenance, any steps taken to mitigate emissions, and corrective actions taken.
- (2) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof.
- (3) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply. (Ref.: APC-S-1, Section 10)
- 1.25 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Regulation APC-S-1, Section 8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

| Emission Point | Description | | | | |
|-----------------------|--|--|--|--|--|
| AA-001A* | 625.49 MMBtu/hr Natural Gas Fired Babcock and Wilcox Utility Boiler (Unit #1) | | | | |
| AA-001B* | 625.49 MMBtu/hr Natural Gas Fired Babcock and Wilcox Utility Boiler (Unit #2) | | | | |
| AA-003** | 631.8 MMBtu/hr Natural Gas/#2 Fuel Oil Fired Pratt and Whitney Combustion Turbine (CT _A and CT _B) | | | | |

^{*} Emission Points AA-001A and AA-001B share a common stack.

^{**} Emission Point AA-003, for purposes of the CAIR regulations, is identified as CT_A and CT_B .

SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. Facility-Wide Emission Limitations & Standards

- 3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).
 - (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
 - (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour.

(Ref.: APC-S-1, Section 3.1)

3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Paragraph 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets. (Ref.: APC-S-1, Section 3.2)

B. Emission Point Specific Emission Limitations & Standards

| Emission Point(s) | Applicable Requirement | Condition Number(s) | Pollutant/ Parameter | Limit/Standard |
|------------------------|----------------------------|------------------------|-------------------------|---|
| AA-001A, | APC-S-1, Section 3.4(a)(2) | 3.B.1 | PM/PM ₁₀ | $E = 0.8808 * I^{-0.1667}$, or 0.30 lb/MMBtu |
| AA-001B, and AA-003 | APC-S-1, Section 4.1(a) | 3.B.2 | SO_2 | 4.8 lb/MMBtu |
| | | 3.B.3 | Fuel | Fuel is limited to natural gas only. |
| AA-001A, | Acid Rain Regulations | 3.B.4 | SO ₂ | Continuous emissions monitoring per Part 75. |
| AA-001B | 40 CFR Parts 72-78 | | NO_X | Continuous emissions monitoring per Part 75. |
| | | | | See Phase II Acid Rain Permit (Appendix B) |
| AA-001A, | Clean Air Interstate Rule | 3.B.5 | SO_2 | Clean Air Interstate Rule (CAIR) |
| AA-001B, and AA-003 | 1 NO ₂ | | NO_X | requirements |

- 3.B.1 For Emission Points AA-001A, AA-001B, and AA-003, the maximum permissible emission of ash and/or PM when burning fossil fuels shall not exceed an emission rate as determined by the relationship $E = 0.8808*I^{-0.1667}$; where *E* is the emission rate in pounds per million BTU per hour heat input, and *I* is the heat input in millions of BTU per hour. (Ref.: APC-S-1, Section 3.4(a)(2))
- 3.B.2 For Emission Points AA-001A, AA-001B, and AA-003, the maximum discharge of sulfur oxides (SO₂) from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input or as otherwise specified herein. (Ref.: APC-S-1, Section 4.1(a))
- 3.B.3 For Emission Points AA-001A, AA-001B, and AA-003, the permittee is limited to combusting only natural gas.
- 3.B.4 For Emission Points AA-001A and AA-001B, the permittee is subject to and shall comply with all applicable requirements of the Acid Rain Program Regulations as specified in 40 CFR Parts 72-78. The Acid Rain Program requirements include continuous emissions monitoring for SO₂ and nitrogen oxides (NO_X) in accordance with Part 75. For Emission Points AA-001A and AA-001B, the permittee complies with the SO₂ requirements by using the Alternative Fuel Monitoring procedures in accordance with Part 75. (Ref.: Acid Rain Regulations, 40 CFR Part 72-78)
- 3.B.5 For Emission Points AA-001A, AA-001B, and AA-003, the permittee is subject to the requirements of APC-S-1, Section 14.1 and the Clean Air Interstate Rule (CAIR) as set forth in 40 CFR 51.123, 40 CFR 51.124, 40 CFR 96.102 through 40 CFR 96.388.
 - (a) Regarding the *CAIR NO_x Annual Trading Program*, the permittee must comply with all of the standard requirements specified in $\S96.106$ and permit requirements specified in $\S96.120$ through $\S96.124$. The permittee shall also comply with all monitoring and reporting requirements as specified in $\S96.170$ through $\S96.175$.
 - (b) Regarding the *CAIR SO₂ Annual Trading Program*, the permittee must comply with all of the standard requirements specified in §96.206 and permit requirements specified in §96.220 through §96.224. The permittee shall also comply with all monitoring and reporting requirements as specified in §96.270 through §96.275.
 - (c) Regarding the *CAIR NO_x Ozone Season Trading Program*, the permittee must comply with all of the standard requirements specified in \$96.306 and permit requirements specified in \$96.320 through \$96.324. The permittee shall also comply with all monitoring and reporting requirements specified in \$96.370 through \$96.375.

C. <u>Insignificant and Trivial Activity Emission Limitations & Standards</u>

| Applicable Requirement | Condition Number(s) | Pollutant/ Parameter | Limit/Standard |
|----------------------------|------------------------|-------------------------|---|
| APC-S-1, Section 3.4(a)(1) | 3.C.1 | PM | 0.6 lbs/MMBTU, or as otherwise limited by facility modification restrictions. |
| APC-S-1, Section 4.1(a) | 3.C.2 | SO_2 | 4.8 lbs/MMBTU, or as otherwise limited by facility modification restrictions. |

- 3.C.1 The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.
- 3.C.2 The maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input.

SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, within sixty (60) days after the end of the calendar year for the preceding calendar year. Each compliance certification shall include the following:
 - (a) the identification of each term or condition of the permit that is the basis of the certification;
 - (b) the compliance status;
 - (c) whether compliance was continuous or intermittent;
 - (d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
 - (e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit. (Ref.: APC-S-6, Section III.C.5.a.,c.,&d.)
- 4.3 For each calendar year that an affected unit is subject to the Acid Rain Program, the permittee shall submit an annual compliance certification report in accordance with 40 CFR Part 72.90(b) within sixty (60) days after the end of the calendar year.
- 4.4 Except as otherwise specified herein, compliance with the opacity limits shall be determined using EPA Reference Method 9, or other approved methodology.

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

- A. General Monitoring, Recordkeeping and Reporting Requirements
- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.
- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
 - (a) the date, place as defined in the permit, and time of sampling or measurements;
 - (b) the date(s) analyses were performed;
 - (c) the company or entity that performed the analyses;
 - (d) the analytical techniques or methods used;
 - (e) the results of such analyses; and
 - (f) the operating conditions existing at the time of sampling or measurement. (Ref.: APC-S-6, Section III.A.3.b.(1)(a)-(f))
- 5.A.3 Except as otherwise specified herein, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration, maintenance, and monitoring records and copies of all reports required by the permit. (Ref.: APC-S-6, Section III.A.3.b.(2))
- 5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with APC-S-6, Section II.E. (Ref.: APC-S-6, Section III.A.3.c.(1))
- 5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) days of the time the deviation began. For the purposes of this permit, deviations from the opacity standard shall be determined using EPA Reference Method 9. (Ref.: APC-S-6, Section III.A.3.c.(2))

- 5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the DEQ and the EPA.
- 5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation. (Ref.: TVOP Section 1.19)

B. Specific Monitoring and Recordkeeping Requirements

| Emission Point(s) | Pollutant/Parameter Monitored | Monitoring/Recordkeeping Requirement | Condition Number | Applicable Requirement |
|----------------------------------|------------------------------------|---|---------------------|---|
| AA-001A, AA-001B, & AA-003 | Fuel Records | Monitoring and Recordkeeping | 5.B.1 | APC-S-6, Section III.A.3 |
| AA-001A AA-001B | NO_x SO_2 CO_2 Fuel Gas Flow | Monitoring, Recordkeeping, and Testing | 5.B.2 | 40 CFR Part 75 (e.g., App. D, E, G, and 40 CFR Part 75.54 |

- 5.B.1 For Emission Points AA-001A, AA-001B, and AA-003, the permittee shall maintain monthly records of fuel combusted. These records shall include fuel type (i.e., natural gas), quantity, and the heating value (Btu/gal or Btu/ft³). The permittee can use the data provided by the vendor to generate these records. (Ref.: APC-S-6, Section III.A.3)
- 5.B.2 For Emission Points AA-001A and AA-001B, the permittee shall install, calibrate, maintain, and operate a continuous emissions monitoring system (e.g., CEMS) for the purpose of measuring SO₂ emissions, NO_X emissions, and either oxygen (O₂) or carbon dioxide (CO₂), unless complying with another standard or requirement meets the requirements of this standard. The permittee shall monitor, test, and keep records of the emissions/parameters identified above in accordance with 40 CFR Part 75. The permittee shall maintain all measurements, data, reports, testing, and other information required in 40 CFR Part 75.54 for each affected unit. The permittee complies with the SO₂ requirements by using the Alternative Fuel Monitoring procedures in accordance with Part 75. The permittee shall utilize Part 75 data for NO_X emissions reporting by monitoring the parameters and maintaining the CEMS in accordance with 40 CFR Part 75. The Relative Accuracy Test Audit (RATA) shall be conducted and submitted in accordance with the requirements of 40 CFR Part 75. (Ref.: 40 CFR Part 75)

- C. Specific Reporting Requirements
- 5.C.1 For Emission Points AA-001A, AA-001B, and AA-003, the permittee shall submit a fuel usage report containing a summary of the information required in Permit Condition 5.B.1. This report shall be submitted in accordance with Condition 5.A.4. These reports should include the quantity and quality, including the sulfur content and the heating value (Btu/ft³), of the natural gas burned. (Ref.: APC-S-6, Section III.A.3.c.(1))
- 5.C.2 For Emission Points AA-001A and AA-001B, the permittee shall submit an Acid Rain monitoring report containing a summary of the information required in Permit Condition 5.B.2. This report shall be submitted in accordance with Condition 5.A.4. These reports should include a summary of the information required by the applicable Part 75 monitoring requirements. (Ref.: 40 CFR Part 75).
- 5.C.3 For Emission Points AA-001A and AA-001B, the permittee shall submit an annual report in accordance with the terms outlined in Permit Condition 4.3 and 40 CFR Part 72.90(b).
- 5.C.4 For Emission Points AA-001A and AA-001B, when a Relative Accuracy Test Audit (RATA) is required, the permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to obtain approval for test methods and procedures. Also, the permittee shall notify MDEQ in writing at least ten (10) days prior to the intended test date(s) so that an observer may be afforded the opportunity to witness the test(s).

After the first successful submittal of a written test protocol, the permittee may request that the re-submittal of the testing protocol be waived for subsequent testing by certifying in writing at least ten (10) days prior to subsequent testing that all conditions for testing remain unchanged such that the original protocol can and will be followed.

The permittee shall submit test report(s) within sixty (60) days of completion of the stack test (e.g., RATA). (Ref.: 40 CFR Part 75)

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

None permitted.

SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at http://ecfr.gpoaccess.gov under Title 40, or MDEQ shall provide a copy upon request by the permittee.

- 7.1 If the permittee stores or transports class I or class II substances, the permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - (a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if being introduced into interstate commerce pursuant to § 82.106.
 - (b) The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
 - (c) The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
 - (d) No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
- 7.2 If the permittee performs any of the activities described below, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
 - (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - (b) Equipment used during the maintenance, service, repair, or disposal of appliance must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - (d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the recordkeeping requirements pursuant to § 82.166. ("MVAC like appliance" is defined at § 82.152.)
 - (e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

- (f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 7.3 If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 7.4 If the permittee performs a service on motor (fleet) vehicles and if this service involves an ozone-depleting substance (refrigerant) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
 - The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include air-tight sealed refrigeration systems used for refrigerated cargo, or air conditioning systems on passenger buses using HCFC-22 refrigerant.
- 7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program.

SECTION 8. ACID RAIN

The permittee shall comply with all requirements of the Phase II Acid Rain Permit attached as Appendix B of this permit. All conditions of the Phase II Acid Rain Permit are effective from *PERMIT ISSUANCE DATE* through *May 31, 2015*; however, these conditions may be revised by the MDEQ during the permitted period.

APPENDIX A

List of Abbreviations Used In this Permit

| APC-S-1 | Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants |
|-----------|---|
| APC-S-2 | Permit Regulations for the Construction and/or Operation of Air Emissions Equipment |
| APC-S-3 | Regulations for the Prevention of Air Pollution Emergency Episodes |
| APC-S-4 | Ambient Air Quality Standards |
| APC-S-5 | Regulations for the Prevention of Significant Deterioration of Air Quality |
| APC-S-6 | Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean |
| 711 0 5 0 | Air Act |
| APC-S-7 | Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act |

BACT Best Available Control Technology CEM Continuous Emission Monitor

CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations

CO Carbon Monoxide

COM Continuous Opacity Monitor

COMS Continuous Opacity Monitoring System

DEQ Mississippi Department of Environmental Quality EPA United States Environmental Protection Agency

gr/dscf Grains Per Dry Standard Cubic Foot

HP Horsepower

HAP Hazardous Air Pollutant lbs/hr Pounds per Hour

M or K Thousand

MACT Maximum Achievable Control Technology

MM Million

MMBTUH Million British Thermal Units per Hour

NA Not Applicable

NAAQS National Ambient Air Quality Standards

NESHAP National Emissions Standards For Hazardous Air Pollutants, 40 CFR 61

or

National Emission Standards For Hazardous Air Pollutants for Source Categories, 40 CFR 63

NMVOC Non-Methane Volatile Organic Compounds

NO_x Nitrogen Oxides

NSPS New Source Performance Standards, 40 CFR 60

O&M Operation and Maintenance

PM Particulate Matter

PM₁₀ Particulate Matter less than $10 \mu m$ in diameter

ppm Parts per Million

PSD Prevention of Significant Deterioration, 40 CFR 52

SIP State Implementation Plan

SO₂ Sulfur Dioxide TPY Tons per Year TRS Total Reduced Sulfur

VEE Visible Emissions Evaluation VHAP Volatile Hazardous Air Pollutant VOC Volatile Organic Compound

APPENDIX B

PHASE II ACID RAIN PERMIT

PHASE II ACID RAIN PERMIT

Issued to:

Mississippi Power Company, Sweatt Electric Generating Plant

Operated by:

Mississippi Power Company

ORIS code:

2048

Effective:

Title V Permit Issuance Date to May 31, 2015

Summary of Previous Actions:

This page will be replaced to document new actions each time a new action is taken by the MDEQ. This is the initial permitting action being undertaken:

| 1) | Draft permit for public and EPA comr | nent. April 18, 1997 |
|----|--------------------------------------|----------------------|
| 11 | Diant permittor public and Er A comi | nene. April 10, 1777 |

2) Permit finalized and issued. September 12, 1997

3) Draft renewal Title V Permit (incorporating Acid Rain May 14, 2004 Permit) for public and EPA review.

4) Permit finalized and re-issued. August 6, 2004

5) Draft renewal Title V Permit (incorporating Acid Rain May 10, 2010 Permit) for public and EPA review.

Present Action:

6) Permit finalized and re-issued.

TITLE V PERMIT ISSUANCE DATE

Signature

JUN 2 8 2010

Date

Harry M. Wilson, III, PE, Chief Environmental Permits Division

Mississippi Department of Environmental Quality

P.O. Box 2261

Jackson, MS 39225-2261

Telephone: (601) 961-5171 Fax: (601) 961-5742

PHASE II ACID RAIN PERMIT

Issued to: Mississippi Power Company, Sweatt Electric Generating Plant

Operated by: Mississippi Power Company

ORIS code: 2048

Effective: Title V Permit Issuance Date to May 31, 2015

ACID RAIN PERMIT CONTENTS:

1) Statement of Basis.

- 2) SO₂ allowances allocated under this permit and NOx requirements for each affected unit.
- 3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.
- 4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

1) STATEMENT OF BASIS:

Statutory and Regulatory Authorities: In accordance with the Mississippi Air and Water Pollution Control Law, specifically Miss. Code Ann. §§ 49-17-1 through 49-17-43, and any subsequent amendments, and Titles IV and V of the Clean Air Act, the Mississippi Department of Environmental Quality issues this permit pursuant to the State of Mississippi Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act, Regulation APC-S-6, and the State of Mississippi Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act, Regulation APC-S-7.

2) SO₂ ALLOWANCE ALLOCATIONS AND NO_X REQUIREMENTS FOR EACH AFFECTED UNIT:

| | | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--------|--|------|------|------|------|------|------|
| AA-001 | SO ₂ allowances, under Tables 2, 3, or 4 of 40 CFR Part 73. | 78 | 78 | 78 | 78 | 78 | 78 |
| | NO _x limit | N/A | | | | | |

| | | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--------|--|------|------|------|------|------|------|
| AA-002 | SO ₂ allowances, under Tables 2, 3, or 4 of 40 CFR Part 73. | 86 | 86 | 86 | 86 | 86 | 86 |
| | NO _x limit | | | N | /A | | |

Note: The number of allowances allocated to Phase II affected units by U.S. EPA may change per revisions to 40 CFR Part 73, Tables 2, 3, and 4. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

3) COMMENTS, NOTES, AND JUSTIFICATIONS:

Unit 1 (AA-001A) and Unit 2 (AA-001B) are natural gas-fired units; therefore, the affected units are not subject to the NO_x requirements outlined in 40 CFR Part 76.

4) PHASE II PERMIT APPLICATION AND NO_X COMPLIANCE & AVERAGING PLAN:

On File or Attached.