STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

NRG Wholesale Generation LP
2446 Highway 407
French Camp, Mississippi
Choctaw 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: OCT 19 2018

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

Krystal Rudolph

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: SEP 30 2023 **Permit No.: 0400-00018**

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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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(c).)

1.4 Prior to its expiration, this permit may be reopened in accordance with the provisions listed below.

(a) This permit shall be reopened and revised under any of the following circumstances:

(1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of 3 or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.

(2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

(3) The Permit Board or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.

(4) The Administrator or the Permit Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

(c) Reopenings shall not be initiated before a notice of such intent is provided to the

Title V source by the DEQ at least 30 days in advance of the date that the permit is to be reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.G.)

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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(e).)

1.6 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(d).)

1.7 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(5).)

1.8 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 11 Miss. Admin. Code Pt. 2, Ch. 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 judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.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.: 11 Miss. Admin. Code Pt. 2, R. 6.6.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.: 11 Miss. Admin. Code Pt. 2, R. 6.6.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.: 11 Miss. Admin. Code Pt. 2, R. 6.6.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.: 11 Miss. Admin. Code Pt. 2, R. 6.6.C.)

1.9 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(8).)

1.10 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.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)

1.11 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 emissions-related 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(2).)

1.12 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.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(1).)

1.13 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.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)

1.14 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(1).)

1.15 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(2).)

1.16 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)

1.17 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.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C(2)., R. 6.4.B., and R. 6.2.A(1)(c).)

1.18 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.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F(1).)

1.19 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 11 Miss. Admin. Code Pt. 2, Ch. 3., "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared. (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)

1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2., "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations 11 Miss. Admin. Code Pt. 2, Ch. 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.C(15).)

1.21 Any change in ownership or operational control must be approved by the Permit Board. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)

1.22 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B(1).)

1.23 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.: 11 Miss. Admin. Code Pt. 2, R. 1.3.G.)

1.24 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)

1.25 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.

(a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)

(1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:

(i) An upset occurred and that the source can identify the cause(s) of the upset;

(ii) The source was at the time being properly operated;

(iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;

(iv) That within 5 working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;

(v) That as soon as practicable but no later than 24 hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.

(2) In any enforcement proceeding by the Commission, the source 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.

(4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third-party enforcement actions.

(b) Startups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)

(1) Startups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific emission limitations or work practice standards for startups and shutdowns are defined by an applicable rule, regulation, or permit.

(2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in this regulation, 11 Mississippi Administrative Code, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for startups and shutdowns. Source specific emission limitations or work practice standards established for startups and shutdowns are subject to the requirements prescribed in 11 Miss. Admin. Code Pt. 2, R. 1.10.B(2)(a) through (e).

(3) Where an upset as defined in Rule 1.2 occurs during startup or shutdown, see the upset requirements above.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

1.26 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 11 Miss Admin. Code Pt. 2, R. 1.8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities. (Ref.: 11 Miss Admin. Code Pt. 2, R. 1.8.)

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-001	2,126 MMBtu/hr natural gas-fired combustion turbine with supplemental duct burners with maximum heat input of 258.9 MMBtu/hr. The turbine is equipped with Selective Catalytic Reduction (SCR) for control of NO_x emissions.
AA-002	2,126 MMBtu/hr natural gas-fired combustion turbine with supplemental duct burners with maximum heat input of 258.9 MMBtu/hr. The turbine is equipped with Selective Catalytic Reduction (SCR) for control of NO_x emissions.
AA-003	2,126 MMBtu/hr natural gas-fired combustion turbine with supplemental duct burners with maximum heat input of 258.9 MMBtu/hr. The turbine is equipped with Selective Catalytic Reduction (SCR) for control of NO_x emissions.

Emission Point	Description
AA-004	32.66 MMBtu/hr natural gas-fired Clever Brooks auxiliary boiler equipped with dry low-NO_x burners.
AA-005	1.97 MMBtu/hr (375 HP) diesel-fired emergency, compression ignition (<10 liters/cylinder), fire water pump engine (John Deere Power Tech 8.1 Model 6081, Model Year: 2002)

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.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.)

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.: 11 Miss. Admin. Code Pt. 2, R. 1.3.B.)

B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001 AA-002 AA-003 AA-004	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.1	PM (filterable only)	$E = 0.8808*(I)^{-0.1667}$
AA-001	PSD Construction Permit issued on May 31, 2017, and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(1).	3.B.2	PM (filterable only) (BACT limit)	20.59 lb/hr, based on a 3-hour average and 90.18 tons/yr
			$PM_{10}/PM_{2.5}$ (filterable and condensable) (BACT limit)	20.59 lb/hr, based on a 3-hour average and 90.18 tons/yr
			SO_2	1.38 lb/hr and 6.04 tons/yr
			NO_x (BACT limit)	3 ppmv at 15% O_2, not to exceed 23.45 lb/hr, both limits based on 3-hour rolling averages, and 102.72 tons/year
			CO (BACT limit)	10 ppmv at 15% O_2, not to exceed 44.82 lb/hr, both limits based on 3-hour rolling averages, and 220.9 tons/year
			VOC (PSD-avoidance limit)	3.5 ppmv at 15% O_2, not to exceed 8.97 lb/hr, both limits based on 3-hour averages, and 39.29 tons/year
			Opacity (BACT limit)	≤10%
AA-002 AA-003	PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008	3.B.3	PM/PM_{10} (filterable only) (BACT limit)	20.59 lb/hr, based on a 3-hour average and 90.18 tons/yr
			SO_2	1.38 lb/hr and 6.04 tons/yr
			NO_x (BACT limit)	3.5 ppmv at 15% O_2, not to exceed 27.36 lb/hr, both limits based on 3-hour rolling averages, and 119.83 tons/year
			CO (BACT limit)	18.36 ppmv at 15% O_2, not to exceed 82.29 lb/hr, both limits based on 3-hour rolling averages, and 360.43 tons/year

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
			VOC (BACT limit)	3.64 ppmv at 15% O_2, not to exceed 9.33 lb/hr, both limits based on 3-hour averages, and 40.86 tons/year
			Opacity (BACT limit)	≤10%
AA-001 AA-002 AA-003	PSD Construction Permit issued on May 31, 2017 and PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008	3.B.4	Fuel Restrictions	Natural gas only
		3.B.5	Operating Restriction	Lowest Sustainable Load (LSL) equal to 45%
		3.B.6	Operating Restriction	SCR operational at all loads above the LSL
		3.B.7	Startup/ Shutdown/ Runbacks/ Tuning	Cold startup ≤ 6 hours; Warm startup ≤ 4 hours; Tuning event ≤ 6 hours; Runback ≤ 60 minutes to return above LSL; and, Shutdown ≤ 3 hours
AA-001 AA-002 AA-003	Standards of Performance for Stationary Gas Turbines 40 CFR 60, Subpart GG, 60.330	3.B.8	SO_2/NO_x	Applicability
	40 CFR 60, Subpart GG, 60.332(a)(1) and (b)	3.B.9	NO_x	$NO_x \leq 0.0075*(14.4/Y) + F$; expressed as percent by volume at 15% O_2 on a dry basis
	40 CFR 60, Subpart GG, 60.333(b)	3.B.10	SO_2	Sulfur Content ≤0.8% by weight
AA-001 AA-002 AA-003	Standards of Performance for Electric Utility Steam Generating Units 40 CFR 60, Subpart Da, 60.40Da(e)(1) and (2)	3.B.11	PM, SO_2, NO_x, Opacity	Applicability
	40 CFR 60.42Da(f)(1)	3.B.12	PM	Exemption
	40 CFR 60.43Da(b)(2)	3.B.13	SO_2	≤0.20 lb/MMBtu heat input
	40 CFR 60.44Da(d)(1)	3.B.14	NO_x	≤1.6 lb/MWh
AA-001 AA-002 AA-003	National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines 40 CFR 63, Subpart YYYY, 63.6080, 63.6085, 63.6090(a)(1) and (4)	3.B.15	HAP	Applicability

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001 AA-002 AA-003	Acid Rain Program Regulations, 40 CFR 72-78	3.B.16	NO_x, SO_2 and CO_2	Applicability (see Section 8.0)
AA-001 AA-002 AA-003	Cross-State Air Pollution Rule (CSAPR), 40 CFR 97, Subpart BBBBB – NO_x Oxone Season Trading Program	3.B.17	NO_x	Applicability (see Section 9.0)
AA-004	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.1	PM (filterable only)	$E = 0.8808*(I)^{-0.1667}$
	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.B.18	SO_2	4.8 lbs/MMBTU
	PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008	3.B.4	Fuel Restriction	Natural gas only
		3.B.19	Operating Restriction	4,000 hours per year based on 12-month rolling total
	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units 40 CFR 60, Subpart Dc, 60.40c	3.B.20	SO_2, PM	Applicability
	NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR 63, Subpart DDDDD, 63.7480, 63.7485, 63.7490(a)(1) and (d), and 63.7499(l)	3.B.21	HAP	Applicability
	40 CFR 63.7500(a)(1) and (3), 63.7515(d), 63.7540(a)(10) and (13), and Table 3 of Subpart DDDDD	3.B.22		Tune-up requirements
AA-005	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.23	PM (filterable only)	0.6 lb/MMBtu
	PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008	3.B.24	Fuel Restriction	Sulfur Content ≤0.8% by weight
	NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR 63, Subpart ZZZZ, 63.6580, 63.6585, 63.6590(a)(1)(ii), 63.6640(f)(1), (2)(i), and (3), and 63.6675	3.B.25	HAP	Applicability

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
	40 CFR 63, Subpart ZZZZ, 63.6602, 63.6625(i), and Table 2c	3.B.26		Operating and Maintenance Requirements
	40 CFR 63, Subpart ZZZZ, 63.6605	3.B.27		General compliance requirements
	40 CFR 63, Subpart ZZZZ, 63.6625(e)(2), (f)(1), and (h), 63.6640(a), and Tables 2c and 6	3.B.28		Maintenance plan, hour meter, minimize periods of startup

3.B.1 For Emission Points AA-001, AA-002, AA-003, and AA-004, except as otherwise specified or limited herein, the maximum permissible emission of ash and/or particulate matter (PM) from fossil fuel burning installations greater than 10 million BTU per hour heat input but less than 10,000 million BTU per hour heat input 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.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).)

3.B.2 For Emission Point AA-001, the permittee is limited by the Prevention of Significant Deterioration (PSD) Air Permit to Construct issued on May 31, 2017, as follows:

Particulate Matter (PM) (BACT limit) (filterable only)	20.59 lb/hr, based on a 3-hr average, and 90.18 tons/year
$PM_{10}/PM_{2.5}$ (BACT limit) (filterable and condensable)	20.59 lb/hr, based on a 3-hr average, and 90.18 tons/year
SO_2	1.38 lb/hr, based on a 3-hr average, and 6.04 tons/year
NO_x (BACT limit)	3 ppmv at 15% O_2, not to exceed 23.45 lb/hr, both limits based on a 3-hr rolling average, and 102.72 tons/year
CO (BACT limit)	10 ppmv at 15% O_2, not to exceed 44.82 lb/hr, both limits based on a 3-hr rolling average, and 220.9 tons/year
VOC (PSD-avoidance limit)	3.5 ppmv at 15% O_2, not to exceed 8.97 lb/hr, both limits based on a 3-hr average, and 39.29 tons/year
Opacity (BACT limit)	≤ 10 %

The permittee shall comply with the short-term lb/hr emission limitations except during periods of startup, shutdown, run back, and tuning events. However, emissions generated during these periods shall be used to demonstrate compliance with the tons/year emission limits. (Ref.: PSD Construction Permit issued May 31, 2017)

3.B.3 For Emission Points AA-002 and AA-003, the permittee is limited by the PSD Air Permit to Construct issued on June 12, 2001, and modified on November 23, 2004, and June 17, 2008, as follows:

Particulate Matter (PM) (BACT limit) (filterable only)	20.59 lb/hr, based on a 3-hr average, and 90.18 tons/year
$PM_{10}/PM_{2.5}$ (BACT limit) (filterable and condensable)	20.59 lb/hr, based on a 3-hr average, and 90.18 tons/year
SO_2	1.38 lb/hr, based on a 3-hr average, and 6.04 tons/year
NO_x (BACT limit)	3.5 ppmv at 15% O_2, not to exceed 27.36 lb/hr, both limits based on a 3-hr rolling average, and 119.83 tons/year
CO (BACT limit)	18.36 ppmv at 15% O_2, not to exceed 82.29 lb/hr, both limits based on a 3-hr rolling average, and 360.43 tons/year
VOC (BACT limit)	3.64 ppmv at 15% O_2, not to exceed 9.33 lb/hr, both limits based on a 3-hr average, and 40.86 tons/year
Opacity (BACT limit)	≤ 10 %

The limits above apply to each combustion turbine (AA-002 and AA-003) separately. The permittee shall comply with the short-term lb/hr emission limitations except during periods of startup, shutdown, run back, and tuning events. However, emissions generated during these periods shall be used to demonstrate compliance with the tons/year emission limits. (Ref.: PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008)

3.B.4 For Emission Points AA-001, AA-002, AA-003, and AA-004 the permittee shall not burn any fuel other than pipeline quality natural gas. (Ref.: PSD Construction Permit issued May 31, 2017 and PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008)

3.B.5 For Emission Points AA-001, AA-002, and AA-003, the Lowest Sustainable Load (LSL) for the combustion turbines is equal to 45% of operating load. The LSL was established via performance testing conducted in 2017. (Ref.: PSD Construction Permit issued May 31, 2017, and PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008

3.B.6 For Emission Points AA-001, AA-002, and AA-003, the selective catalytic reduction (SCR) shall be in operation at all times the combustion turbine is above the established LSL. (Ref.: PSD Construction Permit issued May 31, 2017, and PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008)

3.B.7 For Emission Points AA-001, AA-002, and AA-003, the permittee shall comply with the following requirements during startup, shutdown, run back, and tuning events:

(a) A startup event begins at the moment the startup sequence is initiated by the permittee and fuel flow is initiated into the specific combustion turbine (CT) and ends with the attainment of the CT LSL (45%). There are two types of startups:

(1) Cold Startup. A startup that occurs when the turbine has not been fired in the previous 48 hours. For cold startups, the permittee shall limit the period of the turbine and heat recovery steam generator (HRSG) startup to six (6) hours or less.

(2) Warm Startup. A startup that occurs when the turbine has been fired within the previous 48 hours. For warm startups, the permittee shall limit the period of the turbine and the HRSG startup to four (4) hours or less.

(b) A runback event begins at the moment a process critical alarm causes a CT to drop below the LSL. The permittee has sixty (60) minutes to return to or above the LSL. If the CT is not returned to the LSL within this period, the permittee shall initiate shutdown procedures.

(c) A tuning event will normally occur because of required seasonal tuning, after a combustor change-out, after a major repair or maintenance to a combustor, or other similar maintenance circumstance. Tuning sessions are completed periodically to optimize combustion or emission reductions from the CT. Tuning events must be performed in accordance with the manufacturer's recommendations. During the tuning event, all reasonable steps to minimize levels of emissions that exceed the limits of this permit shall be taken. Tuning events shall be limited to six (6) hours or less.

(d) A shutdown event begins at the moment the specific combustion turbine reduces load to the LSL during a normal shutdown sequence initiated by the permittee and ends with the termination of fuel flow to the specific CT. For periods of shutdown, the permittee shall limit the total time in a shutdown event to three (3) hours or less.

The CTs shall not operate at less than the LSL at any time except during startup, shutdown, run back events, tuning events, or emergencies.

(Ref.: PSD Construction Permit issued May 31, 2017, and PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008)

3.B.8 The CTs associated with Emission Points AA-001, AA-002, and AA-003 are subject to and shall comply with the applicable requirements of the Standards of Performance for Stationary Gas Turbines, 40 CFR 60, Subpart GG and the General Provisions, 40 CFR 60, Subpart A. (Ref.: 40 CFR 60.330)

3.B.9 For Emission Points AA-001, AA-002, and AA-003, the permittee shall not cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075\frac{(14.4)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in §60.335(b)(1)) NO_X emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NO_X emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

The permittee shall be deemed in compliance with the Subpart GG limit provided the permittee demonstrates compliance with the NO_x emission limit of 3 ppmv at 15% O_2 contained in Conditions 3.B.2 and 3.B.3 of this permit. (Ref.: 40 CFR 60.332(a)(1) and (b))

3.B.10 For Emission Points AA-001, AA-002, and AA-003, the permittee shall not burn any fuel which contains total sulfur in excess of 0.8 percent by weight (Ref.: 40 CFR 60.333(b))

3.B.11 The heat recovery steam generators with duct burners associated with Emission Points AA-001, AA-002, and AA-003 are subject to the Standards of Performance for Electric Utility Steam Generating Units, 40 CFR 60, Subpart Da. Only the emissions generated from the combustion of fuel in the steam generating unit (i.e., duct burners) are subject to the requirements of Subpart Da. (Ref.: 40 CFR 60.40Da(e)(1) and (2))

3.B.12 For the heat recovery steam generators with duct burners associated with Emission Points AA-001, AA-002, and AA-003, the permittee is exempt from the PM emission limits found in 40 CFR 60.42Da since the units only combust natural gas with potential SO_2 emissions equal to or less than 0.060 lb/MMBtu and they do not use a post-combustion technology to reduce emissions of SO_2 or PM. (Ref.: 40 CFR 60.42Da(f)(1))

3.B.13 For the heat recovery steam generators with duct burners associated with Emission Points AA-001, AA-002, and AA-003, the permittee shall not discharge any gases that contain SO_2 in excess of 0.20 lb/MMBtu heat input. This limit applies at all times except during periods of startup, shutdown, or malfunction. (Ref.: 40 CFR 60.43Da(b)(2) and 60.48Da(a))

3.B.14 For the heat recovery steam generators with duct burners associated with Emission Points AA-001, AA-002, and AA-003, the permittee shall not discharge any gases that contain NO_x (expressed as NO_2) in excess of 1.6 lb/MWh gross energy output. Compliance with the limit is determined on a 30-boiler operating day rolling average basis. This limit applies at all times except during periods of startup, shutdown, or malfunction. (Ref.: 40 CFR 60.44Da(d)(1) and 60.48Da(a))

3.B.15 Emission Points AA-001, AA-002, and AA-003 are subject to and shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines, 40 CFR 63, Subpart YYYY. Per 63.6090(a)(1) and (b)(4), the combustion turbines are considered existing stationary combustion turbines and as such are not required to meet the requirements of Subpart YYYY. (Ref.: 40 CFR 63.6080, 63.6085, 63.6090(a)(1) and (b)(4))

3.B.16 Emission Points AA-001, AA-002, and AA-003 are subject to the Acid Rain Program Regulations as specified in 40 CFR 72-78. The permittee shall comply with all applicable requirements of said standards as included in Section 8.0 and specified in the Acid Rain Permit attached to this permit in Appendix C. (Ref.: 40 CFR 72-78).

3.B.17 Emission Points AA-001, AA-002, and AA-003 are subject to the applicable requirements of the Cross-State Air Pollution Rule (CSAPR) as set forth in 40 CFR 97, Subpart BBBBB - NO_x Ozone Season Trading Program. The permittee must ensure that the subject units have allocations equal to or greater than the emissions during the ozone season period (May 1 – September 30). See Section 9.0 for additional requirements. (Ref.: 40 CFR 97, Subpart BBBBB)

3.B.18 For Emission Point AA-004, the permittee shall not discharge sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer in excess of 4.8 pounds (measured as sulfur dioxide) per million BTU heat input. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).)

3.B.19 For Emission Point AA-004, the permittee is limited to 4,000 hours per year operation on a 12-month rolling total (Ref.: PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008)

3.B.20 Emission Point AA-004 is subject to the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc. Since the boiler is fired with natural gas, it is not subject to any emission limits from Subpart Dc. (Ref.: 40

CFR 60.40c(a))

3.B.21 Emission Point AA-004 is subject to the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD. For purposes of this subpart, the boiler is considered an existing boiler that is in the units designed to burn gas 1 fuels subcategory. (Ref. 40 CFR 63.7480, 63.7485, 63.7490(a)(1) and (d), and 63.7499(l)).

3.B.22 For Emission Point AA-004, the permittee shall conduct an annual tune-up on the boiler no more than thirteen (13) months after the previous tune-up. The permittee shall complete the following tasks during each tune-up:

(a) Inspect the burner and clean or replace any of the burner components as necessary. This inspection can be delayed until the next scheduled unit shutdown, but it must be inspected at least once every 36 months.

(b) Inspect the flame pattern and adjust the burner as necessary to optimize the flame pattern. All adjustments should be consistent with the manufacturer's specifications, if available.

(c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated or functioning properly. This inspection can be delayed until the next scheduled unit shutdown.

(d) Optimize total emissions of CO consistent with the manufacturer's specifications, if available.

(e) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made.

(f) Maintain documentation on site containing the concentrations of CO in the effluent stream determined in (e) for before and after the tune-up of the boiler, a description of any corrective actions taken as part of the tune-up, and monthly fuel records for the previous twelve (12) months preceding the tune-up.

If the boiler is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. (Ref.: 40 CFR 63.7500(a)(1) and (3), 63.7515(d), 63.7540(a)(10) and (13), and Table 3 of Subpart DDDDD)

3.B.23 For Emission Point AA-005, 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. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).)

3.B.24 For Emission Point AA-005, the permittee shall not burn any fuel which contains sulfur in excess of 0.8 percent by weight. (Ref.: PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008)

3.B.25 Emission Point AA-005 is subject to the NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR 63, Subpart ZZZZ. For purposes of this subpart, Emission Point AA-005 is considered an existing emergency compression ignition stationary

RICE with a site rating less than 500 HP with a displacement of less than 30 liters/cylinder, located at a major source of HAPs. The permittee shall meet the applicable requirements of this standard and the applicable General Provisions, 40 CFR 63, Subpart A.

In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year as described in (c) below is prohibited. If the permittee does not operate the engine according to the requirements in (a)-(c) below, the engine will not be considered an emergency engine under Subpart ZZZZ and must meet all requirements for non-emergency engines.

(a) There is no limit on the use of the engine during emergency situations.

(b) The permittee may operate the engine for maintenance checks and readiness testing for a maximum of 100 hours per calendar year provided the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or insurance company associated with the engine. The permittee may petition the MDEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating the federal, state, or local standards require maintenance testing of the engine beyond 100 hours per calendar year.

(c) The emergency engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 63.6580, 63.6585, 63.6590(a)(1)(ii), 63.6640(f)(1), (2)(i), and (3), and 63.6675)

3.B.26 For Emission Point AA-005, the permittee shall comply with the following requirements:

(a) Change oil and filter every 500 hours of operation or annually, whichever comes first, or perform an oil analysis at the same frequency in order to extend the oil change requirement in accordance with 63.6625(i).

(b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If the engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practices according to the schedule in (a)-(c) above, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has

abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk has abated. (Ref.: 40 CFR 63.6602, 63.6625(i), and Table 2c of Subpart ZZZZ.)

3.B.27 For Emission Point AA-005, the permittee shall, at all times, be in compliance with the applicable requirements of Subpart ZZZZ and operate and maintain the engine, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (Ref.: 40 CFR 63.6605(a) and (b))

3.B.28 For Emission Point AA-005, the permittee shall comply with the following requirements:

(a) Operate and maintain the engine according to the manufacturer's emission-related written instructions or develop and follow a maintenance plan which provides to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution practice for minimizing emissions.

(b) Install and maintain a non-resettable hour meter on the engine.

(c) The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

(Ref.: 40 CFR 63.6625(e)(2), (f)(1), and (h), 63.6640(a), and Tables 2c and 6 of Subpart ZZZZ)

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

There are no other requirements applicable to the insignificant activities listed in the source's Title V permit application.

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, by January 31 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(5)(a), (c), & (d).)

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. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(1).)

5.A.3 Except where a longer duration is specified in an applicable requirement, 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 and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.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 11 Miss. Admin. Code Pt. 2, R. 6.2.E. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.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. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.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. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-001 AA-002 AA-003	PSD Construction Permit issued on May 31, 2017 11 Miss. Admin. Code Pt. 2, R. 6.3.A(1). and PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008	5.B.1	$PM/PM_{10}/PM_{2.5}$	Stack testing
		5.B.2	CO/NO_x	CEMS to demonstrate compliance
		5.B.3	SO_2	Fuel monitoring
		5.B.4	VOC	Stack testing
		5.B.5	Opacity	Visible Emissions Evaluation
		5.B.3	Fuel	Monitor and maintain fuel quality and usage
		5.B.6	Operating Restriction	Document operating levels and control device operations
		5.B.7	Startup/Shutdown/ Runbacks/Tuning	Monitor and maintain records
AA-001 AA-002 AA-003	40 CFR Part 60, Subpart GG, 60.334(h)	5.B.3	SO_2/Fuel	Monitor and maintain fuel quality and usage
	40 CFR Part 60, Subpart GG, 60.334(c)	5.B.2	NO_x	CEMS monitoring
AA-001 AA-002 AA-003	40 CFR 60, Subpart Da, 60.48Da	5.B.8	SO_2/NO_x	Monitor fuel and emissions and calculate emission rates
AA-001 AA-002 AA-003	40 CFR 75	5.B.9	Fuel flow, NO_x, and CO	Monitor required data
AA-004	PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008	5.B.10	Fuel	Monitor and maintain fuel quality and usage
		5.B.11	Operating Hours	Monitor and maintain hours of operation
	40 CFR 63, Subpart DDDDD, 63.7540(a)(10)(vi), 63.7555(a),	5.B.12	Tune-ups	Document results

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
	and 63.7560			
AA-005	PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008	5.B.13	Fuel	Monitor and maintain fuel quality and usage
	40 CFR 63, Subpart ZZZZ, 63.6625(i) and 63.6655(a), (d), (e)(2), and (f)(1)	5.B.14	HAP	Maintenance, malfunction, and operating records
	40 CFR 63, Subpart ZZZZ, 63.6660	5.B.15		General recordkeeping

5.B.1 For Emission Points AA-001, AA-002, and AA-003, the permittee shall demonstrate compliance with filterable PM/PM_{10} emission limitations by stack testing, in accordance with EPA Reference Methods 1-5. For Emission Point AA-001, the permittee shall demonstrate compliance with $PM_{10}/PM_{2.5}$ (filterable and condensable) by stack testing using EPA Reference Method 202 in conjunction with Methods 1-5. The permittee shall determine the frequency of the stack testing based on the previous stack testing results. If a stack test shows that the emissions are at or below 65 percent of the emission limits in Conditions 3.B.2 and 3.B.3, then the permittee shall stack test once per permit term. If a stack test shows emissions exceeding 65 percent of the emission limit, the permittee shall perform the stack test biennially beginning on the next odd year. The stack testing shall be performed on a biennial basis until two consecutive stack tests show emissions below 65 percent of the emission limit at which time the stack testing my return to the once per permit term testing frequency.
(Ref.: PSD Construction Permit issued on May 31, 2017, PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008, and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.2 For Emission Points AA-001, AA-002, and AA-003, the permittee shall demonstrate compliance with the CO and NO_x emission limitations using the CEMS. Demonstrating compliance with the emission limits using CEMS data in lieu of EPA Reference Methods is an acceptable practice provided the permittee meets the guidelines established in EPA's general guidance on "Alternative Testing and Monitoring Procedures for Combustion Turbines Regulated under New Source Performance Standards." This includes the use of reference method data collected during the Relative Accuracy Test Audits (RATA) required under 40 CFR 75. The permittee shall use Part 75 CEMS data substitution provisions for CEMS when determining compliance with CO and NO_x limitations.
(Ref.: PSD Construction Permit issued on May 31, 2017; PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008; and 40 CFR 60.334(c))

5.B.3 For Emission Points AA-001, AA-002, and AA-003, the permittee shall monitor the quantity and quality of the fuel being fired in each turbine. Per 63.334(h)(3), the permittee shall not be required to monitor the total sulfur content of the gaseous fuel combusted if the fuel meets the definition of natural gas in 40 CFR 63.331(u). The permittee shall use one of the

following sources of information to demonstrate compliance:

(a) The quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or

(b) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20.0 grains/100 scf. At a minimum, the amount of fuel sampling data specified in Sections 2.3.1.4 or 2.3.2.4 of Appendix D of Part 75 is required.

(Ref.: PSD Construction Permit issued on May 31, 2017, PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008, and 40 CFR 60.334(h))

5.B.4 For Emission Points AA-001, AA-002, and AA-003, the permittee shall demonstrate compliance with the VOC emission limitations by stack testing in accordance with EPA Reference Method 25 or an approved equivalent. The permittee shall determine the frequency of the stack testing based on the previous stack testing results. If a stack tests show that emissions are at or below 65 percent of the emission limits in Conditions 3.B.2 and 3.B.3, then the permittee shall stack test once per permit term. If a stack test shows emissions exceeding 65 percent of the emission limit, the permittee shall perform the stack test biennially beginning on the next odd year. The stack testing shall be performed on a biennial basis until two consecutive stack tests show emissions below 65 percent of the emission limit at which time the stack testing my return to the once per permit term testing frequency. (Ref.: PSD Construction Permit issued June 13, 2001, modified on November 23, 2004, and June 17, 2008, and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.5 For Emission Points AA-001, AA-002, and AA-003, the permittee shall demonstrate compliance with the opacity limitations on an annual basis by having a facility trained observer perform a visual observation of each emission point. The permittee shall keep records of the results from these observations. If any visible emissions are detected during an observation, a certified observer shall perform a Visible Emissions Evaluation (VEE) in accordance with EPA Reference Method 9 for a minimum of six (6) consecutive minutes (24 observations at 15 second intervals) and maintain records of the results. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(1).)

5.B.6 For Emission Points AA-001, AA-002, and AA-003, the permittee shall keep records of the turbine operating loads and corresponding records which demonstrate the SCR on each turbine was in operation at all times the combustion turbines were operating in excess of the LSL established in Condition 3.B.5 (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(1).)

5.B.7 For Emission Points AA-001, AA-002, and AA-003, the permittee shall maintain records of the occurrence and duration of any startup, shutdown, runback, or tuning event for any turbine. Such records shall include the date and time for each event and confirmation that good air pollution control practices were followed during the period. (Ref.: PSD Construction Permit issued May 31, 2017, PSD Construction Permit issued June 13, 2001,

and modified on November 23, 2004, and June 17, 2008, and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(1).)

5.B.8 For Emission Points AA-001, AA-002, and AA-003, the permittee shall demonstrate compliance with the SO_2 and NO_x emission limitations from Subpart Da using one of the sources of information in Condition 5.B.3 (SO_2), the CEMS required in Condition 5.B.2 (NO_x), and the procedures identified in 60.48Da(d) and (k). (Ref.: 40 CFR 60.48Da)

5.B.9 For Emission Points AA-001, AA-002, and AA-003, the permittee shall install, calibrate, maintain, and operate continuous monitoring systems for NO_x (as specified in 40 CFR 60.334, Appendix B and 40 CFR 75). The monitoring systems must comply with all applicable requirements specified in 40 CFR 60.334, 60.13, Appendix B of 40 CFR 60, and 40 CFR 75. In addition, the permittee must comply with the reporting and recordkeeping requirements specified in 40 CFR 60.7 and 40 CFR Part 75.

The permittee shall install, calibrate, maintain, and operate continuous monitoring systems for CO as specified in 40 CFR 60, Appendix B and Appendix F.

The permittee shall install, calibrate, maintain, and operate a fuel flow monitor for the purpose of determining the hourly SO_2 mass emission rate and heat input in accordance with Appendix D of Part 75 in lieu of a continuous SO_2 monitor.

The Cylinder Gas Audits/Relative Accuracy Test Audits (CGA/RA) shall be conducted according to Appendix B and F of 40 CFR 60. However, the frequency of the audit shall be as specified in 40 CFR 75, Appendix B, Section 2.2. The RATA required under 40 CFR 60, Appendix F, shall be at the frequency specified in 40 CFR 75, Appendix B, Section 2.3.1 and is as follows:

A calendar quarter that does not qualify as a QA operating quarter shall be excluded in determining the deadline for the next RATA. No more than eight (8) successive calendar quarters shall elapse after the quarter in which a RATA was last performed without a subsequent RATA having been conducted. If the RATA has not been completed by the end of the eighth calendar quarter since the quarter of the last RATA, then the RATA must be completed within a 720 unit (or stack) operating hour grace period following the end of the eight successive elapsed calendar quarter. For the diluent monitor(s), a RATA may be performed annually (i.e., once every four successive QA operating quarters, rather than once every two successive QA operating quarters.

(Ref.: 40 CFR 75)

5.B.10 For Emission Point AA-004, the permittee shall record and maintain records of the amount of natural gas combusted each day or may elect to record and maintain records of the amount of natural gas combusted during each calendar month. (Ref.: 40 CFR 60.48c(g)(1)-(2))

5.B.11 For Emission Point AA-004, the permittee shall monitor and record the hours of operation of the boiler on a daily basis and maintain a 12-month rolling total. (Ref.: PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008)

5.B.12 For Emission Point AA-004, the permittee shall maintain on-site and submit to the MDEQ upon proper request, the records required by Condition 3.B.22(f).

The permittee shall keep all records and notifications demonstrating compliance with Subpart DDDDD in a form suitable and readily available for review for a period of five (5) years following the date of each record or report. These records must be kept on-site for at least two years after the date of the record or report and then the records may be maintained off-site for the remaining three (3) years. (Ref.: 40 CFR 63.7540(a)(10)(vi), 63.7555(a), and 63.7560)

5.B.13 For Emission Point AA-005, the permittee shall keep records on site that contain the sulfur content for each shipment of diesel fuel received and stored in the fuel tank. (Ref.: PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008)

5.B.14 For Emission Point AA-005, the permittee shall keep the following records

(a) A copy of each report submitted to comply with Subpart ZZZZ.

(b) Documentation of each occurrence and the duration of malfunctions of operations (i.e., process equipment) or air pollution control and monitoring equipment and the actions taken to minimize emissions during the malfunction, including corrective actions to restore the equipment to normal operation.

(c) Documentation of the maintenance conducted on the engine in order to demonstrate it is being operated and maintained according to the manufacturer's emission-related operation and maintenance instructions or your own maintenance plan.

(d) If using an oil analysis program, documentation of the parameters that were analyzed, the results of the analysis, and the oil changes for the engine.

(e) Documentation of the hours of operation of the engine that is recorded through the non-resettable hour meter. The records must indicate how many hours are spent in emergency operation, including what classified the operation as emergency, and how many hours are spent in non-emergency operation and the type of non-emergency operation.

(Ref.: 40 CFR 63.6625(i) and 63.6655(a), (d), (e)(2), and (f)(1))

5.B.15 For Emission Point AA-005, the permittee shall keep records in a form suitable and readily available for expeditious review according to 63.10(b)(1).

The permittee shall keep readily accessible records in hard copy or electronic form for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

(Ref.: 40 CFR 63.6660)

C. <u>Specific Reporting Requirements</u>

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Reporting Requirement
AA-001 AA-002 AA-003	PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008, and 40 CFR 60.51Da	5.C.1	NO_x CO	Semi-annual emissions report
		5.C.2	$PM/PM_{10}/PM_{2.5}$ VOC	Stack test protocol and reports
	40 CFR 72-78	5.C.3	SO_2 NO_x CO	Acid Rain Program
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.C.4	Opacity	Semi-annual report
		5.C.5	Operating Limitations	
	40 CFR 60.334(j)	5.C.6	Excess emissions report	Semi-annual report
AA-004	PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008	5.C.7	Hours of operation	Semi-annual report
	40 CFR 63.7550(b), (c)(1), and (c)(5)(i)-(iii), (xiv), and (xvii)	5.C.8	Tune-ups	Annual report
AA-005	40 CFR 63.6640(b) and Footnote 2 to Table 2d	5.C.9	HAP	Deviation Report

5.C.1 For Emission Points AA-001, AA-002, and AA-003, the permittee shall submit a summary of emissions in tons/year (consecutive 365-day rolling total) for NO_x and CO using the data recorded by the CEMS for each unit. The information shall also include the average NO_x emission rate in lb/MMBTU for each 30 successive boiler operating days. The summary shall be submitted in accordance with the semi-annual report required by Condition 5.A.4 of this permit. (Ref.: PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008, and 40 CFR 60.51Da)

5.C.2 For Emission Points AA-001, AA-002, and AA-003, the permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable. For subsequent tests, the submittal of the test protocol requirement may be waived provided the protocol will not change and a request confirming such is made to the MDEQ. The permittee shall notify the 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 any test(s).

The permittee shall submit the corresponding test reports within sixty (60) days of completion of the stack tests.

5.C.3 For Emission Points AA-001, AA-002, and AA-003, the permittee shall comply with

the reporting requirements specified in the Acid Rain Program regulations. (Ref.: 40 CFR 72-78)

5.C.4 For Emission Points AA-001, AA-002, and AA-003, the permittee shall submit a summary of the results from all VEE's conducted in the semi-annual report that follows the date of the observation(s). (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

5.C.5 For Emission Points AA-001, AA-002, and AA-003, the permittee shall submit a summary of operational data for each turbine that identifies the date, duration, and type of event for each startup, shutdown, runback, or tuning event conducted during the semiannual period. This report shall also include the amount of time each turbine was operating above the LSL while the SCR was not operating. The summary report shall be included with the semi-annual report required in Condition 5.A.4. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

5.C.6 For Emission Points AA-001, AA-002, and AA-003, the permittee shall submit reports of excess emissions and monitor downtime semiannually for the NO_x CEMS in accordance with Condition 5.A.4. The report shall be in accordance with 40 CFR 60.7(c) and excess emissions and monitor downtime shall be reported as defined in 60.334(j)(1)(iii)(A) through(C). (Ref.: 40 CFR 60.334(j))

5.C.7 For Emission Point AA-004, the permittee shall submit a summary of the operating hours on a monthly and 12-month rolling total basis in the semi-annual report required in Condition 5.A.4. (Ref.: PSD Construction Permit issued June 13, 2001, and modified on November 23, 2004, and June 17, 2008)

5.C.8 For Emission Point AA-004, the permittee shall submit an annual compliance report in accordance with Condition 4.2 containing the following information:

(a) Company and facility name and address;

(b) Process unit information, emissions limitations, and operating parameter limitations;

(c) Date of report and beginning and end dates of the reporting period;

(d) The date of the most recent tune-up and the date of the most recent burner inspection if it was not done on the date of the tune-up; and,

(e) A statement by a responsible official with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(Ref.: 40 CFR 63.7550(b) and (c)(1) and (5)(i)-(iii), (xiv), and (xvii))

5.C.9 For Emission Point AA-005, the permittee shall report each instance in which the management practices were not met. These instances are deviations and must be reported within five (5) business days in accordance with Condition 5.A.5.

If the engine was operating during an emergency and it was not possible to shut down the engine to perform the management practices or if performing them on the required schedule posed an unacceptable risk under Federal, State, or local law at the time of the required scheduled maintenance activity, the management practices can be delayed until the emergency is over or the unacceptable risk has abated. The permittee shall report such a failure to complete the management practice in a timely manner and shall also document the specific conditions for which the management practices were delayed. (Ref.: 40 CFR 63.6640(b) and Footnote 2 to Table 2d)

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

6.1 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://www.ecfr.gov/** under Title 40, or DEQ shall provide a copy upon request from the permittee.

7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A – Production and Consumption Controls.

7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B – Servicing of Motor Vehicle Air Conditioners.

7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E – The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:

(a) All containers in which a class I or class II substance is stored or transported;

(b) All products containing a class I substance; and

(c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.

7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F – Recycling and Emissions Reduction:

(a) Servicing, maintaining, or repairing appliances;

(b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or

(c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G – Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.

7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H – Halon Emissions Reduction:

(a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;

(b) Any person disposing of halons;

(c) Manufacturers of halon blends; or

(d) Organizations that employ technicians who service halon-containing equipment.

SECTION 8. ACID RAIN

For Emission Points AA-001, AA-002, and AA-003, the permittee shall comply with all requirements of the Phase II Acid Rain Permit attached in Appendix C of this permit. All conditions of the Phase II Acid Rain Permit are effective from [issuance date] through the [expiration date]; however, these conditions may be revised by the MDEQ during the permitting period.

Emission Points AA-001, AA-002, and AA-003, are affected units under the Acid Rain Program as specified in 40 CFR Parts 72-78. However, these units are natural gas fired and are therefore not subject to the NO_X requirements outlined in 40 CFR Part 76. Additionally, these units are not listed in 40 CFR Part 73, Tables 2, 3 or 4, and have not been allocated any SO_2 allowances.
(Ref.: Acid Rain Program Regulations, 40 CFR Parts 72-78)

SECTION 9. CROSS-STATE AIR POLLUTION RULE

9.1 Description of Transport Rule (TR) Monitoring Provisions

The TR subject units and the unit-specific monitoring provisions at this source are identified in the following Table. These units are subject to the requirements for the TR NOx Ozone Season Trading Program.

Unit ID: Emission Points AA-001, AA-002, and AA-003					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO2 monitoring) and 40 CFR part 75, subpart H (for NOX monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E
SO_2	No	Yes; fuel flow monitoring and pipeline quality natural gas (Appendix D, Section 2.3)			
NO_X	CEMS				
Heat Input	Fuel flow meter and Fuel GCV				

9.2 The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.530 through 97.535. The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR trading programs.

9.3 The permittee must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at http://www.epa.gov/airmarkets/emissions/monitoringplans.html.

9.4 The permittee that wants to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.535. The

Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at http://www.epa.gov/airmarkets/emissions/petitions.html.

9.5 The permittee that wants to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.530 through 97.534 must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.535. The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on EPA website at http://www.epa.gov/airmarkets/emissions/petitions.html.

9.6 The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.530 through 97.534, and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add to or change this unit's monitoring system description.

9.7 TR NOx Ozone Season Trading Program Requirements (40 CFR 97.506)

(a) Designated representative requirements - The permittee shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.513 through 97.518.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

(1) The permittee, and the designated representative, of each TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.530 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.531 (initial monitoring system certification and recertification procedures), 97.532 (monitoring system out-of-control periods), 97.533 (notifications concerning monitoring), 97.534 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.535 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(2) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of TR NO_X Ozone Season allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NO_X Ozone Season emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO_X emissions requirements.

(1) TR NO_X Ozone Season emissions limitation.

(i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, TR NO_X Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NO_X emissions for such control period from all TR NO_X Ozone Season units at the source.

(ii) If total NO_X emissions during a control period in a given year from the TR NO_X Ozone Season units at a TR NO_X Ozone Season source are in excess of the TR NO_X Ozone Season emissions limitation set forth in paragraph (c)(1)(i) above, then:

(A) The owners and operators of the source and each TR NO_X Ozone Season unit at the source shall hold the TR NO_X Ozone Season allowances required for deduction under 40 CFR 97.524(d); and

(B) The owners and operators of the source and each TR NO_X Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

(2) TR NO_X Ozone Season assurance provisions.

(i) If total NO_X emissions during a control period in a given year from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state (and Indian country within the borders of such state) exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative’s share of such NO_X emissions during such control period exceeds the common designated representative’s assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_X Ozone Season allowances available for deduction for such control period under 40 CFR 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.525(b), of multiplying—

(A) The quotient of the amount by which the common designated representative's share of such NO_X emissions exceeds the common

designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state (and Indian country within the borders of such state) for such control period, by which each common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and

(B) The amount by which total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state and Indian country within the borders of such state) for such control period exceed the state assurance level.

(ii) The permittee shall hold the TR NO_X Ozone Season allowances required under paragraph 93.7 (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

(iii) Total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state (and Indian country within the borders of such state) during a control period in a given year exceed the state assurance level if such total NO_X emissions exceed the sum, for such control period, of the State NO_X Ozone Season trading budget under 40 CFR 97.510(a) and the state's variability limit under 40 CFR 97.510(b).

(iv) It shall not be a violation of 40 CFR part 97, subpart BBBBB or of the Clean Air Act if total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state (and Indian country within the borders of such state) during a control period exceed the state assurance level or if a common designated representative's share of total NO_X emissions from the TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state (and Indian country within the borders of such state) during a control period exceeds the common designated representative's assurance level.

(v) To the extent the permittee fails to hold TR NO_X Ozone Season allowances for a control period in a given year in accordance with paragraphs 9.7(c)(2)(i) through (iii) above,

(A) The permittee shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and

(B) Each TR NO_X Ozone Season allowance that the permittee fails to hold for such control period in accordance with paragraphs 9.7(c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

(3) Compliance periods.

(i) A TR NO_X Ozone Season unit shall be subject to the requirements under paragraph 9.7(c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.

(ii) A TR NO_X Ozone Season unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

(i) A TR NO_X Ozone Season allowance held for compliance with the requirements under paragraph 9.7(c)(1)(i) above for a control period in a given year must be a TR NO_X Ozone Season allowance that was allocated for such control period or a control period in a prior year.

(ii) A TR NO_X Ozone Season allowance held for compliance with the requirements under paragraphs 9.7(c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO_X Ozone Season allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR NO_X Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart BBBBB.

(6) Limited authorization. A TR NO_X Ozone Season allowance is a limited authorization to emit one ton of NO_X during the control period in one year. Such authorization is limited in its use and duration as follows:

(i) Such authorization shall only be used in accordance with the TR NO_X Ozone Season Trading Program; and

(ii) Notwithstanding any other provision of 40 CFR part 97, subpart BBBBB, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR NO_X Ozone Season allowance does not constitute a property right.

(d) Title V permit revision requirements.

(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_X Ozone Season allowances in accordance with 40 CFR part 97, subpart BBBBB.

(2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.530 through 97.535, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using once permit modification procedures in accordance with 40 CFR 97.506(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

(1) Unless otherwise provided, the permittee of each TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.

(i) The certificate of representation under 40 CFR 97.516 for the designated representative for the source and each TR NO_X Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.516 changing the designated representative.

(ii) All emissions monitoring information, in accordance with 40 CFR part 97, subpart BBBBB.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_X Ozone Season Trading Program.

(2) The designated representative of a TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall make all submissions required under the TR NO_X Ozone Season Trading Program, except as provided in 40 CFR 97.518. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

(1) Any provision of the TR NO_X Ozone Season Trading Program that applies to a TR NO_X Ozone Season source or the designated representative of a TR NO_X Ozone Season source shall also apply to the permittee of such source and of the TR NO_X Ozone Season units at the source.

(2) Any provision of the TR NO_X Ozone Season Trading Program that applies to a TR NO_X Ozone Season unit or the designated representative of a TR NO_X Ozone Season unit shall also apply to the permittee of such unit.

(g) Effect on other authorities - No provision of the TR NO_X Ozone Season Trading Program or exemption under 40 CFR 97.505 shall be construed as exempting or excluding the permittee, and the designated representative, of a TR NO_X Ozone Season source or TR NO_X Ozone Season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(h) Effect on units in Indian country. Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regards to any source or unit, in Indian country within the borders of the state.

APPENDIX A

List of Abbreviations Used In this Permit

11 Miss. Admin. Code Pt. 2, Ch. 1.	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
11 Miss. Admin. Code Pt. 2, Ch. 2.	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
11 Miss. Admin. Code Pt. 2, Ch. 3.	Regulations for the Prevention of Air Pollution Emergency Episodes
11 Miss. Admin. Code Pt. 2, Ch. 4.	Ambient Air Quality Standards
11 Miss. Admin. Code Pt. 2, Ch. 5.	Regulations for the Prevention of Significant Deterioration of Air Quality
11 Miss. Admin. Code Pt. 2, Ch. 6.	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
11 Miss. Admin. Code Pt. 2, Ch. 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
lb/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
PM_{10}	Particulate Matter less than 10 μm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO_2	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

LIST OF REGULATIONS REFERENCED IN THIS PERMIT

The full text of the regulations referenced in this permit may be found on-line at http://www.deq.state.us **and** http://ecfr.gpoaccess.gov **or the Mississippi Department of Environmental Quality will provide a copy upon request. A list of regulations referenced in this permit is shown below:**

11 Miss. Admin. Code, Part 2, Ch. 1. – Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants (Amended November 10, 2016)

11 Miss. Admin. Code, Part 2, Ch. 2. – Permit Regulations for the Construction and/or Operation of Air Emissions Equipment (Amended July 28, 2005)

11 Miss. Admin. Code, Part 2, Ch. 6. – Air Emission Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act (Amended June 28, 2012)

40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units

40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

40 CFR 60, Subpart GG, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

40 CFR 63, Subpart YYYY, NESHAP for Stationary Combustion Turbines

40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines

40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

40 CFR 72-78, Acid Rain Program General Provisions

40 CFR 82, Protection of Stratospheric Ozone

40 CFR 97, Subpart BBBBB, CSAPR NO_x Ozone Season Group 1 Trading Program

APPENDIX C

PHASE II ACID RAIN PERMIT

PHASE II ACID RAIN PERMIT

Issued to:	NRG Wholesale Generation, L.P. – Choctaw County Generating Station
Operated by:	NRG Wholesale Generation, L.P.
ORIS code:	55706
Effective:	**October 22, 2018** to **September 30, 2023**

Summary of Previous Actions:

This page will be replaced to document new actions each time a new action is taken by the MDEQ. These are the permitting actions that have been undertaken:

1) Draft permit for public and EPA review.	November 9, 2001
2) Permit finalized and issued.	April 9, 2002
3) Draft permit for public and EPA review.	August 20, 2004
4) Permit finalized and issued.	November 23, 2004
5) Draft permit for public and EPA review.	May 5, 2010
6) Permit finalized and issued.	June 10, 2010
7) Draft permit for public and EPA review.	August 29, 2018

Present Action:

8) Permit finalized and issued	October 22, 2018

Krystal Rudolph

Signature

October 22, 2018

Date

Krystal Rudolph, P.E.
Chief, Environmental Permits Division
Mississippi Department of Environmental Quality
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Telephone: (601) 961-5171 Fax: (601) 961-5742

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Issued to: NRG Wholesale Generation, L.P. – Choctaw County Generating Station
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ACID RAIN PERMIT CONTENTS:

1) Statement of Basis.

2) SO_2 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.

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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, 11 Miss. Admin. Code Pt. 2, Ch. 6, and the State of Mississippi Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act, 11 Miss. Admin. Code Pt. 2, Ch. 7.

2) SO_2 ALLOWANCE ALLOCATIONS AND NO_X REQUIREMENTS FOR EACH AFFECTED UNIT:

		2018	2019	2020	2021	2022	2023
AA-001	**SO_2 allowances, under Tables 2, 3, or 4 of 40 CFR Part 73.**	N/A	N/A	N/A	N/A	N/A	N/A
AA-002		N/A	N/A	N/A	N/A	N/A	N/A
AA-003		N/A	N/A	N/A	N/A	N/A	N/A
AA-001 AA-002 AA-003	**NO_X limit**	N/A					

3) COMMENTS, NOTES AND JUSTIFICATIONS:

All affected units are natural gas fired units; therefore, the affected units are not subject to the NO_x requirements outlined in 40 CFR Part 76. Additionally, these units are not listed in 40 CFR Part 73, Tables 2, 3 or 4, and have not been allocated any SO_2 allowances.

4) PHASE II PERMIT APPLICATION:

Attached