

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Wolf Hollow II Power, LLC

AUTHORIZING THE OPERATION OF
Wolf Hollow II Power Plant
Electric Services

LOCATED AT
Hood County, Texas
Latitude 32° 20' 24" Longitude 97° 44' 8"
Regulated Entity Number: RN100219195

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site, emission units and affected source listed in this permit. Operations of the site, emission units and affected source listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site, emission units and affected source authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site, emission units and affected source.

Permit No: 03848 Issuance Date: _____

For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
 - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
 - E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

- (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
- (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
 - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
 - (3) Records of all observations shall be maintained.
 - (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer’s eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

- (5) Compliance Certification:
- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
 - (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- C. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
- (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_c) less than the standard effective stack height (H_c), must reduce the allowable emission level by multiplying it by $[h_c/H_c]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- D. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:

- (i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)
 - (ii) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
 - (iii) Title 30 TAC § 111.209 (relating to Exception for Disposal Fires)
 - (iv) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
 - (v) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
- A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
5. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

Additional Monitoring Requirements

6. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

7. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
 - A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
8. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
9. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

10. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
11. Use of Discrete Emission Credits to comply with the applicable requirements:
 - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117

- (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
- B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
- (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
 - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
 - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

12. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

13. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
- A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

Permit Location

14. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

15. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Acid Rain Permit Requirements

16. For units CTG4 and CTG5 located at the affected source identified by ORIS/Facility code (55139), the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.
 - A. General Requirements
 - (i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from, or combined with the FOP.
 - (ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.
 - (iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.
 - (iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.
 - (v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.
 - B. Monitoring Requirements
 - (i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained 40 CFR Part 75.

- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO₂ and NO_x under the ARP.
- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

C. SO₂ emissions requirements

- (i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for SO₂.
- (ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the unit's compliance subaccount, allowances in an amount not less than the total annual emissions of SO₂ for the previous calendar year.
- (iii) Each ton of SO₂ emitted in excess of the acid rain emissions limitations for SO₂ shall constitute a separate violation of the FCAA amendments.
- (iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO₂ emissions requirements as follows:
 - (1) Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or
 - (2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).
- (v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.
- (vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.
- (vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO₂ in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

- D. NO_x Emission Requirements
- (i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO_x under 40 CFR Part 76.
- E. Excess emissions requirements for SO₂ and NO_x.
- (i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
 - (ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:
 - (1) Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.
 - (2) Comply with the terms of an approved offset plan.
- F. Recordkeeping and Reporting Requirements
- (i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on site at the source each of the following documents 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 permitting authority or the EPA Administrator.
 - (1) The certificate of representation for the designated representative for the source and each affected unit and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the 3-year period shall apply.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.
 - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.
 - (ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

G. Liability

- (i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an acid rain permit, or a written exemption under 40 CFR §§ 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).
- (ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.
- (iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.
- (iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.
- (v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.
- (vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.
- (vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.

H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:

- (i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans.
- (ii) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's

obligation to comply with any other provisions of the FCAA Amendments.

- (iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law.
 - (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
 - (v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.
- I. The number of SO₂ allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

Clean Air Interstate Rule Permit Requirements

17. For units CTG4 and CTG5 located at the site identified by ORIS/Facility code (55139), the designated representative and the owner or operator, as applicable, shall comply with the following Clean Air Interstate Rule (CAIR) Permit requirements. Until approval of the Texas CAIR SIP by EPA, the permit holder shall comply with the equivalent requirements of 40 CFR Part 97 in place of the referenced 40 CFR Part 96 requirements in the Texas CAIR permit and 30 TAC Chapter 122 requirements.

A. General Requirements

- (i) Under 30 TAC § 122.420(b) and 40 CFR §§ 96.120(b) and 96.220(b) the CAIR Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP).
- (ii) The owners and operators of the CAIR NO_x and the CAIR SO₂ source shall operate the source and the unit in compliance with the requirements of this CAIR permit and all other applicable State and federal requirements.
- (iii) The owners and operators of the CAIR NO_x and the CAIR SO₂ source shall comply with the General Terms and Conditions of the FOP that incorporates this CAIR Permit.
- (iv) The term for the initial CAIR permit shall commence with the issuance of the revision containing the CAIR permit and shall be the remaining term for the FOP that incorporates the CAIR permit. Renewal of the initial CAIR permit shall coincide with the renewal of the FOP that incorporates the CAIR permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring and Reporting Requirements

- (i) The owners and operators, and the CAIR designated representative, of the CAIR NO_x source and each CAIR NO_x unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HH.

- (ii) The owners and operators, and the CAIR designated representative, of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HHH.
- (iii) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH and any other credible evidence shall be used to determine compliance by the CAIR NO_x source with the CAIR NO_x emissions limitation.
- (iv) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH and any other credible evidence shall be used to determine compliance by the CAIR SO₂ source with the CAIR SO₂ emissions limitation.

C. NO_x emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under 40 CFR § 96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HH.
- (ii) A CAIR NO_x unit shall be subject to the requirements of paragraph C.(i) of this CAIR Permit starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.170(b)(1), (2), or (5).
- (iii) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.
- (iv) CAIR NO_x allowances shall be held in, deducted from or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FF or Subpart GG.
- (v) A CAIR NO_x allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR NO_x allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FF or Subpart GG, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x unit's compliance account is incorporated automatically in this CAIR permit.

- D. NO_x excess emissions requirement
- (i) If a CAIR NO_x source emits nitrogen oxides during any control period in excess of the CAIR NO_x emissions limitation, the owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under 40 CFR § 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
 - (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable State law.
- E. SO_2 emissions requirements
- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, CAIR SO_2 allowances available for compliance deductions for the control period under 40 CFR § 96.254(a) and (b) in an amount not less than the tons of total sulfur dioxides emissions for the control period from all CAIR SO_2 units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HHH.
 - (ii) A CAIR SO_2 unit shall be subject to the requirements of paragraph E.(i) of this CAIR Permit starting on the later of January 1, 2010, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.270(b)(1), (2), or (5).
 - (iii) A CAIR SO_2 allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.
 - (iv) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FFF or Subpart GGG.
 - (v) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 Trading Program. No provision of the CAIR SO_2 Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
 - (vi) A CAIR SO_2 allowance does not constitute a property right.
 - (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or Subpart GGG, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 unit's compliance account is incorporated automatically in this CAIR permit.
- F. SO_2 excess emissions requirements

- (i) If a CAIR SO₂ source emits sulfur dioxides during any control period in excess of the CAIR SO₂ emissions limitation, the owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under 40 CFR § 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable State law.

G. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source and the CAIR SO₂ source and each CAIR SO₂ unit at the source shall keep on site at the source each of the following documents 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 permitting authority or the Administrator.
 - (1) The certificate of representation under 40 CFR §§ 96.113 and 96.213 for the CAIR NO_x designated representative for the source and each CAIR NO_x unit and the CAIR SO₂ designated representative for the source and each CAIR SO₂ 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 documents are superseded because of the submission of a new certificate of representation under 40 CFR §§ 96.113 and 96.213 changing the CAIR designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH and Subpart HHH, provided that to the extent that these subparts provide for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program or relied upon for compliance determinations.
 - (4) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program.
- (ii) The CAIR designated representative of a CAIR NO_x source and each CAIR NO_x unit at the source and a CAIR SO₂ source and each CAIR SO₂ unit at the source shall submit the reports required under the CAIR NO_x Annual

Trading Program and the CAIR SO₂ Trading Program including those under 40 CFR Part 96, Subpart HH^x and Subpart HHH.

- H. The CAIR NO_x source and each CAIR NO_x unit shall meet the requirements of the CAIR NO_x Annual Trading Program contained in 40 CFR Part 96, Subparts AA through II^x.
- I. The CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program contained in 40 CFR Part 96, Subparts AAA through III.
- J. Any provision of the CAIR NO_x Annual Trading Program and the CAIR SO₂ Trading Program that applies^x to a CAIR NO_x source or CAIR SO₂ source or the CAIR designated representative of a CAIR NO_x source or CAIR SO₂ source shall also apply to the owners and operators of such source and the units at the source.
- K. Any provision of the CAIR NO_x Annual Trading Program and the CAIR SO₂ Trading Program that applies^x to a CAIR NO_x unit or CAIR SO₂ unit or the CAIR designated representative of a CAIR NO_x unit or CAIR SO₂ unit shall also apply to the owners and operators of such unit.
- L. No provision of the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, a CAIR permit application, a CAIR permit, or an exemption under 40 CFR §§ 96.105 or 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source or CAIR NO_x unit or a CAIR SO₂ source or CAIR SO₂ unit from compliance^x with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary 19

Applicable Requirements Summary 21

Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|---------------------------------------|--|----------------------------------|----------------------|--|--|
| CGT4 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1151 | 30 TAC Chapter 111, Nonagricultural Processes | No changing attributes. |
| CGT4 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1111 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| CGT4 | STATIONARY TURBINES | N/A | 60KKKK-1 | 40 CFR Part 60, Subpart KKKK | 75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F. |
| CGT4 | STATIONARY TURBINES | N/A | 60KKKK-2 | 40 CFR Part 60, Subpart KKKK | 75% of Peak = The combustion turbine operates at less than 75% of peak load or at temperatures less than zero degrees F. |
| CGT4 | STATIONARY TURBINES | N/A | 60TTTT | 40 CFR Part 60, Subpart TTTT | No changing attributes. |
| CGT5 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1151 | 30 TAC Chapter 111, Nonagricultural Processes | No changing attributes. |
| CGT5 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1111 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| CGT5 | STATIONARY TURBINES | N/A | 60KKKK-1 | 40 CFR Part 60, Subpart KKKK | 75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F. |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|---|--------------------------|---------------|---------------------------------|--|
| CGT5 | STATIONARY TURBINES | N/A | 60KKKK-2 | 40 CFR Part 60, Subpart KKKK | 75% of Peak = The combustion turbine operates at less than 75% of peak load or at temperatures less than zero degrees F. |
| CGT5 | STATIONARY TURBINES | N/A | 60TTTT | 40 CFR Part 60, Subpart TTTT | No changing attributes. |
| E-AUXBLR2 | BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS | N/A | 60DC | 40 CFR Part 60, Subpart Dc | No changing attributes. |
| E-GEN2 | SRIC ENGINES | N/A | 60III | 40 CFR Part 60, Subpart III | No changing attributes. |
| E-GEN2 | SRIC ENGINES | N/A | 63ZZZZ | 40 CFR Part 63, Subpart ZZZZ | No changing attributes. |
| E-PUMP2 | SRIC ENGINES | N/A | 60III | 40 CFR Part 60, Subpart III | No changing attributes. |
| E-PUMP2 | SRIC ENGINES | N/A | 63ZZZZ | 40 CFR Part 63, Subpart ZZZZ | No changing attributes. |

Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---------------------------|-------------------------|---------------|--------------|---|---|--|---|---|---|
| CGT4 | EP | R1151 | PM | 30 TAC Chapter 111, Nonagricultural Processes | § 111.151(a) § 111.151(c) | No person may cause, suffer, allow, or permit emissions of particulate matter from any source to exceed the allowable rates specified in Table 1 as follows, except as provided by §111.153 of this title (relating to Emissions Limits for Steam Generators). | ** See Periodic Monitoring Summary | None | None |
| CGT4 | EP | R1111 | PM (OPACITY) | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C) § 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed. | [G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary | None | None |

Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|----------------------------------|--------------------------------|----------------------|------------------|--|--|--|---|--|---|
| CGT4 | EU | 60KKKK-1 | NO _x | 40 CFR Part 60, Subpart KKKK | § 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4333(a) § 60.4333(b)(1) § 60.4335(b)(1) [G]§ 60.4345 | New, modified, or reconstructed turbine firing natural gas with a heat input at peak load > 850 MMBtu/h must meet the nitrogen oxides emission standard of 15 ppm at 15 percent O ₂ . | § 60.4333(b)(1) § 60.4335(b)(1) § 60.4340(b) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(2) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405 | [G]§ 60.4345 § 60.4350(b) | [G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395 |
| CGT4 | EU | 60KKKK-1 | SO ₂ | 40 CFR Part 60, Subpart KKKK | § 60.4330(a)(2) § 60.4333(a) | You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO ₂ /J (0.060 lb SO ₂ /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement. | § 60.4365 § 60.4365(a) § 60.4415(a) § 60.4415(a)(1) § 60.4415(a)(1)(ii) | § 60.4365(a) | § 60.4375(a) |

Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---------------------------|-------------------------|---------------|-----------------|---------------------------------------|--|--|---|---|---|
| CGT4 | EU | 60KKKK-2 | NO _x | 40 CFR Part 60, Subpart KKKK | § 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4333(a) § 60.4333(b)(1) § 60.4335(b)(1) [G]§ 60.4345 | Turbines operating at less than 75 percent of peak load, or turbines operating at temperatures less than 0 degrees F with greater than 30 MW output must meet the nitrogen oxides emission standard of 96 ppm at 15 percent O ₂ . | § 60.4333(b)(1) § 60.4335(b)(1) § 60.4340(b) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(2) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405 | [G]§ 60.4345 § 60.4350(b) | [G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395 |
| CGT4 | EU | 60KKKK-2 | SO ₂ | 40 CFR Part 60, Subpart KKKK | § 60.4330(a)(2) § 60.4333(a) | You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO ₂ /J (0.060 lb SO ₂ /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement. | § 60.4365 § 60.4365(a) § 60.4415(a) § 60.4415(a)(1) § 60.4415(a)(1)(ii) | § 60.4365(a) | § 60.4375(a) |

Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---------------------------|-------------------------|---------------|-----------------|---|--|--|--|---|---|
| CGT4 | EU | 60TTTT | CO ₂ | 40 CFR Part 60, Subpart TTTT | § 60.5509 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart TTTT | The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart TTTT | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart TTTT | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart TTTT | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart TTTT |
| CGT5 | EP | R1151 | PM | 30 TAC Chapter 111, Nonagricultural Processes | § 111.151(a) § 111.151(c) | No person may cause, suffer, allow, or permit emissions of particulate matter from any source to exceed the allowable rates specified in Table 1 as follows, except as provided by §111.153 of this title (relating to Emissions Limits for Steam Generators). | ** See Periodic Monitoring Summary | None | None |
| CGT5 | EP | R1111 | PM (OPACITY) | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C) § 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed. | [G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary | None | None |

Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|----------------------------------|--------------------------------|----------------------|------------------|--|--|--|---|--|---|
| CGT5 | EU | 60KKKK-1 | NO _x | 40 CFR Part 60, Subpart KKKK | § 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4333(a) § 60.4333(b)(1) § 60.4335(b)(1) [G]§ 60.4345 | New, modified, or reconstructed turbine firing natural gas with a heat input at peak load > 850 MMBtu/h must meet the nitrogen oxides emission standard of 15 ppm at 15 percent O ₂ . | § 60.4333(b)(1) § 60.4335(b)(1) § 60.4340(b) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(2) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405 | [G]§ 60.4345 § 60.4350(b) | [G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395 |
| CGT5 | EU | 60KKKK-1 | SO ₂ | 40 CFR Part 60, Subpart KKKK | § 60.4330(a)(2) § 60.4333(a) | You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO ₂ /J (0.060 lb SO ₂ /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement. | § 60.4365 § 60.4365(a) § 60.4415(a) § 60.4415(a)(1) § 60.4415(a)(1)(ii) | § 60.4365(a) | § 60.4375(a) |

Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|----------------------------------|--------------------------------|----------------------|------------------|--|--|--|---|--|---|
| CGT5 | EU | 60KKKK-2 | NO _x | 40 CFR Part 60, Subpart KKKK | § 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4333(a) § 60.4333(b)(1) § 60.4335(b)(1) [G]§ 60.4345 | Turbines operating at less than 75 percent of peak load, or turbines operating at temperatures less than 0 degrees F with greater than 30 MW output must meet the nitrogen oxides emission standard of 96 ppm at 15 percent O ₂ . | § 60.4333(b)(1) § 60.4335(b)(1) § 60.4340(b) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(2) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405 | [G]§ 60.4345 § 60.4350(b) | [G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395 |
| CGT5 | EU | 60KKKK-2 | SO ₂ | 40 CFR Part 60, Subpart KKKK | § 60.4330(a)(2) § 60.4333(a) | You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO ₂ /J (0.060 lb SO ₂ /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement. | § 60.4365 § 60.4365(a) § 60.4415(a) § 60.4415(a)(1) § 60.4415(a)(1)(ii) | § 60.4365(a) | § 60.4375(a) |

Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---------------------------|-------------------------|---------------|-----------------|---------------------------------------|--|---|--|---|---|
| CGT5 | EU | 60TTTT | CO ₂ | 40 CFR Part 60, Subpart TTTT | § 60.5509 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart TTTT | The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart TTTT | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart TTTT | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart TTTT | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart TTTT |
| E-AUXBLR2 | EU | 60DC | SO ₂ | 40 CFR Part 60, Subpart Dc | § 60.40c(a) | This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW). | None | § 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i) | [G]§ 60.48c(a) § 60.48c(j) |
| E-AUXBLR2 | EU | 60DC | PM | 40 CFR Part 60, Subpart Dc | § 60.40c(a) | This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW). | None | § 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i) | [G]§ 60.48c(a) § 60.48c(j) |

Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---------------------------|-------------------------|---------------|--------------|---------------------------------------|--|---|-------------------------------------|---|--|
| E-AUXBLR2 | EU | 60DC | PM (OPACITY) | 40 CFR Part 60, Subpart Dc | § 60.40c(a) | This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW). | None | § 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i) | [G]§ 60.48c(a) § 60.48c(j) |
| E-GEN2 | EU | 60III | CO | 40 CFR Part 60, Subpart III | § 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a) | Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a). | § 60.4209(a) | § 60.4214(b) | [G]§ 60.4214(d) |

Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|----------------------------------|--------------------------------|----------------------|--------------------------|--|--|--|--|--|--|
| E-GEN2 | EU | 60III | NMHC and NO _x | 40 CFR Part 60, Subpart III | § 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a) | Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than 560 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NOx emission limit of 6.4 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a). | § 60.4209(a) | § 60.4214(b) | [G]§ 60.4214(d) |
| E-GEN2 | EU | 60III | PM | 40 CFR Part 60, Subpart III | § 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a) | Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a). | § 60.4209(a) | § 60.4214(b) | [G]§ 60.4214(d) |

Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---------------------------|-------------------------|---------------|--------------------------|---------------------------------------|--|--|-------------------------------------|---|---|
| E-GEN2 | EU | 63ZZZZ | 112(B) HAPS | 40 CFR Part 63, Subpart ZZZZ | § 63.6590(c) | Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part. | None | None | None |
| E-PUMP2 | EU | 60IIII | NMHC and NO _x | 40 CFR Part 60, Subpart IIII | § 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 | Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with an NMHC+NOx emission limit of 4.0 g/KW-hr, as listed in Table 4 to this subpart. | § 60.4209(a) | § 60.4214(b) | [G]§ 60.4214(d) |

Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|----------------------------------|--------------------------------|----------------------|------------------|--|--|---|--|--|--|
| E-PUMP2 | EU | 60III | PM | 40 CFR Part 60, Subpart III | § 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 | Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as listed in Table 4 to this subpart. | § 60.4209(a) | § 60.4214(b) | [G]§ 60.4214(d) |
| E-PUMP2 | EU | 63ZZZZ | 112(B) HAPS | 40 CFR Part 63, Subpart ZZZZ | § 63.6590(c) | Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart III, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part. | None | None | None |

Additional Monitoring Requirements

Periodic Monitoring Summary33

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|-----------------------------------|
| ID No.: CGT4 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information | |
| Indicator: Fuel Type | |
| Minimum Frequency: Annually | |
| Averaging Period: n/a | |
| Deviation Limit: Firing of an alternative fuel, either alone or in combination with the specified fuel (pipeline quality natural gas containing no more than 5.0 grains total sulfur per 100 dscf). | |
| Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|-----------------------------|
| ID No.: CGT4 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Nonagricultural Processes | SOP Index No.: R1151 |
| Pollutant: PM | Main Standard: § 111.151(a) |
| Monitoring Information | |
| Indicator: Fuel Type | |
| Minimum Frequency: Annually | |
| Averaging Period: n/a | |
| Deviation Limit: Firing of an alternative fuel, either alone or in combination with the specified fuel (pipeline quality natural gas containing no more than 5.0 grains total sulfur per 100 dscf). | |
| Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|-----------------------------------|
| ID No.: CGT5 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information | |
| Indicator: Fuel Type | |
| Minimum Frequency: Annually | |
| Averaging Period: n/a | |
| Deviation Limit: Firing of an alternative fuel, either alone or in combination with the specified fuel (pipeline quality natural gas containing no more than 5.0 grains total sulfur per 100 dscf). | |
| Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|-----------------------------|
| ID No.: CGT5 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Nonagricultural Processes | SOP Index No.: R1151 |
| Pollutant: PM | Main Standard: § 111.151(a) |
| Monitoring Information | |
| Indicator: Fuel Type | |
| Minimum Frequency: Annually | |
| Averaging Period: n/a | |
| Deviation Limit: Firing of an alternative fuel, either alone or in combination with the specified fuel (pipeline quality natural gas containing no more than 5.0 grains total sulfur per 100 dscf). | |
| Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation. | |

Permit Shield

Permit Shield38

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

| Unit/Group/Process | | Regulation | Basis of Determination |
|--------------------|-----------------------|--|---|
| ID No. | Group/Inclusive Units | | |
| CGT4 | N/A | 30 TAC Chapter 117, Subchapter E, Division 1 | The provisions of this division do not apply since the stationary gas turbine (and duct burner) was placed in service after December 31, 1995. |
| CGT4 | N/A | 40 CFR Part 60, Subpart Dc | Heat recovery steam generators and duct burners regulated under 40 CFR Part 60, Subpart KKKK are not subject to the requirements of Dc of this subpart. |
| CGT4 | N/A | 40 CFR Part 60, Subpart GG | Stationary combustion turbines regulated under 40 CFR Part 60, subpart KKKK are exempt from the requirements of subpart GG of this part. |
| CGT5 | N/A | 30 TAC Chapter 117, Subchapter E, Division 1 | The provisions of this division do not apply since the stationary gas turbine (and duct burner) was placed in service after December 31, 1995. |
| CGT5 | N/A | 40 CFR Part 60, Subpart Dc | Heat recovery steam generators and duct burners regulated under 40 CFR Part 60, Subpart KKKK are not subject to the requirements of Dc of this subpart. |
| CGT5 | N/A | 40 CFR Part 60, Subpart GG | Stationary combustion turbines regulated under 40 CFR Part 60, subpart KKKK are exempt from the requirements of subpart GG of this part. |
| E-DSLTK1 | N/A | 40 CFR Part 60, Subpart Kb | Tank has a volume less than 75 cubic meters. |

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

| Unit/Group/Process | | Regulation | Basis of Determination |
|--------------------|-----------------------|----------------------------|--|
| ID No. | Group/Inclusive Units | | |
| E-DSLTK2 | N/A | 40 CFR Part 60, Subpart Kb | Tank has a volume less than 75 cubic meters. |

New Source Review Authorization References

New Source Review Authorization References.....41

New Source Review Authorization References by Emission Unit42

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

| Prevention of Significant Deterioration (PSD) Permits | |
|---|------------------------------|
| PSD Permit No.: PSDTX1110 | Issuance Date: 07/06/2015 |
| Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area. | |
| Authorization No.: 83638 | Issuance Date: 07/06/2015 |
| Permits By Rule (30 TAC Chapter 106) for the Application Area | |
| Number: 106.227 | Version No./Date: 09/04/2000 |
| Number: 106.263 | Version No./Date: 11/01/2001 |
| Number: 106.265 | Version No./Date: 09/04/2000 |
| Number: 106.532 | Version No./Date: 09/04/2000 |

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

| Unit/Group/Process ID No. | Emission Unit Name/Description | New Source Review Authorization |
|----------------------------------|---------------------------------------|--|
| CGT4 | CT-HRSG UNIT 4 | 83638, PSDTX1110 |
| CGT5 | CT-HRSG UNIT 5 | 83638, PSDTX1110 |
| E-AUXBLR2 | AUXILIARY BOILER 2 | 83638, PSDTX1110 |
| E-DSLTK1 | DIESEL TANK 1 | 83638, PSDTX1110 |
| E-DSLTK2 | DIESEL TANK 2 | 83638, PSDTX1110 |
| E-GEN2 | EMERGENCY GENERATOR UNIT 2 | 83638, PSDTX1110 |
| E-PUMP2 | FIREWATER PUMP UNIT 2 | 83638, PSDTX1110 |

Appendix A

Acronym List.....44

Acronym List

The following abbreviations or acronyms may be used in this permit:

| | | |
|------------------|-------|---|
| ACFM | ..... | actual cubic feet per minute |
| AMOC | ..... | alternate means of control |
| ARP | ..... | Acid Rain Program |
| ASTM | ..... | American Society of Testing and Materials |
| B/PA | ..... | Beaumont/Port Arthur (nonattainment area) |
| CAM | ..... | Compliance Assurance Monitoring |
| CD | ..... | control device |
| COMS | ..... | continuous opacity monitoring system |
| CVS | ..... | closed-vent system |
| D/FW | ..... | Dallas/Fort Worth (nonattainment area) |
| DR | ..... | Designated Representative |
| EIP | ..... | El Paso (nonattainment area) |
| EP | ..... | emission point |
| EPA | ..... | U.S. Environmental Protection Agency |
| EU | ..... | emission unit |
| FCAA Amendments | ..... | Federal Clean Air Act Amendments |
| FOP | ..... | federal operating permit |
| GF | ..... | grandfathered |
| gr/100 scf | ..... | grains per 100 standard cubic feet |
| HAP | ..... | hazardous air pollutant |
| H/G/B | ..... | Houston/Galveston/Brazoria (nonattainment area) |
| H ₂ S | ..... | hydrogen sulfide |
| ID No. | ..... | identification number |
| lb/hr | ..... | pound(s) per hour |
| MMBtu/hr | ..... | Million British thermal units per hour |
| MRRT | ..... | monitoring, recordkeeping, reporting, and testing |
| NA | ..... | nonattainment |
| N/A | ..... | not applicable |
| NADB | ..... | National Allowance Data Base |
| NO _x | ..... | nitrogen oxides |
| NSPS | ..... | New Source Performance Standard (40 CFR Part 60) |
| NSR | ..... | New Source Review |
| ORIS | ..... | Office of Regulatory Information Systems |
| Pb | ..... | lead |
| PBR | ..... | Permit By Rule |
| PM | ..... | particulate matter |
| ppmv | ..... | parts per million by volume |
| PSD | ..... | prevention of significant deterioration |
| RO | ..... | Responsible Official |
| SO ₂ | ..... | sulfur dioxide |
| TCEQ | ..... | Texas Commission on Environmental Quality |
| TSP | ..... | total suspended particulate |
| TVP | ..... | true vapor pressure |
| U.S.C. | ..... | United States Code |
| VOC | ..... | volatile organic compound |

Appendix B

Major NSR Summary Table46

| Permit Number: 83638/PSDTX1110 | | | Issuance Date: 07/06/2015 | | | | |
|--------------------------------|--|---|---------------------------|--------|-------------------------------------|----------------------------|------------------------|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lb/hr | TPY** | Spec. Cond. | Spec. Cond. | Spec. Cond. |
| E-ST3 | GE 7HA.02 (~330 MW) w/~771 MMBtu/hr Duct Burner (6) | NO _x | 27.81 | 168.59 | 1, 5, 6, 12, 13, 14 | 1, 12, 13, 15, 16 | 1, 12, 13, 17 |
| | | NO _x (MSS) | 420.00 | -- | | | |
| | | CO | 33.86 | 856.32 | | | |
| | | CO (MSS) | 7636.66 | -- | | | |
| | | VOC | 19.35 | 169.55 | | | |
| | | VOC (MSS) | 1323.78 | -- | | | |
| | | SO ₂ | 21.96 | 20.38 | | | |
| | | SO ₂ (MSS) | 21.69 | -- | | | |
| | | PM (7) | 42.86 | 87.95 | | | |
| | | PM ₁₀ (7) | 42.86 | 87.95 | | | |
| | | PM _{2.5} (7) | 42.86 | 87.95 | | | |
| | | NH ₃ | 51.49 | 193.37 | | | |
| | | H ₂ SO ₄ (7) | 3.69 | 3.46 | | | |
| | | (NH ₄) ₂ SO ₄ (7) | 22.96 | 20.56 | | | |
| E-ST4 | GE 7HA.02 (~330 MW) w/~771 MMBtu/hr Duct Burner (6) | NO _x | 27.81 | 168.59 | 1, 5, 6, 12, 13, 14 | 1, 12, 13, 15, 16 | 1, 12, 13, 17 |
| | | NO _x (MSS) | 420.00 | -- | | | |
| | | CO | 33.86 | 856.32 | | | |
| | | CO (MSS) | 7636.66 | -- | | | |

| Permit Number: 83638/PSDTX1110 | | | Issuance Date: 07/06/2015 | | | | |
|--------------------------------|----------------------------------|---|---------------------------|--------|-------------------------------------|----------------------------|------------------------|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lb/hr | TPY** | Spec. Cond. | Spec. Cond. | Spec. Cond. |
| | | VOC | 19.35 | 169.55 | | | |
| | | VOC (MSS) | 1323.78 | -- | | | |
| | | SO ₂ | 21.96 | 20.38 | | | |
| | | SO ₂ (MSS) | 21.69 | -- | | | |
| | | PM (7) | 42.86 | 87.95 | | | |
| | | PM ₁₀ (7) | 42.86 | 87.95 | | | |
| | | PM _{2.5} (7) | 42.86 | 87.95 | | | |
| | | NH ₃ | 51.49 | 193.37 | | | |
| | | H ₂ SO ₄ (7) | 3.69 | 3.46 | | | |
| | | (NH ₄) ₂ SO ₄ (7) | 22.96 | 20.56 | | | |
| E-AUXBLR2 | Auxiliary Boiler ~40 MMBtu/hr | NO _x | 1.48 | 6.48 | 1, 5, 6, 14 | 1, 16 | 1 |
| | | CO | 1.48 | 6.48 | | | |
| | | VOC | 0.22 | 0.96 | | | |
| | | SO ₂ | 0.23 | 0.25 | | | |
| | | PM | 0.20 | 0.88 | | | |
| | | PM ₁₀ | 0.20 | 0.88 | | | |
| | | PM _{2.5} | 0.20 | 0.88 | | | |
| E-PUMP2 | Fire Water Pump 2 ~250-hp | NO _x | 1.49 | 0.07 | 1, 5, 6 | 1, 16 | 1 |
| | | CO | 0.22 | 0.01 | | | |
| | | VOC | 0.06 | <0.01 | | | |
| | | SO ₂ | <0.01 | <0.01 | | | |
| | | PM | 0.03 | <0.01 | | | |
| | | PM ₁₀ | 0.03 | <0.01 | | | |

| Permit Number: 83638/PSDTX1110 | | | Issuance Date: 07/06/2015 | | | | |
|--------------------------------|------------------------------------|--------------------------|---------------------------|-------|-------------------------------------|----------------------------|------------------------|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lb/hr | TPY** | Spec. Cond. | Spec. Cond. | Spec. Cond. |
| | | PM _{2.5} | 0.03 | <0.01 | | | |
| E-PIPFUG2 | Fugitive Components 2 (5) | VOC | 0.05 | 0.22 | | | |
| E-LOV3 | Turbine 3 Lube Vent Oil Vent | VOC | <0.01 | 0.01 | 6 | 16 | |
| | | PM | <0.01 | 0.01 | | | |
| | | PM ₁₀ | <0.01 | 0.01 | | | |
| | | PM _{2.5} | <0.01 | 0.01 | | | |
| E-LOV4 | Turbine 4 Lube Vent Oil Vent | VOC | <0.01 | 0.01 | 6 | 16 | |
| | | PM | <0.01 | 0.01 | | | |
| | | PM ₁₀ | <0.01 | 0.01 | | | |
| | | PM _{2.5} | <0.01 | 0.01 | | | |
| E-LOVST2 | Steam Turbine 2 Lube Vent Oil Vent | VOC | <0.01 | 0.01 | 6 | 16 | |
| | | PM | <0.01 | 0.01 | | | |
| | | PM ₁₀ | <0.01 | 0.01 | | | |
| | | PM _{2.5} | <0.01 | 0.01 | | | |
| E-NH3FUG2 | Ammonia Fugitive Components (5) | NH ₃ | 0.12 | 0.51 | 8 | 8, 16 | |

| Permit Number: 83638/PSDTX1110 | | | Issuance Date: 07/06/2015 | | | | |
|--------------------------------|-------------------------------|--------------------------|---------------------------|-------|-------------------------------------|----------------------------|------------------------|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lb/hr | TPY** | Spec. Cond. | Spec. Cond. | Spec. Cond. |
| E-ILEMSS2 | ILE Maintenance Fugitives (5) | NO _x | <0.01 | <0.01 | 10 | 16 | |
| | | CO | <0.01 | <0.01 | | | |
| | | VOC | 0.12 | <0.01 | | | |
| | | PM | 0.14 | 0.02 | | | |
| | | PM ₁₀ | 0.14 | 0.02 | | | |
| | | PM _{2.5} | 0.09 | 0.02 | | | |
| | | NH ₃ | <0.01 | <0.01 | | | |
| E-GEN2 | Emergency Generator Unit 2 | NO _x | 35.29 | 1.76 | 1, 5, 6 | 1, 16 | 1 |
| | | CO | 1.94 | 0.10 | | | |
| | | VOC | 0.71 | 0.04 | | | |
| | | SO ₂ | 0.03 | <0.01 | | | |
| | | PM | 0.16 | 0.01 | | | |
| | | PM ₁₀ | 0.16 | 0.01 | | | |
| | | PM _{2.5} | 0.16 | 0.01 | | | |
| E-DSLTK1 | Diesel Tank 1 | VOC | 0.11 | <0.01 | 6 | 16 | |
| E-DSLTK2 | Diesel Tank 2 | VOC | 0.02 | <0.01 | 6 | 16 | |
| E-DPHTR1 | Dew Point Heater 1 | NO _x | 0.25 | 1.12 | 6 | 16 | |
| | | CO | 0.51 | 2.22 | | | |
| | | VOC | 0.04 | 0.17 | | | |
| | | PM | 0.05 | 0.23 | | | |
| | | PM ₁₀ | 0.05 | 0.23 | | | |
| | | PM _{2.5} | 0.05 | 0.23 | | | |
| | | SO ₂ | 0.04 | 0.17 | | | |

Footnotes:

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - total particulate matter

PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}

PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

NH₃ - ammonia

H₂SO₄ - sulfuric acid

(NH₄)₂SO₄ - ammonia sulfate

(MSS) - indicates maintenance, startup, and shutdown emissions

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

(6) Annual emission rates include normal and MSS emissions. MSS lb/hr emission allowables apply during each clock hour that includes one or more minutes of MSS activities. During all other clock hours, the normal lb/hr limits apply.

(7) Planned MSS hourly emissions are included.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AIR QUALITY PERMIT



A Permit Is Hereby Issued To
Wolf Hollow II Power, LLC
Authorizing the Construction and Operation of
Wolf Hollow II
Located at **Granbury, Hood County, Texas**
Latitude 32° 20' 24" Longitude -97° 44' 8"

Permits: 83638 and PSDTX1110

Amendment Date : July 6, 2015

Expiration Date: March 3, 2020

For the Commission

- Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code 116.116 (30 TAC 116.116)]
- Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC 116.120(a), (b) and (c)]
- Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC 116.115(b)(2)(A)]
- Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC 116.115(b)(2)(B)(iii)]
- Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC 116.115(b)(2)(C)]

6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with 30 TAC 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in Texas Health and Safety Code (THSC) 382.003(3) or violate THSC 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.

Special Conditions

Permit Numbers 83638 and PSDTX1110

Federal Applicability

1. These facilities shall comply with applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations in Title 40 Code of Federal Regulations (40 CFR) as follows: **(07/15)**
 - A. In 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS):
 - (1) Subpart A: General Conditions.
 - (2) Subpart Dc: Industrial-Commercial-Institutional Steam Generating Units.
 - (3) Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
 - (4) Subpart KKKK: Standards of Performance for Stationary Combustion Turbines.
 - B. In 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (HAP) for Source Categories:
 - (1) Subpart A: General Conditions.
 - (2) Subpart ZZZZ: Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Emission Standards and Operating Specifications

2. This permit authorizes Two General Electric Model 7HA.02 (GE7HA) natural gas fired combined cycle turbine generators (CTGs) (Emission Point Nos. [EPNs] E-ST3 and E-ST4): each rated at nominal capability of 330 megawatts (MW). Each CTG will have a duct fired heat recovery steam generator (HRSG) with a maximum heat input of 771 million British thermal units per hour (MMBtu/hr). **(07/15)**
3. Emission Rates
 - A. GE7HA.02 **(07/15)**
 - (1) The concentration of nitrogen oxides (NO_x) from the two CTGs (EPNs: E-ST3 and E-ST4) shall not exceed 2.0 parts per million by volume dry (ppmvd) corrected to 15 percent oxygen (O₂), on a rolling 24-hour average.
 - (2) The concentration of carbon monoxide (CO) from the two CTGs (EPNs: E-ST3 and E-ST4) shall not exceed 4.0 ppmvd when corrected to 15 percent O₂ on a rolling 24-hour average.

- (3) The concentration of volatile organic compounds (VOC) from the two CTGs (EPNs: E ST3 and E-ST4) shall not exceed 4.0 ppmvd when corrected to 15 percent O₂ on a rolling three-hour average.
- (4) The concentration of ammonia (NH₃) from the two CTGs (EPNs: E-ST3 and E-ST4) shall not exceed 10 ppmvd when corrected to 15 percent O₂ on a rolling 24-hour average.

The concentrations above do not apply during periods of turbine startup or shutdown activities.

4. Also authorized under this permit are a 40 MMBtu/hr Auxiliary Boiler (EPN E-AUXBLR2), a 2,937-horse power (hp) Emergency Generator (EPN E-GEN2), a 250-hp Fire Water Pump (EPN E-PUMP2) and one 7.0 MMBtu/hr Dew Point Heater (EPN E-DPHTR1). **(07/15)**
 - A. The auxiliary boiler shall not be used to generate power in the steam turbine generator. The auxiliary boiler shall not exceed the emission and operation limitations specified in the MAERT. **(07/15)**
 - B. The emergency generator and fire water pump are each limited to 100 hours per year of non-emergency operation. **(07/15)**
 - C. The dew point heater shall be used to heat the natural gas fuel as necessary and shall be operated only when needed. The dew point heater shall not exceed the emission and operation limitations specified in the MAERT. **(07/15)**
5. Fuel Specifications
 - A. Fuel for the CTGs, duct burners, auxiliary boiler, and the dew point heater is limited to pipeline-quality natural gas containing no more than 2 grains total sulfur per 100 dry standard cubic feet (short-term) and 0.50 grain per 100 standard cubic feet (annually) which will minimize SO₂ emissions. **(07/15)**
 - B. The Emergency Generator (EPN E-GEN2) and the Fire Water Pump (EPN E-PUMP2) are authorized to fire diesel fuel containing no more 0.0015 percent sulfur by weight. **(07/15)**

Upon request by the Executive Director of the TCEQ or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel-fired in the CTGs, auxiliary boiler, emergency generator and fire water pump, or shall allow air pollution control agency representatives to obtain a sample for analysis.
6. Opacity of emissions from all stack sources covered by this permit shall not exceed five percent averaged over a six-minute period. During periods of maintenance, startup or shutdown, the opacity shall not exceed 15 percent averaged over a six-minute period. Instantaneous visible emission observations shall be performed monthly while the facility is in operation following the procedures of 40 CFR Part 60, Appendix A, Reference Method No. 22. Observations shall be made at least 15 feet and no more than 0.25 mile

from the emission point. If visible emissions are present opacity shall be determined by 40 CFR Part 60, Appendix A, Reference Method No. 9.

Aqueous Ammonia (NH₃)

7. The permit holder shall maintain prevention and protection measures for the NH₃ storage system. The NH₃ storage tank area will be marked and protected so as to protect the NH₃ storage area from accidents that could cause a rupture.
8. In addition to the requirements of Special Condition No. 7, the permit holder shall maintain the piping and valves in NH₃ service as follows:
 - A. All operating practices and procedures relating to the handling and storage of NH₃ shall conform to the safety recommendations specified for that compound by guidelines of the American National Standards Institute and the Compressed Gas Association.
 - B. Audio, olfactory, and visual checks for NH₃ leaks shall be made once a day.
 - C. As soon as possible, following the detection of a leak, plant personnel shall take one or more of the following actions:
 - (1) Locate and isolate the leak, if necessary.
 - (2) Commence repair or replacement of the leaking component.
 - (3) Use a leak collection or containment system to control the leak until repair or replacement can be made if immediate repair is not possible.

Routine Maintenance, Startup, and Shutdown (MSS)

9. The emissions from routine maintenance, startup and shutdown (MSS) activities are reflected in the MAERT. These emissions will be minimized by the following:
 - A. Facility and air pollution control equipment will be operated in a manner consistent with good practices for minimizing emissions.
 - B. The frequency and duration of operation in MSS mode will be minimized and the applicable emissions monitoring systems will be kept in operation.
 - C. Cold startup events for EPNs E-ST3 and E-ST4 shall not exceed six hours each per CTG. A cold startup is defined as a startup after a unit has received no fuel for a period of 72 hours or more. **(07/15)**
 - D. Warm startup events for EPNs E-ST3 and E-ST4 shall not exceed four hours each per CTG. A warm startup is defined as a startup which is not a cold startup. **(07/15)**
 - E. Shutdown events for both EPNs E-ST3 and E-ST4 shall not exceed one hour each per CTG. **(07/15)**

- F. MSS activities are authorized provided that the NO_x, CO, particulate matter (PM), and VOC emission rates in lb/hr do not exceed those specified in the MAERT and comply with the tons per year specified in the MAERT at normal operating conditions. **(07/15)**
10. Compliance with the emissions limits for planned MSS activities identified in the MAERT attached to this permit shall be demonstrated as follows. **(07/15)**
- A. For inherently low-emitting (ILE) planned maintenance activities identified in Attachment A of this permit:
 - (1) The total emissions from all ILE planned maintenance activities shall be considered to be no more than the estimated potential to emit for those activities that are represented in the permit application.
 - (2) The permit holder shall annually confirm the continued validity of the estimated potential to emit represented in the permit application for all ILE planned maintenance activities.
 - B. For CTG and SCR planned MSS activities identified in Attachment B of this permit, the permit holder shall do the following.
 - (1) For each pollutant whose emissions are measured with a CEMS that has been certified to measure the pollutant's emissions over the entire range of a planned MSS activity, the permit holder shall measure the emissions of the pollutant during the planned MSS activity using the CEMS.
 - (2) For each pollutant whose emissions are not measured with a CEMS in accordance with B.(1) of this condition, determine for each calendar month the emissions of each pollutant listed on the MAERT of this permit from all occurrences of planned MSS activity by calculation. The calculations of the pollutant's hourly and monthly emissions must use data related to the planned MSS activity, identified in turbine operating records, work orders, or equivalent records. The emission rate of the pollutant during the planned MSS activity must be determined either:
 - (a) as represented in the permit application; or
 - (b) as determined with an appropriate method, including but not limited to any of the following methods, provided that the permit holder maintains appropriate records supporting such determination:
 - i. use of emission factor(s), facility-specific parameter(s), and/or engineering knowledge of the facility's operations;
 - ii. use of emissions data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at

or on a similar facility, and correlation of that data with the activity's or facility's relevant operating parameters;

- iii. use of emissions testing data collected during a planned MSS activity occurring at or on the facility, and correlation of that data with the facility's or activity's relevant operating parameters, such as electric load, temperature, fuel input, or fuel sulfur content;
- iv. use of parametric monitoring system data applicable to the facility;
or
- v. in accordance with an approved Compliance Assurance Monitoring Plan.

Initial Determination of Compliance

- 11. Sampling ports and platforms shall be incorporated into the design of all exhaust stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director.
- 12. The holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from EPNs E-ST3 and E-ST4 and to determine initial compliance with all emission limits established in this permit. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate EPA Reference Methods 201A and 202 or Reference Method 5, modified for the concentration of particulate matter less than 10 microns in diameter (PM₁₀); Reference Method 8 or Reference Methods 6 or 6C for sulfur dioxide (SO₂); Reference Method 9 for opacity; Reference Method 10 for the concentration of CO; and Reference Method 25A, modified to exclude methane and ethane, for the concentration of VOC. In addition, Reference Method 20 or equivalent methods shall be used to determine the concentrations of NO_x and O₂ for the CTGs. Reference Method 7E or equivalent methods shall be used to determine the concentrations of NO_x and O₂ for the Auxiliary Boiler.

Fuel sampling (for EPNs E-ST3 and E-ST4) using the methods and procedures of 40 CFR § 60.4415 may be conducted in lieu of stack sampling for SO₂ or the permit holder may be exempted from fuel monitoring of SO₂ as provided under 40 CFR § 60.4365(a). If fuel sampling is used, compliance with New Source Performance Standards (NSPS) Subpart KKKK, SO₂ limits shall be based on 100 percent conversion of the sulfur in the fuel to SO₂. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling.

The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

- A. The TCEQ Dallas/Ft. Worth Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Procedure used to determine turbine loads during and after the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions, or the TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Austin Office of Air, Air Permits Division. Test waivers and alternate or equivalent procedure proposals for NSPS testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- B. Air contaminants and diluents to be sampled and analyzed include (but are not limited to) NO_x, O₂, CO, VOC, SO₂, PM₁₀, and NH₃. (Fuel sampling using the methods and procedures of 40 CFR § 60.4415 or 40 CFR § 60.4365(a) may be conducted for monitoring SO₂.)
- C. Each CTG shall be tested with duct burners at as close to maximum firing rate as possible while the turbine is operating as close to base load as possible. **(07/15)**
- D. Sampling as required by this condition shall occur within 60 days after achieving the maximum production rate at which each turbine will be operated, but no later than 180 days after initial start-up of each unit. Additional sampling may be required by TCEQ or EPA.
- E. Within 60 days after the completion of the testing and sampling required herein, two copies of the sampling reports shall be distributed as follows:

One copy to the TCEQ Dallas/Fort Worth Regional Office, Fort Worth

One copy to the EPA Region 6 Office, Dallas

Continuous Determination of Compliance

13. The holder of this permit shall install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of NO_x, CO, NH₃, and diluents (O₂ or CO₂) from each Stack (EPNs E-ST3 and E-ST4).
 - A. Monitored NO_x, CO, and NH₃ concentrations shall be corrected and reported in dimensional units corresponding to the emission rate and concentration limits established in this permit.
 - B. The CEMS data shall be used to demonstrate compliance with the emission limitations in Special Condition No. 3 and the MAERT.
 - C. The CEMS shall be operated according to the methods and procedures as set out in 40 CFR § 60.4345.
 - D. Reporting of monitoring data shall be in accordance with the methods and procedures as set out in 40 CFR § 60.4380(b).
 - E. Compliance with the continuous emissions monitor requirements above can be demonstrated by meeting the requirements of 40 CFR Part 75 provided that the permit holder demonstrates compliance with applicable NSPS regulations.
 - F. The TCEQ Dallas/Fort Worth Regional Office shall be notified at least 30 days prior to any required relative accuracy test audit in order to provide them the opportunity to observe the testing.
 - G. Continuously monitor or continuously calculate NH₃. Install, calibrate, maintain, and operate a CEMS to measure and record NH₃ directly or calculate NH₃ through the use of a secondary NO_x measurement. The continuously measured or continuously calculated NH₃ concentrations shall be corrected in accordance with Special Condition No. 3. Monitor downtime shall not exceed 5 percent of the time that the CTGs were operated over the previous 12-month rolling period. Downtime consists of activities involving calibration, unanticipated power failure, unanticipated equipment malfunction, unplanned maintenance and planned maintenance. The continuous options are as follows.
 - (1) Use a CEMS to directly measure and record the concentration of NH₃. If there are no applicable NH₃ CEMS performance specifications in 40 CFR Part 60, contact the TCEQ Air Permits Division in Austin for requirements to be met.
 - (2) Use a second NO_x CEMS probe located between the duct burners and the SCR, upstream of the stack NO_x CEMS. In association with the SCR efficiency and NH₃ injection rate, calculate the NH₃ emissions. This condition shall not be construed to set a minimum NO_x reduction efficiency on the SCR unit.
 - (3) Use a dual stream system of NO_x CEMS at the exit of the SCR. Route one of the exhaust streams, in an unconverted state, to one NO_x CEMS and route the other exhaust stream through a NH₃ converter to convert NH₃ to NO_x and then to the second NO_x CEMS. The NH₃ emission concentration is the difference between the converted and unconverted NO_x CEMS readings.

14. The holder of this permit shall additionally install, calibrate, maintain, and operate continuous monitoring systems to monitor and record the average hourly natural gas consumption of each CTG, duct burners and the auxiliary boiler. The systems shall be accurate to ± 5.0 percent of the unit's maximum flow and shall be calibrated in accordance with the manufactures specifications or at least annually.

Recordkeeping Requirements

15. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction:
 - A. A copy of this permit.
 - B. Permit application dated December 2, 2007, and subsequent representations submitted to the TCEQ.
 - C. A complete copy of the testing reports and records of the initial performance testing completed pursuant to Special Condition No. 12 to demonstrate initial compliance.
 - D. Stack sampling results or other air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.
16. The following information shall be maintained by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction:
 - A. The CEMS data of NO_x, CO, NH₃, and O₂ emissions from EPNs E-ST3 and E-ST4 to demonstrate compliance with the emission rates listed in the MAERT and Special Condition No. 3.
 - B. Raw data files of all CEMS data including calibration checks, adjustments, and maintenance performed on these systems in a permanent form suitable for inspection.
 - C. Records of the hours of operation, average daily quantity, and sulfur content of natural gas fired in the CTGs, HRSG duct burners and the auxiliary boiler pursuant to Special Conditions Nos. 4 and 5.
 - D. Records of the hours of operations and sulfur content of diesel fuel fired in the emergency generator and firewater pump, pursuant to Special Conditions Nos. 4 and 5.
 - E. Monthly fuel usage of the auxiliary boiler to demonstrate compliance with Special Condition No. 4. **(07/15)**
 - F. Written records of accidental releases, spills, or venting of NH₃ and the corrective action taken.

- G. Written records of AVO checks for ammonia leaks and maintenance performed to any piping and valves in NH₃ service pursuant to Special Condition No. 8. **(07/15)**
- H. Records of visible emissions and opacity observations pursuant to Special Condition No. 6.
- I. Records of monitored or calculated MSS emissions to demonstrate compliance with Special Condition No. 10 **(07/15)**

Reporting

- 17. The holder of this permit shall submit to the TCEQ Dallas/Fort Worth Regional Office and the Air Enforcement Branch of EPA in Dallas reports as described in 40 CFR § 60.7. Such reports are required for each emission unit which is required to be continuously monitored pursuant to this permit.

Date: July 6, 2015

Attachment A

Permit Nos. 83638 and PSDTX1110

| Inherently Low-Emitting Planned Maintenance Activities | | | | | | |
|---|-----------------|----|-----|----|-----------------|---------|
| Planned Maintenance Activity | Emissions | | | | | |
| | NO _x | CO | VOC | PM | NH ₃ | Opacity |
| Turbine Washing, Unit On-Line ¹ | | | | X | | |
| Air Intake Filter Maintenance | | | | X | | X |
| Annual Catalyst Handling and Maintenance ² | | | | X | | |
| Ammonia Equipment Maintenance ³ | | | | | X | |
| Gaseous fuel venting ⁴ | | | X | | | |
| Boiler Tube Cleaning | | | X | | | |
| CEMS Calibration | X | X | | | | |
| Analytical Equipment and Process Instruments | | | X | | | |

Notes:

¹Involves use of water only.

²Includes but not limited to, replacement, cleaning, activation, and deactivation of SCR and oxidation catalysts.

³Includes, but is not limited to:

- (i) repair/replacement of pumps, compressors, valves, pipes, flanges, transport lines, filters and screens in NH₃ service; and
- (ii) off-line NO_x control device maintenance, including maintenance of the aqueous NH₃ systems associated with the SCR system.

⁴Includes, but is not limited to, venting prior to pipeline pigging, and meter proving.

Date: July 6, 2015

Attachment B

Permit Nos. 83638 and PSDTX1110

| Non-Inherently Low Emitting Planned Maintenance Activities | | | | | | | |
|---|-------------|-----------------|----|-----|----|-----------------|-----------------|
| Planned Maintenance Activity | EPNs | Emissions | | | | | |
| | | NO _x | CO | VOC | PM | NH ₃ | SO ₂ |
| CT Maintenance and Tuning ¹ | E-ST3/E-ST4 | X | X | X | X | X | X |
| SCR Maintenance, Unit On-Line | E-ST3/E-ST4 | X | | | | X | |

Notes:

¹Includes, but is not limited to:

- (i) leak and operability checks (e.g. CT overspeed trip testing, troubleshooting);
- (ii) generator balancing; and
- (iii) tuning activities that occur during seasonal tuning or after the completion of initial construction, a combustor change-out, a major repair, maintenance to a combustor, or other similar circumstances.

Date: July 6, 2015

Emission Sources - Maximum Allowable Emission Rates

Permit Number 83638 and PSDTX1110

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|---|---|------------------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| E-ST3 | GE 7HA.02 (~330 MW) w/~771 MMBtu/hr Duct Burner (6) | NO _x | 27.81 | 168.59 |
| | | NO _x (MSS) | 420.00 | -- |
| | | CO | 33.86 | 856.32 |
| | | CO (MSS) | 7636.66 | -- |
| | | VOC | 19.35 | 169.55 |
| | | VOC (MSS) | 1323.78 | -- |
| | | SO ₂ | 21.96 | 20.38 |
| | | SO ₂ (MSS) | 21.69 | -- |
| | | PM (7) | 42.86 | 87.95 |
| | | PM ₁₀ (7) | 42.86 | 87.95 |
| | | PM _{2.5} (7) | 42.86 | 87.95 |
| | | NH ₃ | 51.49 | 193.37 |
| | | H ₂ SO ₄ (7) | 3.69 | 3.46 |
| (NH ₄) ₂ SO ₄ (7) | 22.96 | 20.56 | | |
| E-ST4 | GE 7HA.02 (~330 MW) w/~771 MMBtu/hr Duct Burner (6) | NO _x | 27.81 | 168.59 |
| | | NO _x (MSS) | 420.00 | -- |
| | | CO | 33.86 | 856.32 |
| | | CO (MSS) | 7636.66 | -- |
| | | VOC | 19.35 | 169.55 |
| | | VOC (MSS) | 1323.78 | -- |
| | | SO ₂ | 21.96 | 20.38 |
| | | SO ₂ (MSS) | 21.69 | -- |
| | | PM (7) | 42.86 | 87.95 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|---------------------------|----------------------------------|---|----------------|---------|
| | | | lbs/hour | TPY (4) |
| | | PM ₁₀ (7) | 42.86 | 87.95 |
| | | PM _{2.5} (7) | 42.86 | 87.95 |
| | | NH ₃ | 51.49 | 193.37 |
| | | H ₂ SO ₄ (7) | 3.69 | 3.46 |
| | | (NH ₄) ₂ SO ₄ (7) | 22.96 | 20.56 |
| E-AUXBLR2 | Auxiliary Boiler ~40 MMBtu/hr | NO _x | 1.48 | 6.48 |
| | | CO | 1.48 | 6.48 |
| | | VOC | 0.22 | 0.96 |
| | | SO ₂ | 0.23 | 0.25 |
| | | PM | 0.20 | 0.88 |
| | | PM ₁₀ | 0.20 | 0.88 |
| | | PM _{2.5} | 0.20 | 0.88 |
| E-PUMP2 | Fire Water Pump 2 ~250-hp | NO _x | 1.49 | 0.07 |
| | | CO | 0.22 | 0.01 |
| | | VOC | 0.06 | <0.01 |
| | | SO ₂ | <0.01 | <0.01 |
| | | PM | 0.03 | <0.01 |
| | | PM ₁₀ | 0.03 | <0.01 |
| | | PM _{2.5} | 0.03 | <0.01 |
| E-PIPFUG2 | Fugitive Components 2 (5) | VOC | 0.05 | 0.22 |
| E-LOV3 | Turbine 3 Lube Vent Oil Vent | VOC | <0.01 | 0.01 |
| | | PM | <0.01 | 0.01 |
| | | PM ₁₀ | <0.01 | 0.01 |
| | | PM _{2.5} | <0.01 | 0.01 |
| E-LOV4 | Turbine 4 Lube Vent Oil Vent | VOC | <0.01 | 0.01 |
| | | PM | <0.01 | 0.01 |
| | | PM ₁₀ | <0.01 | 0.01 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|---------------------------|---------------------------------------|-----------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| | | PM _{2.5} | <0.01 | 0.01 |
| E-LOVST2 | Steam Turbine 2 Lube Vent Oil Vent | VOC | <0.01 | 0.01 |
| | | PM | <0.01 | 0.01 |
| | | PM ₁₀ | <0.01 | 0.01 |
| | | PM _{2.5} | <0.01 | 0.01 |
| E-NH ₃ FUG2 | Ammonia Fugitive Components (5) | NH ₃ | 0.12 | 0.51 |
| E-ILEMSS2 | ILE Maintenance Fugitives (5) | NO _x | <0.01 | <0.01 |
| | | CO | <0.01 | <0.01 |
| | | VOC | 0.12 | <0.01 |
| | | PM | 0.14 | 0.02 |
| | | PM ₁₀ | 0.14 | 0.02 |
| | | PM _{2.5} | 0.09 | 0.02 |
| | | NH ₃ | <0.01 | <0.01 |
| E-GEN2 | Emergency Generator Unit 2 | NO _x | 35.29 | 1.76 |
| | | CO | 1.94 | 0.10 |
| | | VOC | 0.71 | 0.04 |
| | | SO ₂ | 0.03 | <0.01 |
| | | PM | 0.16 | 0.01 |
| | | PM ₁₀ | 0.16 | 0.01 |
| | | PM _{2.5} | 0.16 | 0.01 |
| E-DSLTK1 | Diesel Tank 1 | VOC | 0.11 | <0.01 |
| E-DSLTK2 | Diesel Tank 2 | VOC | 0.02 | <0.01 |
| E-DPHTR1 | Dew Point Heater 1 | NO _x | 0.25 | 1.12 |
| | | CO | 0.51 | 2.22 |
| | | VOC | 0.04 | 0.17 |
| | | PM | 0.05 | 0.23 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|---------------------------|-----------------|-----------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| | | PM ₁₀ | 0.05 | 0.23 |
| | | PM _{2.5} | 0.05 | 0.23 |
| | | SO ₂ | 0.04 | 0.17 |

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- NO_x - total oxides of nitrogen
- SO₂ - sulfur dioxide
- PM - total particulate matter
- PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}
- PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
- CO - carbon monoxide
- NH₃ - ammonia
- H₂SO₄ - sulfuric acid
- (NH₄)₂SO₄ - ammonia sulfate
- (MSS) - indicates maintenance, startup, and shutdown emissions
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) Annual emission rates include normal and MSS emissions. MSS lb/hr emission allowables apply during each clock hour that includes one or more minutes of MSS activities. During all other clock hours, the normal lb/hr limits apply.
- (7) Planned MSS hourly emissions are included.

Date: July 6, 2015