

# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO

Wolf Hollow I, L.P.

AUTHORIZING THE OPERATION OF

Wolf Hollow Power Plant  
Electric Services

LOCATED AT

Hood County, Texas

Latitude 32° 20' 1" Longitude 97° 44' 1"

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:   O2066   Issuance Date: \_\_\_\_\_

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For the Commission

## Table of Contents

<b>Section</b>	<b>Page</b>
General Terms and Conditions .....	1
Special Terms and Conditions .....	1
Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting .....	1
Additional Monitoring Requirements .....	6
New Source Review Authorization Requirements .....	7
Compliance Requirements .....	8
Risk Management Plan .....	9
Protection of Stratospheric Ozone .....	9
Permit Location .....	9
Permit Shield (30 TAC § 122.148) .....	9
Acid Rain Permit Requirements .....	10
Clean Air Interstate Rule Permit Requirements .....	15
Attachments .....	20
Applicable Requirements Summary .....	21
Additional Monitoring Requirements .....	27
Permit Shield .....	29
New Source Review Authorization References .....	31
Schedules .....	34
Appendix A .....	36
Acronym List .....	37
Appendix B .....	38

## **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<sub>x</sub>, 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) 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. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- D. 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 ( $h_e$ ) less than the standard effective stack height ( $H_e$ ), must reduce the allowable emission level by multiplying it by  $[h_e/H_e]^2$  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)
- E. 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.
6. For each gasoline dispensing facility, with a throughput of less than 10,000 gallons per month as specified in 40 CFR Part 63, Subpart C, the permit holder shall comply with the following requirements (Title 30 TAC, Subchapter C, § 113.1380 incorporated by reference):
  - A. Title 40 CFR § 63.11111(e), for records of monthly throughput
  - B. Title 40 CFR § 63.11111(i), for compliance due to increase of throughput
  - C. Title 40 CFR § 63.11113(c), for compliance due to increase of throughput
  - D. Title 40 CFR § 63.11115(a), for operation of the source
  - E. Title 40 CFR § 63.11116(a) and (a)(1) - (4), for work practices
  - F. Title 40 CFR § 63.11116(b), for records availability
  - G. Title 40 CFR § 63.11116(d), for portable gasoline containers

#### **Additional Monitoring Requirements**

7. 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**

8. 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
9. 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.
10. 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, material safety data sheets (MSDS), 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.

- A. If applicable, monitoring of control device performance or general work practice standards shall be made in accordance with the TCEQ Periodic Monitoring Guidance document.
- B. 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**

- 11. 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.
- 12. The permit holder shall adhere to the provisions in the Compliance Schedule attachment of this permit and submit certified progress reports consistent with the schedule established under 30 TAC § 122.132(e)(4)(C) and including the information specified in 30 TAC § 122.142(e)(2). Those emission units listed in the Compliance Schedule attachment shall adhere with the requirements in the Compliance Schedule attachment until operating fully in compliance with the applicable requirements.
- 13. 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

### **Risk Management Plan**

- 14. 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**

- 15. 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**

- 16. 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)**

- 17. 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**

18. For units CTG1 and CTG2, 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 SO<sub>2</sub> and NO<sub>x</sub> 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. SO<sub>2</sub> 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 SO<sub>2</sub>.
- (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 SO<sub>2</sub> for the previous calendar year.
- (iii) Each ton of SO<sub>2</sub> emitted in excess of the acid rain emissions limitations for SO<sub>2</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> 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<sub>x</sub> 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<sub>x</sub> under 40 CFR Part 76.

E. Excess emissions requirements for SO<sub>2</sub> and NO<sub>x</sub>.

- (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<sub>x</sub> 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 SO<sub>2</sub> allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

## Clean Air Interstate Rule Permit Requirements

19. For units CTG1 and CTG2, 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 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<sub>x</sub> and the CAIR SO<sub>2</sub> 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<sub>x</sub> and the CAIR SO<sub>2</sub> 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<sub>x</sub> source and each CAIR NO<sub>x</sub> 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 SO<sub>2</sub> source and each CAIR SO<sub>2</sub> 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<sub>x</sub> source with the CAIR NO<sub>x</sub> 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 SO<sub>2</sub> source with the CAIR SO<sub>2</sub> emissions limitation.

C. NO<sub>x</sub> emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> 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<sub>x</sub> units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HH.
- (ii) A CAIR NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> allowance was allocated.
- (iv) CAIR NO<sub>x</sub> allowances shall be held in, deducted from or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FF or Subpart GG.
- (v) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Annual Trading Program. No provision of the CAIR NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> unit's compliance account is incorporated automatically in this CAIR permit.

D. NO<sub>x</sub> excess emissions requirement

- (i) If a CAIR NO<sub>x</sub> source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> emissions limitation, the owners and operators of the source and each CAIR NO<sub>x</sub> unit at the source shall surrender the CAIR NO<sub>x</sub> 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<sub>2</sub> emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, CAIR SO<sub>2</sub> 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<sub>2</sub> units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HHH.
- (ii) A CAIR SO<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> allowance was allocated.
- (iv) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FFF or Subpart GGG.
- (v) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> unit's compliance account is incorporated automatically in this CAIR permit.

F. SO<sub>2</sub> excess emissions requirements

- (i) If a CAIR SO<sub>2</sub> source emits sulfur dioxides during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, the owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> 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<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source and the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> 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<sub>x</sub> designated representative for the source and each CAIR NO<sub>x</sub> unit and the CAIR SO<sub>2</sub> designated representative for the source and each CAIR SO<sub>2</sub> 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<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> 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<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> Trading Program or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> Trading Program.
- (ii) The CAIR designated representative of a CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source and a CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading Program including those under 40 CFR Part 96, Subpart HH and Subpart HHH.
- H. The CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program contained in 40 CFR Part 96, Subparts AA through II.
- I. The CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit shall meet the requirements of the CAIR SO<sub>2</sub> Trading Program contained in 40 CFR Part 96, Subparts AAA through III.
- J. Any provision of the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR NO<sub>x</sub> source or CAIR SO<sub>2</sub> source or the CAIR designated representative of a CAIR NO<sub>x</sub> source or CAIR SO<sub>2</sub> 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<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR NO<sub>x</sub> unit or CAIR SO<sub>2</sub> unit or the CAIR designated representative of a CAIR NO<sub>x</sub> unit or CAIR SO<sub>2</sub> unit shall also apply to the owners and operators of such unit.
- L. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> 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<sub>x</sub> source or CAIR NO<sub>x</sub> unit or a CAIR SO<sub>2</sub> source or CAIR SO<sub>2</sub> unit from compliance 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**

**Schedules**

## **Applicable Requirements Summary**

**Unit Summary ..... 22**

**Applicable Requirements Summary ..... 23**

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
AUXBLR	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60Db-0001	40 CFR Part 60, Subpart Db	No changing attributes.
GRP-BLR	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	HRSG1, HRSG2	60Db-0001	40 CFR Part 60, Subpart Db	No changing attributes.
GRP-VNT	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	E-ST1, E-ST2	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
E-GEN	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
E-PUMP	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP-TURB	STATIONARY TURBINES	CTG1, CTG2	60GG-0001	40 CFR Part 60, Subpart GG	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)
AUXBLR	EU	6oDb-0001	SO <sub>2</sub>	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
AUXBLR	EU	6oDb-0001	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
AUXBLR	EU	6oDb-0001	PM (OPACITY)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
AUXBLR	EU	6oDb-0001	NO <sub>x</sub>	40 CFR Part 60, Subpart Db	§ 60.44b(k)	Affected facilities that meet the criteria described in §60.44b(j)(1), (2), and (3), and that have a heat input capacity of 73 MW (250 MMBtu/hr) or less, are not subject to the NOX emission limits under this section.	§ 60.46b(g)	[G]§ 60.49b(d) § 60.49b(o) [G]§ 60.49b(p)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(2) § 60.49b(a)(3) § 60.49b(q) § 60.49b(q)(1) § 60.49b(q)(3) § 60.49b(w)
GRP-BLR	EU	6oDb-0001	SO <sub>2</sub>	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)

## 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)
						6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).			
GRP-BLR	EU	60Db-0001	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRP-BLR	EU	60Db-0001	PM (OPACITY)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRP-BLR	EU	60Db-0001	NO <sub>x</sub>	40 CFR Part 60, Subpart Db	§ 60.44b(l)(1) § 60.44b(h) § 60.44b(i) § 60.46b(a) § 60.48b(h)	Affected facilities combusting coal, oil, or natural gas, or a mixture of these fuels, or any other fuels: a limit of 86 ng/JI (0.20 lb/million Btu) heat input unless the affected facility meets the specified requirements.	§ 60.46b(c) § 60.46b(f) [G]§ 60.46b(f)(1)	[G]§ 60.49b(d) § 60.49b(o) [G]§ 60.49b(p)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b)
GRP-VNT	EP	R1111	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	[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)
						CEMS is installed.			
E-GEN	EU	63ZZZZ-1	112(HAPS)	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a) Table 2d4(a) § 63.6603(a) Table 2d4(b) § 63.6603(a) Table 2d4(c) § 63.6605(a) § 63.6605(b) § 63.6625(e)(3) § 63.6625(f) § 63.6625(h) § 63.6625(i) § 63.6640(a) § 63.6640(b) § 63.6640(f) § 63.6650(f) § 63.6655(a)(4) § 63.6655(d) § 63.6655(e)(2) § 63.6660(a) § 63.6660(b) § 63.6660(c)	If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart that apply.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(b)	§ 63.6625(i) § 63.6655(a)(4) § 63.6655(d) § 63.6655(e)(2) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6650(f)
E-PUMP	EU	63ZZZZ-1	112(HAPS)	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a) Table 2d4(a) § 63.6603(a) table 2d4(b) § 63.6603(a) Table 2d4(c) § 63.6605(a) § 63.6605(b) § 63.6625(e)(3) § 63.6625(f) § 63.6625(h) § 63.6625(i) § 63.6640(a) § 63.6640(b) § 63.6640(f)	If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart that apply.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(b)	§ 63.6625(i) § 63.6655(a)(4) § 63.6655(d) § 63.6655(e)(2) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6650(f)

### 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)
					§ 63.6650(f) § 63.6655(a)(4) § 63.6655(d) § 63.6655(e)(2) § 63.6660(a) § 63.6660(b) § 63.6660(c)				
GRP-TURB	EU	60GG-0001	SO <sub>2</sub>	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) [G]§ 60.334(h)(3)	None	None
GRP-TURB	EU	60GG-0001	NO <sub>x</sub>	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.334(b) § 60.334(c) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(2) § 60.335(b)(3)	[G]§ 60.334(b)	§ 60.334(j) § 60.334(j)(5)

**Additional Monitoring Requirements**

**Periodic Monitoring Summary..... 28**

## Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: GRP-VNT	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
<b>Monitoring Information</b>	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
Deviation Limit: The presence of visible emissions unless an opacity test, as specified in 111.111(a)(1)(F) is performed and the source is determined to be in compliance. However, if the source is out of compliance, a deviation shall be reported.	
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, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.	

**Permit Shield**

**Permit Shield .....30**

## 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		
GRP-BLR	HRSG1, HRSG2	30 TAC Chapter 112, Sulfur Compounds	Steam generator does not fire liquid or solid fuel.
GRP-BLR	HRSG1, HRSG2	40 CFR Part 60, Subpart Da	Not capable of combusting more than 73 MW (250 MMBtu/hr) heat input of fossil fuel (either alone or in combination with any other fuel).
GRP-BLR	HRSG1, HRSG2	40 CFR Part 60, Subpart Kb	Storage vessel with capacity < 40 m3
E-CTOWER	N/A	40 CFR Part 63, Subpart Q	Chromium cleaning compounds not used.
E-GEN	N/A	40 CFR Part 60, Subpart IIII	Did not commence construction after July 11, 2005.
E-PUMP	N/A	40 CFR Part 60, Subpart IIII	Did not commence construction after July 11, 2005.
GRP-TURB	CTG1, CTG2	40 CFR Part 60, Subpart KKKK	Did not commence construction, modification, or reconstruction after February 18, 2005.
E-TANK7	N/A	40 CFR Part 60, Subpart Kb	Storage vessel with capacity < 40 m3.
E-TANK8	N/A	40 CFR Part 60, Subpart Kb	Storage capacity less than 75 cubic meters
E-TANK9	N/A	40 CFR Part 60, Subpart Kb	Storage capacity less than 75 cubic meters

**New Source Review Authorization References**

**New Source Review Authorization References ..... 32**

**New Source Review Authorization References by Emission Unit..... 33**

## 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.

<b>Prevention of Significant Deterioration (PSD) Permits</b>	
PSD Permit No.: PSDTX939	Issuance Date: 07/09/2012
<b>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.</b>	
Authorization No.: 41166	Issuance Date: 07/09/2012
<b>Permits By Rule (30 TAC Chapter 106) for the Application Area</b>	
Number: 106.122	Version No./Date: 09/04/2000
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: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.511	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
AUXBLR	AUXILARY BOILER	41166, PSDTX939
CTG1	TURBINE 1	41166, PSDTX939
CTG2	TURBINE 2	41166, PSDTX939
E-CTOWER	COOLING TOWER	41166, PSDTX939
E-GEN	EMERGENCY GENERATOR ENGINE	106.511/09/04/2000
E-PUMP	EMERGENCY FIRE WATER PUMP ENGINE	106.511/09/04/2000
E-ST1	HRSG 1 STACK	41166, PSDTX939
E-ST2	HRSG 2 STACK	41166, PSDTX939
E-TANK7	300-GALLON DIESEL TANK	41166, PSDTX939
E-TANK8	240-GAL DIESEL TANK/FIRE WATER PUMP ENGINE	106.472/09/04/2000
E-TANK9	750 GAL DIESEL TANK/EMERGENCY GENERATOR ENGINE	106.472/09/04/2000
HRSG1	HRSG 1	41166, PSDTX939
HRSG2	HRSG 2	41166, PSDTX939

**Schedules**

**Compliance Schedule ..... 35**

## Compliance Schedule

<b>A. Compliance Schedule</b>				
<b>1. Specific Non-Compliance Situation</b>				
Unit/Group/ Process ID. No(s).	SOP Index No.	Pollutant	Applicable Requirement	
			Citation	Text Description
GRP-TURB (CTG1, CTG2)	N/A	CO	NSR 41166/PSDTX 939	SPECIAL CONDITION 1 & MAXIMUM ALLOWABLE EMISSIONS RATE TABLE ANNUAL CO EMISSION RATE BASED ON A ROLLING 12 MONTH PERIOD.
<b>2. Compliance Status Assessment Method and Records Location</b>				
Compliance Status Assessment Method			Location of Records/Documentation	
Citation	Text Description			
NSR 41166/PSDTX939	Continuous emissions monitoring systems (CEMS) for CO required under Special Condition 12.		CEMS records reside in the DATA Acquisitions and Handling Systems.	
<b>3. Non-compliance Situation Description</b>				
Exceeding rolling 12 month CO emission limit.				
<b>4. Corrective Action Plan Description</b>				
Minimum load was increased to minimize operating time with elevated CO levels. During this time, the facility may operate at reduced load for short intervals to collect emissions data needed to supply accurate information for future permitting actions.				
<b>5. List of Activities/Milestones to Implement the Corrective Action Plan</b>				
<b>1</b>	Calculate the monthly CO emissions required for compliance with the annual CO emission limit.			
<b>2</b>	Monthly and 12 month rolling CO emissions to be quantified and reviewed at the end of each month.			
<b>3</b>	Evaluate engineering changes to reduce CO emissions by the end of June 2014.			
<b>4</b>	Demonstrate compliance with the rolling 12 month CO emission limit for the 12 month period ending January 2015.			
6. Previously Submitted Compliance Plan(s)		Type of Action		Date Submitted
N/A				
7. Progress Report Submission Schedule		1st Report - 7/31/14 for Jan - Jun 2014; 2nd Report - 1/30/15 for Jun - Dec 2014; 3rd Report – 7/31/15 for Jan – Jun 2015.		

**Appendix A**

**Acronym List ..... 37**

## 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 <sub>2</sub> 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 <sub>x</sub>	.....	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 <sub>2</sub>	.....	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 Table..... 39**

### Major NSR Summary Table

Permit Number: 41166 and PSDTX939			Issuance Date: 07/09/2012				
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-ST 1	MH1501G (~254 MW) + ~243.3 MMBtu/hr DB – Normal Operations, Hourly Emission Rates	NOx	91.9	--	4, 7, 9, 10, 11, 12, 14, 15, 16, 27	4, 7, 9, 10, 11, 12, 14, 15, 16, 23, 24, 27	9, 10, 11, 12, 25, 26, 27
CO		143.4	--				
VOC		12.3	--				
PM <sub>10</sub> /PM <sub>2.5</sub>		30.1	--				
SO <sub>2</sub>		41.8	--				
H <sub>2</sub> SO <sub>4</sub>		5.1	--				
NH <sub>3</sub>		37.8	--				
E-ST 2	MH1501G (~254 MW) + ~243.3 MMBtu/hr DB – Normal Operations, Hourly Emission Rates	NOx	91.9	--	4, 7, 9, 10, 11, 12, 14, 15, 16, 27	4, 7, 9, 10, 11, 12, 14, 15, 16, 23, 24, 27	9, 10, 11, 12, 25, 26, 27
CO		143.4	--				
VOC		12.3	--				
PM <sub>10</sub> /PM <sub>2.5</sub>		30.1	--				
SO <sub>2</sub>		41.8	--				
H <sub>2</sub> SO <sub>4</sub>		5.1	--				
NH <sub>3</sub>		37.8	--				
E-ST 1	MH1501G (~254 MW) + ~243.3 MMBtu/hr DB – Reduced Load and MSS Operations, Hourly Emission Rates	NOx	386.9	--	4, 7, 9, 10, 11, 12, 14, 15, 16, 19, 21, 27	4, 7, 9, 10, 11, 12, 14, 15, 16, 19, 21, 22, 23, 24, 27	9, 10, 11, 12, 25, 26, 27
CO		3029.2	--				
VOC		333.4	--				
PM <sub>10</sub> /PM <sub>2.5</sub>		21.3	--				
SO <sub>2</sub>		18.2	--				
H <sub>2</sub> SO <sub>4</sub>		2.2	--				
NH <sub>3</sub>		20.5	--				

Permit Number: 41166 and PSDTX939

Issuance Date: 07/09/2012

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-ST 2	MH1501G (~254 MW) + ~243.3 MMBtu/hr DB – Reduced Load and MSS Operations, Hourly Emission Rates	NOx CO VOC PM <sub>10</sub> /PM <sub>2.5</sub> SO <sub>2</sub> H <sub>2</sub> SO <sub>4</sub> NH <sub>3</sub>	386.9 3029.2 333.4 21.3 18.2 2.2 20.5	-- -- -- -- -- -- --	4, 7, 9, 10, 11, 12, 14, 15, 16, 19, 21, 27	4, 7, 9, 10, 11, 12, 14, 15, 16, 19, 21, 22, 23, 24, 27	9, 10, 11, 12, 25, 26, 27
E-ST 1 & E-ST2	MH1501G (~254 MW) + ~243.3 MMBtu/hr DB – Normal, Reduced Load and MSS Operations, Annual Emission Rates	NOx CO VOC PM <sub>10</sub> /PM <sub>2.5</sub> SO <sub>2</sub> H <sub>2</sub> SO <sub>4</sub> NH <sub>3</sub>	-- -- -- -- -- -- --	708.7 1128.6 103.0 230.9 161.6 19.8 291.5	4, 7, 9, 10, 11, 12, 14, 16, 19, 21, 25, 27	4, 7, 9, 10, 11, 12, 14, 16, 19, 21, 22, 23, 24, 25, 27	9, 10, 11, 12, 25, 26, 27
E-AUXBLR	Auxiliary Boiler 142 MMBtu/hr – Normal, Reduced Load and MSS Operations	NOx CO VOC PM <sub>10</sub> /PM <sub>2.5</sub> SO <sub>2</sub>	8.5 10.5 0.77 1.4 2.2	3.7 4.6 0.34 0.6 0.49	11, 15, 16, 25	11, 15, 16, 23, 24, 25	11, 25, 26, 27
E-TANK7	Diesel Storage Tank 300 gallon	VOC	0.01	<0.01			
C-TOWER	Cooling Tower	PM PM <sub>10</sub> /PM <sub>2.5</sub>	5.68 0.41	24.87 1.82	17	17, 23, 24	25
E-PIPFUG	Piping Fugitives	VOC NH <sub>3</sub>	0.11 0.33	0.5 1.41	16	16	
MSSFUG	Non-ILES Maintenance Emissions (Attachment B)	VOC	276.33	0.27	19, 21	19, 21, 22, 23, 24	25, 26

Permit Number: 41166 and PSDTX939				Issuance Date: 07/09/2012			
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.
ILEMSS	ILEs Maintenance (Attachment A)	NOx	<0.01	<0.01	14, 21	14, 21, 23, 24	18, 25, 26
		CO	<0.01	<0.01			
		VOC	0.21	0.01			
		PM10	0.36	0.01			
		PM2.5	0.36	0.01			

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) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.
  - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
  - NO<sub>x</sub> - total oxides of nitrogen
  - SO<sub>2</sub> - sulfur dioxide
  - PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
  - PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
  - PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
  - CO - carbon monoxide
  - MSS - maintenance, start-up, and shutdown emissions
  - HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
- (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) For NO<sub>x</sub> and CO emissions that are measured using a CEMS, the Reduced Load/MSS lb/hr limits apply during each clock hour that includes one or more minutes of reduced load operation or MSS activities. During all other clock hours, the normal lb/hr limits apply.
- (7) For NH<sub>3</sub> emissions that are measured using a CEMS, the Normal Load limits apply during each clock hour that includes one or more minutes of normal load operation. During all other clock hours, the Reduced Load/MSS lb/hr limits apply.

## Special Conditions

Permit Numbers 41166 and PSDTX939

### Emission Standards and Operating Specifications

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emissions Rates," maintenance activities listed in Attachment A [Inherently Low Emitters (ILEs)], Attachment B [non-ILE maintenance activities (non-ILEs)], startup, and shutdown activities. Those sources are limited to the emissions limits and other conditions specified in that attached table. Annual rates are based on a rolling 12-month period. **(11/11)**

Also authorized under this permit are two Mitsubishi Heavy Industry G-Frame combined cycle combustion gas turbine generators (CGTs) using Selective Catalytic Reduction (SCR) technology each rated at a nominal net capability of 254 megawatt electric (MWe); and each CGT will have a heat recovery steam generator (HRSG) with a 243.3 MMBtu per hour (MMBtu/hr) duct burner. The two HRSGs will power a steam turbine generator with a nominal net capability of 299 MWe. Total plant net capability is estimated to be 807 MWe. **(11/11)**

Also authorized under this permit is a 142.2 MMBtu/hr Auxiliary Boiler (Emission Point No. [EPN] E-AUXBLR). The Auxiliary Boiler is limited to a maximum annual heat input of 124,567 MMBtu which represents an annual capacity factor of 0.10. The Auxiliary Boiler shall not be used to generate power in the steam turbine generator.

2. The CGT limitations apply to normal operation (normal operating range defined as 75 to 100 percent load) not including periods of start-up or shutdown, not to exceed the time periods specified in the manufacturer procedures. Reduced load operation is authorized to accommodate periods of reduced power provided the maximum pounds per hour (lbs/hr) emission rates for reduced load operations specified in the attached maximum allowable emission rates table (MAERT) table for EPNs E-ST1 and E-ST2 are not exceeded. **(11/11)**

The Auxiliary Boiler (EPN E-AUXBLR) shall not exceed the emission and operation limitations specified in the attached MAERT table.

3. Fuel for the CGTs, HRSG burners, and the auxiliary boiler is limited to pipeline-quality natural gas containing no more than 5 grains total sulfur per 100 dry standard cubic feet.
4. Upon request by the Executive Director of the Texas Commission on Environmental Quality (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 CGTs or shall allow air pollution control agency representatives to obtain a sample for analysis.

5. Emission Limits

- A. Emissions of nitrogen oxide ( $\text{NO}_x$ ) as measured after the natural gas-fired HRSG and after the SCR system shall not exceed 9 parts per million on a dry basis (ppmvd) when corrected to 15 percent oxygen ( $\text{O}_2$ ), during normal operation except during periods of reduced load, maintenance, start-up, or shutdown (MSS). **(11/11)**
  - B. Emissions of carbon monoxide (CO) as measured after the HRSG and SCR shall not exceed 25 ppmvd when corrected to 15 percent  $\text{O}_2$ , at full load. This limit does not apply during periods of reduced load and MSS. **(11/11)**
  - C. Emissions of volatile organic compounds (VOC) as measured after the natural gas fired HRSG and SCR, defined as total hydrocarbons minus methane and ethane, shall not exceed 2.8 ppmvd when corrected to 15 percent  $\text{O}_2$ . These limits do not apply during periods of reduced load and MSS. **(11/11)**
  - D. Emissions of ammonia ( $\text{NH}_3$ ) shall not exceed 10 ppmvd when corrected to 15 percent  $\text{O}_2$ . These limits do not apply during MSS. The SCR system shall be maintained according to manufacturer recommendations. **(11/11)**
6. Combustion air cooling may be utilized to enhance the power output of each CGT. Steam injection will not be utilized.
7. During normal operations opacity of emissions from all stack sources covered by this permit shall not exceed 5 percent averaged over a six-minute period. During periods of MSS, the opacity shall not exceed 15 percent averaged over a six minute period. Visible emission observations shall be performed and recorded quarterly while the facility is in operation. Observations shall be made at least 15 feet and no more than 0.25 miles from the emission point. If visible emissions are present the permit holder shall perform one of the following within 24 hours: **(11/11)**
- A. Take corrective action within 48 hours of first observing the visible emission, if the corrective action eliminates the visible emissions such that visible emissions are no longer observed during the visible emissions determination then no further action is required other than to document the incident within one week of the observation.
  - B. Record this as a violation of the opacity limit in this condition.
  - C. Conduct and record an opacity observation as determined by 40 CFR Part 60, Appendix A, Reference Method 9 to determine if there is a violation of the opacity limit in this condition.
8. The Cooling Tower (EPN: C-TOWER) shall not exceed a total dissolved solids (TDS) concentration of 15,000 parts per million by weight (ppmw).

### **Federal Applicability**

9. These facilities shall comply with applicable requirements of the EPA regulations on Standards of Performance for New Stationary Sources, 40 CFR Part 60:
  - A. Subpart A: General Conditions
  - B. Subpart Db: Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.
  - C. Subpart GG: Standards of Performance for Stationary Gas Turbines.

If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

### **Initial Determination of Compliance**

10. 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.
11. Upon request of the TCEQ or any other air pollution agency with jurisdiction, 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 each combined cycle unit's stack and also the Auxiliary Boiler Stack (EPN E-AUXBLR) when firing natural gas. 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 (RM) 201A and 202 or RM 5, modified to include back-half condensibles, for the concentration of particulate matter less than 10 microns in diameter (PM<sub>10</sub>); RM 8 or RM 6 or 6c for sulfur dioxide (SO<sub>2</sub>); RM 9 for opacity; RM 10 for the concentration of CO; and RM 25A, modified to exclude methane and ethane, for the concentration of VOC. In addition, RM 20 or equivalent methods shall be used to determine the concentrations of NO<sub>x</sub> and O<sub>2</sub> for the CGTs. RM 7E or equivalent methods shall be used to determine the concentrations of NO<sub>x</sub> and O<sub>2</sub> for the Auxiliary Boiler.

Fuel sampling using the methods and procedures of 40 CFR § 60.335(d) may be conducted in lieu of stack sampling for SO<sub>2</sub> or the permit holder may be exempted from fuel monitoring of SO<sub>2</sub> as provided under 40 CFR § 60.334(h)(3)(i). If fuel sampling is used, compliance with New Source Performance Standards (NSPS) Subpart GG SO<sub>2</sub> limits shall

Special Conditions

Permit Numbers: 41166 and PSDTX939

Page 4

be based on 100 percent conversion of the sulfur in the fuel to SO<sub>2</sub>. 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.

- A. Air emissions from each CGT shall be tested while firing at full load for the ambient conditions at the time of testing. Air contaminants to be sampled and analyzed while at full load include (but are not limited to) NO<sub>x</sub>, O<sub>2</sub>, CO, VOC, SO<sub>2</sub>, PM<sub>10</sub>, and NH<sub>3</sub>. (Fuel sampling using the methods and procedures of 40 CFR § 60.335[d] may be conducted in lieu of stack sampling for SO<sub>2</sub>.)

The CGTs combustion air coolers shall be operating during sampling if their operation is necessary to achieve the maximum load on the turbines.

- B. Air emissions from each CGT shall be tested while firing at three partial load conditions in the normal operating range of the CGTs and at 35 percent load. The operating range should be established during the pretest meeting.

Air emissions to be sampled and analyzed while at partial load include (but are not limited to) NO<sub>x</sub>, O<sub>2</sub>, CO, VOC, and NH<sub>3</sub>. The VOC need only be sampled at a partial load between and including 70 to 75 percent of full load conditions. All other contaminants for which partial load sampling is required shall be sampled at each of the three partial load conditions. Each tested load shall be identified in the sampling report.

- C. The holder of this permit shall conduct the performance test for the CGTs, as required under 40 CFR § 60.8, using the NO<sub>x</sub> Continuous Emission Monitoring System (CEMS).
- D. Air contaminants emitted from the Auxiliary Boiler to be tested for at minimum load, 50 percent load, and maximum firing include (but are not limited to) NO<sub>x</sub>, CO, SO<sub>2</sub>, O<sub>2</sub>, and opacity. The emission limit at all loads for NO<sub>x</sub> shall be 0.06 pound per MMBtu. For 50 percent and greater loads, the emission limit for CO shall be 100 ppmvd. For loads less than 50 percent, the emission limit for CO shall be based on the maximum allowable emission rates, expressed as lb/hr, for the Auxiliary Boiler (E-AUXBLR) in the attached MAERT table. The operating range of the Auxiliary Boiler shall be determined by the lowest load at which the boiler can demonstrate compliance with this condition.

The CO concentration limit (ppmvd) for 50 percent and greater loads is expressed on a dry basis; at 3 percent (by volume) stack gas O<sub>2</sub>, averaged over a one-hour period. Measured concentrations shall be expressed accordingly. The NO<sub>x</sub> heat input based limit is based upon fuel higher heating value averaged over a one-hour period.

- E. Initial testing to demonstrate compliance was performed on May 13, 2003 and July 21-24, 2003.

**Continuous Determination of Compliance for CO, NO<sub>x</sub>, and NH<sub>3</sub>**

- 12. The holder of this permit shall install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of NO<sub>x</sub>, CO, NH<sub>3</sub>, and diluent from each Stack (EPNs: E-ST1 and E-ST2, respectively).
  - A. Monitored NO<sub>x</sub>, CO, and NH<sub>3</sub> concentrations shall be corrected and reported in dimensional units corresponding to the emission rate and concentration limits established in this permit.
  - B. Each CEMS shall meet the applicable quality-assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1, or an acceptable alternative. Relative accuracy exceedances and any CEMS downtime shall be reported to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.
  - C. The monitoring data shall be reduced to hourly average values at least once everyday, using a minimum of four equally-spaced data points from each one-hour period. Two valid data points shall be generated during the hourly period in which zero and span is performed.
  - D. All monitoring data and quality-assurance data shall be maintained by the source for a period of five years and shall be made available to the TCEQ Executive Director or designated representative upon request. The data from each CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit. Hourly average NO<sub>x</sub>, CO, and NH<sub>3</sub> concentrations, converted to lbs/hr, from EPNs: E-ST1 and E-ST2 shall be summed monthly to tons per year and used to determine compliance with the emission limits of this permit.
  - E. 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.
  - F. If applicable, each CEMS will be required to meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 75, Appendix A. The 40 CFR Part 75 is deemed an

Special Conditions

Permit Numbers: 41166 and PSDTX939

Page 6

acceptable alternative to the performance specifications and quality assurance requirements of 40 CFR Part 60.

13. Continuous compliance for the Auxiliary Boiler (E-AUXBLR) shall be determined using the emission limits of the attached maximum allowable emission rates table (MAERT).
14. If any emission monitor fails to meet specified performance, it shall be repaired or replaced as soon as reasonably possible, but no later than seven days after it was first detected by any employee at the facility unless written permission is obtained from the TCEQ Dallas/Fort Worth Regional Office which allows for a longer repair/replacement time. The holder of this permit shall develop an operation and maintenance program (including stocking necessary spare parts) to ensure that the continuous monitors are available as required.
15. 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 CGT, HRSG burners, and the Auxiliary Boiler. The systems shall be accurate to  $\pm \square 5.0$  percent of the unit's maximum flow.
16. The holder of this permit shall monitor the fuel as specified in 40 CFR § 60.334(b) or the permit holder may be exempted from fuel monitoring of SO<sub>2</sub> as provided under 40 CFR § 60.334(h)(3)(i). Any request for a custom monitoring schedule shall be made in writing and directed to the TCEQ Regional Director. Any custom schedule approved by TCEQ pursuant to 40 CFR § 60.334(b) will be recognized as enforceable conditions of this permit.
17. To demonstrate compliance with the TDS concentration in Special Condition No. 8 and with the hourly and annual particulate emission rate in the MAERT, the holder of this permit shall have the option to either measure conductivity (in order to convert to TDS) or conduct a direct TDS analysis.
  - A. Option A: Direct TDS Analysis
    - (1) Analysis shall be performed in accordance with "Standard Methods for the Examination of Water and Wastewater" Method 2540.
    - (2) Continuous compliance with the hourly and annual particulate matter emission rates for the Cooling Tower in the MAERT shall be demonstrated by monitoring the TDS of the cooling water at a monitoring point in the re-circulating water of the cooling tower, and recording the TDS every two weeks.
    - (3) If a TDS exceedance occurs, an evaluation shall be conducted within 24 hours of the receipt of the analysis report and corrective action to eliminate the exceedance shall be taken promptly and documented with one week of the occurrence.

B. Option B: Conductivity Measurement

- (1) Perform sampling to establish the conductivity to TDS conversion factor that shall be used by the permit holder to demonstrate compliance with the TDS concentration. A conservative default conversion factor of 0.80 (conductivity to TDS) may be used initially until a site specific demonstrated value is determined.

Cooling water samples (minimum of three samples) shall be collected and a TDS/Conductivity analysis performed on each of the samples in order to establish the actual cooling water conductivity to TDS conversion factor. The conductivity and TDS analysis shall be performed in accordance with “Standard Methods for the Examination of Water and Wastewater” Methods 2510 (Conductivity) and Methods 2540 (Solids). An average conversion factor and standard deviation based on the values shall be determined from the cooling water sample results.

- (2) Within 30 days after completion of the sampling, a copy of the sampling report shall be submitted to the TCEQ Dallas/Ft Worth Regional Office.
- (3) Continuous compliance with the hourly and annual particulate matter emission rates for the Cooling Tower in the MAERT shall be demonstrated by monitoring the conductivity of the cooling water at a monitoring point in the recirculating water of the cooling tower, and recording the conductivity reading on no less than a weekly basis. Each conductivity measurement shall be converted to TDS concentration in ppmw using the conductivity factor established in accordance with Special Condition No. 17 B (1). The permit holder shall utilize one of the following monitoring options.

a. A Process Conductivity Meter (PCM).

1. The PCM shall be quality assured quarterly, to confirm the conversion factor, TDS ppmw, and the correlation between the two, by performing a conductivity and TDS analysis. The conductivity and TDS analysis shall be performed in accordance with “Standard Methods for the Examination of Water and Wastewater” Methods 2510 (Conductivity) and Methods 2540 (Solids).
2. The PCM shall be calibrated once a quarter in accordance with the manufacturer specifications.
3. In the event the PCM is offline due to repair or maintenance, either the use of a portable conductivity meter or a TDS analysis in

accordance with Method 2540 (solids) may be used to satisfy the weekly periodic monitoring requirements.

or

b. A portable conductivity meter.

1. The portable conductivity meter shall be quality assured quarterly, to confirm the conversion factor, TDS ppmw, and the correlation between the two, by performing a conductivity and TDS analysis. The conductivity and TDS analysis shall be performed in accordance with "Standard Methods for the Examination of Water and Wastewater" Methods 2510 (Conductivity) and Methods 2540 (Solids).
2. The portable conductivity meter shall be calibrated once a quarter in accordance with the manufacturer specifications.
3. In the event the portable conductivity meter is unavailable due to repair or maintenance, a TDS analysis in accordance with Method 2540 (solids) may be used to satisfy the weekly periodic monitoring requirements.

(4) If a conductivity exceedance occurs, an evaluation shall be conducted within 24 hours and corrective action to eliminate the exceedance shall be taken promptly and documented with one week of the occurrence.

C. Records shall include the date and time of the monitoring, the location of the monitoring point for the cooling tower recirculating water, and the measured conductivity and equivalent TDS or the direct TDS analysis.

### **Planned Maintenance, Start-up, and Shutdown (MSS) (11/11)**

18. Facility and air pollution control equipment shall be operated in a manner consistent with good air pollution control, safe operating practices, and protection of the facility.
19. The emissions from planned MSS activities are reflected in the MAERT. The emissions will be minimized by the following:
  - A. The frequency and duration of operation of the turbines (EPNs: E-ST 1 and E-ST 2) during planned MSS activities will be minimized and applicable monitoring systems kept in operation.

- B. Start-up is defined as the period that begins when fuel is introduced into the system and shall not exceed 7 hours.
  - C. A shutdown shall not exceed 2 hours.
20. Planned maintenance activities authorized in this permit are identified in Attachment A (ILEs) and Attachment B (non-ILEs).

### **MSS Compliance (11/11)**

21. Emissions from planned MSS activities for use in Special Condition Nos. 18, 19, and 20 shall be determined by the use of an appropriate method, including but not limited to any of the following methods:
- A. Use of a CEMS. The CEMS shall be certified to measure the pollutant's emission over the entire range of a planned MSS activity.
  - B. Use of the emission factor(s), facility-specific parameter(s), manufacture's emission factors, and/or engineering knowledge of the facility operations.
  - C. Use of emissions data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at or on an identical or similar facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.
  - D. Use of emissions testing data collected during a planned MSS occurring at or on the facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.
22. Compliance with the emissions limits for planned maintenance activities identified in this permit shall be demonstrated as follows.
- A. ILEs (EPN: ILEMSS/Attachment A)
    - (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 dated December 21, 2010.
    - (2) The permit holder shall annually confirm the continued validity of the estimated potential to emit as represented in the permit application dated December 21, 2010.

- B. For each pollutant emitted during non-ILE planned maintenance activities (Attachment B), the permit holder shall do the following for each calendar month.
  - (1) Determine the total emissions of the pollutant that result from such non-ILE planned maintenance activities in accordance with the methods listed in Special Condition No. 21.
  - (2) Compare the pollutant's short-term (hourly) emissions during planned maintenance activities to the applicable short-term planned MSS emissions limit in the MAERT.
  - (3) Once the pollutant's emissions during planned maintenance activities have been measured for 12 months after the MSS permit amendment issued on November 2, 2011, compare the rolling 12-month emissions of the pollutant, as determined using the data, to the applicable annual planned MSS emissions limit in the MAERT.

### **Recordkeeping Requirements**

- 23. 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 April 22, 1999, 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. 11 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.
  - E. System maintenance records specifying dates of catalyst replacement.
  - F. Manufacturer recommended operating and maintenance procedures for all major equipment, including CGT and the Auxiliary Boiler recommended time periods for startup and shutdown.

Special Conditions

Permit Numbers: 41166 and PSDTX939

Page 11

24. 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<sub>x</sub>, CO, NH<sub>3</sub>, and O<sub>2</sub> emissions from EPNs: E-ST1 and E-ST2 to demonstrate compliance with the emission rates listed in the MAERT.
  - B. Raw data files of all CEMS data including calibration checks and 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 each CGT, HRSG burners, and the Auxiliary Boiler, pursuant to Special Condition No. 3.
  - D. Hours of combustion air cooling to enhance the power output of each CGT pursuant to Special Condition No. 6.
  - E. Monthly and cumulative yearly totals of the heat input (in MMBtu) to the Auxiliary Boiler including times of start-up and shutdown. A monthly determination of the annual capacity factor which shall be calculated based on the total heat input of the preceding 12 month period divided by 1,245,672 MMBtu.
  - F. Records of visible emissions and opacity observations pursuant to Special Condition No. 7.
  - G. Records of conductivity readings, TDS concentrations, conductivity exceedances, corrective action taken and the quarterly PCM quality assurance checks pursuant to Special Condition No. 8 and Special Condition No. 17.
  - H. Startup/Shutdown records shall include the following: **(11/11)**
    - (1) Type and quantity of fuel used; and
    - (2) Emissions from the event; and
    - (3) Date, time and duration of the event.

- I. Monthly maintenance records pursuant to Special Condition No. 22B shall include the following: **(11/11)**
  - (1) Type of activity.
  - (2) Emissions from the activity.
  - (3) Date, time, and duration of the activity.
- J. Pursuant to Special Condition No. 22A(2), the annual confirmation shall be kept with examples of the method of data reduction including units, conversion factors, assumptions, and the basis of the assumptions in accordance with the original manner as represented in the application dated December 21, 2010. **(11/11)**

### **Reporting**

25. 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. In addition to the information specified in 40 CFR § 60.7(c), each report shall contain the hours of operation of the equipment authorized by this permit and a report summary of the periods of non-complying emissions and CEMS downtimes by cause.
26. For the purposes of reporting pursuant to Special Condition No. 25, non-complying emissions from equipment authorized by this permit shall be defined as follows:
  - A. Non-complying emissions of NO<sub>x</sub>, CO, or NH<sub>3</sub> shall be defined as each one hour period of operation, except during MSS, during which the average emissions as measured and recorded by the CEMS exceed any lb/hr emission limitation specified in the MAERT.
  - B. Non-complying annual emissions shall be defined as any rolling 12-month period of operation during which the 12 month cumulative emissions exceeds the annual limits specified in the MAERT of this permit.
  - C. Non-complying emissions of SO<sub>2</sub> shall be defined as emissions resulting from firing fuel which is found to contain sulfur in excess of the limits of Special Condition No. 3 or which indicates exceedance of the SO<sub>2</sub> limitation specified in the MAERT based on 100 percent conversion of the sulfur in the fuel to SO<sub>2</sub>.

Special Conditions

Permit Numbers: 41166 and PSDTX939

Page 13

27. If the average NO<sub>x</sub>, CO, or NH<sub>3</sub> stack outlet emission rate exceeds the maximum allowable emissions rate for more than one hour, the holder of this permit shall investigate and determine the reason for the exceedance and, if needed, make necessary repairs and/or adjustments as soon as possible.

If the NO<sub>x</sub>, CO, or NH<sub>3</sub> emission rate exceeds the emission rate in the MAERT for more than 12-consecutive hours, the permit holder shall notify the TCEQ Dallas/Fort Worth Regional Office either verbally or with a written report detailing the cause of the increase in emissions and all efforts being made to correct the problem.

**Additional Site Permit Authorizations**

28. The following facilities/operations and associated MSS emissions are authorized through Permit by Rule (PBR) under Title 30 Texas Administrative Code (30 TAC) Chapter 106 and are not incorporated into this permit, are listed here for reference purposes only:  
**(11/11)**

<b>EPN</b>	<b>Source</b>	<b>Size</b>	<b>PBR 30 TAC §</b>
TANK3	Sodium Hypochlorite Tank	12,000 gal	106.472
TANK4	Ferric Chloride Tank	600 gal	106.472
TANK5	Scale Inhibitor Storage Tank	6,000 gal	106.472
TANK6	Sulfuric Acid Storage Tank	6,000 gal	106.472
TANK8	Sodium Bisulfate Base Tank	400 gal	106.472
TANK13	Sodium Hydroxide Storage Tank (50%)	2,100 gal	106.472
TANK14	HRSG1 Atmospheric Blow-down Tank	7,945 gal	106.472
TANK15	HRSG1 Atmospheric Blow-down Tank	7,945 gal	106.472
TANK16	Aux. Boiler Atmospheric Blow-down Tank	3,525 gal	106.472
TANK17	Aux. Boiler De-aerator Overflow Tank	3,525 gal	106.472
TANK18	Non-Oxidizing Biocide Base Tank	400 gal	106.472
TANK19	Gasoline Tank	500 gal	106.472
TANK20	Diesel Tank	500 gal	106.472
TANK21	Diesel Tank	1,000 gal	106.472
TANK22	Waste Oil Tank	100 gal	106.472
E-GEN	Emergency Generator	685 hp	106.511
E-PUMP	Emergency Firewater Pump	183 hp	106.511

Special Conditions

Permit Numbers: 41166 and PSDTX939

Page 14

29. The following operations are authorized through PBRs under 30 TAC Chapter 106:  
**(11/11)**

<b>Activity</b>	<b>PBR</b>
Bench Scale Laboratory Equipment	106.122
Soldering, Brazing, Welding	106.227
Routine MSS of Facilities, & Temporary Maintenance Facilities	106.263
Hand-held & Manually Operated Machines	106.265
Dry Abrasive Cleaning	106.452
Surface Coating	106.263, 106.433
Solvent Cleaning	106.454
Water and Wastewater Treatment	106.532

Date: November 22, 2011

Attachment A

Inherently Low Emitters (EPN: ILEMSS)							
Activities	Spreadsheet Table	Emissions					
		NO <sub>x</sub>	CO	VOC	PM	SO <sub>2</sub>	NH <sub>3</sub>
Catalyst handling and maintenance <sup>1</sup>	B-2				X		
Miscellaneous particulate filter maintenance <sup>2</sup>	B-4				X		
Inspection, repair, replacement, adjusting, testing, and calibration of analytical equipment, process instrumentation including sight glasses, meters, gauges, CEMS, and PEMS	B-6	X	X				X
Turbine washing - online <sup>3</sup>	B-7				X		
Small equipment and fugitive component repair/replacement in VOC service <sup>4</sup>	B-9			X			X
Small equipment and fugitive component repair/replacement in VOC and NH <sub>3</sub> service <sup>4</sup>	B-10			X			
Boiler general maintenance <sup>5</sup>	B-13				X		
Management of sludge from pits, ponds, sumps, and water conveyances <sup>6</sup>	B-15			X			

<sup>1</sup> Includes, but is not limited to replacement, cleaning, activation, and deactivation of SCR and oxidation catalyst.

<sup>2</sup> Includes, but is not limited to baghouse filters, process related building filters, and combustion turbine intake filters.

<sup>3</sup> This process involves the use of water only.

<sup>4</sup> Includes, but is not limited to the following: (a) repair/replacement/ of pumps, compressors, valves, pipes, flanges, transport lines, filters, and screens utilized in natural gas, fuel/diesel/lube oil, ammonia, and gasoline service. (b) vehicle/mobile equipment maintenance that may involve small VOC emissions such as oil changes, transmission service, and hydraulic system service. (c) off-line NO<sub>x</sub> control devices including maintenance of the anhydrous/aqueous systems.

<sup>5</sup> Includes pre-heater basket handling/maintenance, refractory change-out, fan maintenance/balancing, damper/air/heater/soot blower maintenance, and any other general maintenance that does not exceed the worst case emission representations in the application.

<sup>6</sup> Includes but is it not limited to the following: mgmt by vacuum truck/dewatering of material in open pits/ponds/sumps/tanks and other closed or open vessels. Material managed includes water and sludge materials containing miscellaneous VOCs such as diesel, lube oil, and other waste oils.

Attachment B

Non-Inherently Low Emitters (non-ILEs)								
Activity	EPN	Emissions						
		NO <sub>x</sub>	CO	VOC	PM	SO <sub>2</sub> / H <sub>2</sub> S	NH <sub>3</sub> / Urea	Exempt Solvent
Gaseous Fuel Venting <sup>7</sup>	MSSFUG			X				
Combustion Optimization <sup>8</sup>	E-ST1 E-ST2 E-AUXBLR	X	X	X	X	X		

<sup>7</sup> Includes, but is not limited to venting prior to pipeline pigging and meter provings

<sup>8</sup> Includes, but is not limited to the following: (a) leak and operability checks (*e.g.* turbine over-speed test, trouble shooting). (b) Balancing. (c) Tuning activities that occur during seasonal tuning or after initial construction, a combustor change out, a major repair/maintenance to a combustor, or other similar circumstances.

## Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 41166 and PSDTX939

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 (6)(7)	TPY (4)
<b>Hourly Emissions Rates - Normal Operations</b>				
E-ST 1	MHI501G (~ 254 MW) + ~ 243.3 MMBtu/hr DB	NO <sub>x</sub>	91.9	-
		CO	143.4	-
		VOC	12.3	-
		PM <sub>10</sub> /PM <sub>2.5</sub>	30.1	-
		SO <sub>2</sub>	41.8	-
		H <sub>2</sub> SO <sub>4</sub>	5.1	-
		NH <sub>3</sub>	37.8	-
E-ST 2	MHI501G (~ 254 MW) + ~ 243.3 MMBtu/hr DB	NO <sub>x</sub>	91.9	-
		CO	143.4	-
		VOC	12.3	-
		PM <sub>10</sub> /PM <sub>2.5</sub>	30.1	-
		SO <sub>2</sub>	41.8	-
		H <sub>2</sub> SO <sub>4</sub>	5.1	-
		NH <sub>3</sub>	37.8	-
<b>Hourly Emissions Rates - Reduced Load and MSS Operations</b>				
E-ST 1	MHI501G (~ 254 MW) + ~ 243.3 MMBtu/hr DB	NO <sub>x</sub>	386.9	-
		CO	3029.2	-
		VOC	333.4	-
		PM <sub>10</sub> /PM <sub>2.5</sub>	21.3	-

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour (6)(7)	TPY (4)
E-ST 1	MHI501G (~ 254 MW) + ~ 243.3 MMBtu/hr DB	SO <sub>2</sub>	18.2	-
		H <sub>2</sub> SO <sub>4</sub>	2.2	-
		NH <sub>3</sub>	20.5	-
E-ST 2	MHI501G (~ 254 MW) + ~ 243.3 MMBtu/hr DB	NO <sub>x</sub>	386.9	-
		CO	3029.2	-
		VOC	333.4	-
		PM <sub>10</sub> /PM <sub>2.5</sub>	21.3	-
		SO <sub>2</sub>	18.2	-
		H <sub>2</sub> SO <sub>4</sub>	2.2	-
		NH <sub>3</sub>	20.5	-
<b>Annual Emission Rates - Normal, Reduced Load, and MSS Operations</b>				
E-ST 1 & E-ST 2	MHI501G (~ 254 MW) + ~ 243.3 MMBtu/hr DB	NO <sub>x</sub>	-	708.7
		CO	-	1128.6
		VOC	-	103.0
		PM <sub>10</sub> /PM <sub>2.5</sub>	-	230.9
		SO <sub>2</sub>	-	161.6
		H <sub>2</sub> SO <sub>4</sub>	-	19.8
		NH <sub>3</sub>	-	291.5
E-AUXBLR	Auxiliary Boiler 142 MMBtu/hr	NO <sub>x</sub>	8.5	3.7
		CO	10.5	4.6
		VOC	0.77	0.34
		PM <sub>10</sub> /PM <sub>2.5</sub>	1.4	0.6
		SO <sub>2</sub>	2.2	0.49

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour (6)(7)	TPY (4)
E-TANK7	Diesel Storage Tank 300 gallon	VOC	0.01	<0.01
C-TOWER	Cooling Tower	PM	5.68	24.87
		PM <sub>10</sub> /PM <sub>2.5</sub>	0.41	1.82
E-PIPFUG	Piping Fugitives	VOC	0.11	0.5
		NH <sub>3</sub>	0.33	1.41
MSSFUG	non-ILEs Maintenance emissions (Attachment B)	VOC	276.33	0.27
ILEMSS	ILEs Maintenance (Attachment A)	NO <sub>x</sub>	<0.01	<0.01
		CO	<0.01	<0.01
		VOC	0.21	0.01
		PM <sub>10</sub>	0.36	0.01
		PM <sub>2.5</sub>	0.36	0.01

- (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) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.
  - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
  - NO<sub>x</sub> - total oxides of nitrogen
  - SO<sub>2</sub> - sulfur dioxide
  - PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
  - PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
  - PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
  - CO - carbon monoxide
  - MSS - maintenance, start-up, and shutdown emissions
  - HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C

Emission Sources - Maximum Allowable Emission Rates

- (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) For  $\text{NO}_x$  and CO emissions that are measured using a CEMS, the Reduced Load/MSS lb/hr limits apply during each clock hour that includes one or more minutes of reduced load operation or MSS activities. During all other clock hours, the normal lb/hr limits apply.
- (7) For  $\text{NH}_3$  emissions that are measured using a CEMS, the Normal Load limits apply during each clock hour that includes one or more minutes of normal load operation. During all other clock hours, the Reduced Load/MSS lb/hr limits apply.

Date: July 9, 2012