Special Conditions

Permit Numbers 177380, PSDTX1650, and GHGPSDTX244

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources – Maximum Allowable Emission Rates (MAERT)," including planned maintenance, startup, and shutdown (MSS) activities, and those sources are limited to the emission limits on that table and other conditions specified in this permit.

2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the MAERT. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions.

Federal Applicability

3. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):

   A. Subpart A, General Provisions.

   B. Subpart Dc, Small industrial-Commercial-Institutional Steam Generating Units.

   C. Subpart IIII, Stationary Compression Ignition Internal Combustion Engines.

   D. Subpart KKKK, Stationary Combustion Turbines.

   E. Subpart TTTTa, Greenhouse Gas Emissions for Modified Coal-Fired Steam Electric Generating Units and New Construction and Reconstruction Stationary Combustion Turbine Electric Generating Units.

4. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63:

   A. Subpart A, General Provisions.

   B. Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines.

Emissions Standards and Operating Specifications

5. This permit authorizes two natural gas fired combustion generators (CTGs) to operate in combined cycle mode or with the steam turbine(s) out of service (i.e. bypass operation) [Emission Point Number (EPNs): GT-1 and GT-2]. The turbines are Siemens model SGT6-9000HL Advanced Class Gas Turbines, each with an average heat input of 3,758 million British thermal units per hour (MMBtu/hr) and each with a rated nominal capacity of 620.1 gross megawatts (MW) at the International Organization for Standardization (ISO) 3977 ambient conditions of 59 °F, 1 bar, and 60% relative humidity. The units are provided with a 100% steam bypass system so that gas turbine base load is possible when the steam turbine is out of service. The bypass valve(s) allow steam produced in the HRSG to go directly to the air-cooled condenser and bypass the steam turbine. Each CTG will have a duct burner fired heat recovery steam generator (HRSG) with a maximum heat input of 348 MMBtu/hr.

6. The combined turbine and duct burner emissions identified as EPNs GT-1 and GT-2 shall not exceed the following concentrations in parts per million by volume, dry basis (ppmvd) at 15% oxygen (O_2), except during periods of planned maintenance, startup, and shutdown (MSS):

Pollutant	Concentration (ppmvd at 15% O_2)	Averaging Time
Nitrogen oxide (NO_x)	2.0	3-hr rolling average
Carbon monoxide (CO)	2.0	3-hr rolling average
Ammonia (NH_3)	10.0	3-hr rolling average

A. A planned startup is defined as the period beginning when the combustion turbine receives a "turbine start" signal, when fuel is introduced, and an initial flame detection signal is recorded by the plant's control system. A planned startup ends when the combustion turbine output achieves steady operation (greater than 35% capacity) in the low NOx operating mode, the SCR has achieved steady state operation, and the startup emissions have purged through the continuous emissions monitoring system (CEMS), thereby achieving emissions compliance. Planned startups shall not exceed 60 minutes per startup.

B. A planned shutdown period when in combined cycle mode is defined as the period beginning when a combustion turbine receives a shutdown command and the combustion turbine operating level drops below its minimum sustainable load (less than 35% capacity), and the ammonia injection is no longer in service for purposes of an intended shutdown (i.e., shutdown of the ammonia system was not caused by a system failure). A combustion turbine's planned shutdown will end when a flame detection signal is no longer recorded in the plant's control system. Planned shutdowns shall not exceed 60 minutes per shutdown.

C. Emissions from maintenance activities identified in Attachment B are excluded from the above concentration limits.

7. Authorized fuel for the combustion turbines, supplemental duct burners, the Auxiliary Boiler (EPN AUX-1), and the Fuel Water Bath heaters (EPNs FH-1, FH-2, FH-CAP) shall be limited to pipeline-quality, sweet natural gas containing no more than 0.5 grain of total sulfur per 100 dry standard cubic feet (gr S/100 dscf).

8. The natural gas shall be sampled at least every 6 months to determine total sulfur and net heating value. Test results from the fuel supplier may be used to satisfy this requirement.

9. Each lube oil vent (EPNs LOV-1 and LOV-2) shall be equipped with a mist eliminator to remove oil mist from the lube oil reservoir air flow.

Opacity / Visible Emissions

10. Except during MSS activities, the opacity shall not exceed five percent (5%) averaged over a six-minute period from each CTG stack. During planned MSS activities, the opacity shall not exceed fifteen percent (15%) for each CTG stack over a six-minute period (or other applicable opacity limit specified in 30 TAC § 111.111(a)(1)). Each determination shall be made by first observing for visible emissions while each gas turbine is in operation. Observations shall be made at least 15 feet and no more than 0.25 miles from the emission point(s). Up to three emissions points may be read concurrently, provided that all three emissions points are within a 70 degree viewing sector or angle in front of the observer such that the proper sun position (at the observer's back) can be maintained for all three emission points. A certified opacity reader is not required for these visible emission observations. If visible emissions are observed from an emission point, then the opacity

shall be determined and documented within 24 hours for that emission point using 40 CFR Part 60, Appendix A, Test Method 9. Contributions from uncombined water shall not be included in determining compliance with this condition.

11. Visible emission observations shall be performed and recorded quarterly for each turbine while the facilities are in operation, unless the emission unit is not operating for the entire calendar quarter. If the opacity exceeds 5% during normal operations or 15% during MSS activities, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one (1) week of first observation.

Ammonia Handling

12. The following requirements apply to the handling of ammonia:

    A. The permit holder shall maintain prevention and protection measures for the NH_3 storage system. The NH_3 storage tank area will be marked and protected so as to protect the NH_3 storage area from accidents that could cause a rupture.

    B. The number of tank trucks unloading ammonia to the ammonia storage tank shall be recorded and updated monthly.

    C. Working losses from ammonia storage tanks shall be vapor balanced with the pressure rated tank truck ensuring 100% capture efficiency throughout the entire unloading operation. This vapor balancing operation shall be subject to the following:

        (1) The permit holder shall not allow a tank truck to be filled unless it has passed a leak-tight test within the past year as evidenced by a certificate which shows the date the tank truck last passed the leak-tight test required by this condition and the identification number of the tank truck

        (2) Dry break dripless fittings shall be used for all connections during the vapor balance operation to ensure that there shall be no emission during connection/disconnection of pipes.

        (3) The permit holder shall be responsible for ensuring that the ammonia supplier complies with all vapor balancing requirements. If there are any changes to the supplier or if they no longer comply with these requirements, the permit holder must submit an appropriate application to modify this permit to include working losses from ammonia storage tank that were abated by vapor balancing.

Auxiliary Boiler 1

13. The following requirements apply to the Auxiliary Boiler (EPN AUX-1):

    A. NO_x and CO emissions from the boiler shall not exceed the following:

    0.01 lb NO_x/MMBtu on an hourly average

    50 ppmvd CO corrected to 3 percent oxygen on an hourly average

    B. The boiler shall be limited to 2,000 hours of operation on a rolling 12 month period.

    C. The permit holder shall install and operate a totalizing fuel flow meter to measure the gas fuel usage for the boiler and fuel usage for each shall be recorded monthly. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or at least annually, whichever is more frequent, and shall be accurate to within 5 percent.

Quality assured (or valid) data must be generated when the boiler is operating. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the boiler operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

Fuel Water Bath Heater 1 and 2

14. The following requirements apply to the Fuel Water Bath Heater 1 (EPN FH-1) and the Fuel Water Bath Heater 2 (EPN FH-2):

    A. NO_x and CO emissions from the Fuel Water Bath Heaters (EPNs FH-1, FH-2, and FH-CAP) shall not exceed the following:

    0.01 lb NO_x/MMBtu on an hourly average

    50 ppmvd CO corrected to 3 percent oxygen on an hourly average

    B. The Fuel Water Bath Heater 1 (EPN FH-1) and the Fuel Water Bath Heater 2 (EPN FH-2) shall be limited to a total of 8,760 hours of combined operation per rolling 12 month period.

Emergency engines

15. The Emergency Generator 1 (EPN GEN-1) and Emergency Fire Pump 1 (EPN FP-1) are each limited to 52 hours of non-emergency operation per year, on a calendar year basis, in accordance with 40 CFR 60.4211(f). The generator and fire water pump must be equipped with a non-resettable runtime meter.

16. The fuel for the Emergency Generator 1 (EPN GEN-1) and Emergency Fire Pump 1 (EPN FP-1) shall be limited to diesel fuel containing no more than 15 ppm sulfur by weight. Records of diesel fuel delivery indicating date and quantity of fuel delivered shall be maintained.

Storage Tanks

17. Storage tank throughput and service shall be limited to the following:

Tank Identifier	Service	Fill/Withdrawal rate (gallons/hour)	Rolling 12 Month Throughput (gallons)
Lube Oil Tank 1 (EPN LOT-1)	Lube oil	8,000	12,012
Lube Oil Tank 2 (EPN LOT-2)	Lube oil	8,000	12,012
Emergency Generator 1 Diesel Tank (EPN: EGDT-1)	Diesel	5,000	100,002
Emergency Fire Pump 1 Diesel Tank (EPN: EFDT-1)	Diesel	500	2,016

18. Storage tanks are subject to the following requirements:

A. Except for labels, logos, etc. not to exceed 15 percent of the tank total surface area, uninsulated tank exterior surfaces exposed to the sun shall be white or unpainted aluminum. Storage tanks must be equipped with permanent submerged fill pipes.

B. The permit holder shall maintain a record of tank throughput for the previous month and the past consecutive 12 month period for each tank.

Fugitives

Piping, Valves, Pumps, and Compressors in contact with ammonia – 28AVO

19. Except as may be provided for in the Special Conditions of this permit, the following requirements apply to the above-referenced equipment:

A. Audio, olfactory, and visual checks for leaks within the operating area shall be made once every four hours.

B. Immediately, but no later than one hour upon detection of a leak, plant personnel shall take at least one of the following actions:

(1) Isolate the leak.

(2) Commence repair or replacement of the leaking component.

(3) Use a leak collection/containment system to prevent the leak until repair or replacement can be made if immediate repair is not possible.

C. Date and time of each inspection shall be noted in the operator's log or equivalent. Records shall be maintained at the plant site of all repairs and replacements made due to leaks. These records shall be made available to representatives of the Texas Commission on Environmental Quality (TCEQ) upon request.

Wastewater Collection

20. Process wastewater shall be immediately directed to a covered system. All lift stations, manholes, junction boxes, conveyances, and any other wastewater facilities shall be covered to minimize emissions.

Initial Determination of Compliance

21. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the combined cycle gas turbines (EPNs GT-1 and GT-2) and the Auxiliary Boiler (EPN AUX-1) to demonstrate compliance with the MAERT and control standards in Special Condition Nos. 6 and 13.A. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual and the U.S. Environmental Protection Agency (EPA) Reference Methods.

Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for 40 CFR Part 60 testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

A. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling. The notice shall include:

(1) Proposed date for pretest meeting.

(2) Date sampling will occur.

(3) Name of firm conducting sampling.

(4) Type of sampling equipment to be used.

(5) Method or procedure to be used in sampling.

(6) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.

(7) Procedure/parameters to be used to determine worst-case emissions, such as turbine loads, during the sampling period. The permit holder shall present at the pretest meeting the manner in which stack sampling will be executed in order to demonstrate compliance with emission standards found in 40 CFR Part 60 Subpart KKKK.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

B. Air contaminants emitted from the gas turbines to be tested for include (but are not limited to) CO, NO_X, VOC, NH_3, SO_2, PM_{10}, and O_2. Air contaminants emitted from the auxiliary boiler to be tested for include (but are not limited to) NO_X, CO, and O_2. As noted below, fuel sampling using the methods and procedures of 40 CFR § 60.4415 may be conducted in lieu of stack sampling for SO_2.

C. Fuel sampling using the methods and procedures of 40 CFR § 60.4415 may be conducted in lieu of stack sampling for SO_2 or the permit holder may be exempted from fuel monitoring of SO_2 as provided under 40 CFR § 60.4365. If fuel sampling is used, compliance with NSPS Subpart KKKK SO_2 limits shall be based on 100 percent conversion of the sulfur in the fuel to SO_2. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling.

D. Sampling shall occur within 60 days after achieving the maximum operating rate at which the CTG will be operated, but no later than 180 days after initial start-up of the unit and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.

E. The facility being sampled shall operate at the maximum firing rate that can be reasonably achieved during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, if the maximum load is greater than that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region.

F. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions

entitled “Chapter 14, Contents of Sampling Reports” of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the appropriate TCEQ Regional Office.

One copy to each local air pollution control program.

G. Sampling ports and platform(s) shall be incorporated into the design of the CTG stack according to the specifications set forth in the attachment entitled “Chapter 2, Guidelines For Stack Sampling Facilities” of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director.

Continuous Demonstration of Compliance

22. The permit holder shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) to measure and record the in-stack concentrations of CO, NH_3, NO_x, and O_2 from the gas turbine exhaust stacks (EPNs GT-1 and GT-2).

A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9 and 18, Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60), Appendix B. Performance Specification No. 18, 40 CFR Part 60, Appendix B shall be adapted for NH_3. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air, Air Permits Division for requirements to be met.

B. Section 1 below applies to sources subject to the quality-assurance requirements of 40 CFR Part 60, Appendix F; section 2 applies to all other sources:

(1) The permit holder shall assure that the CEMS meets the applicable quality-assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1, except NH_3 shall meet 40 CFR Part 60, Appendix F, Procedure 6 adapted for NH_3. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, Section 5.2.3 of Procedure 1 and Section 5.2.1 of Procedure 6 adapted for NH_3 and any CEMS downtime shall be reported to the appropriate TCEQ Regional Manager, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Manager.

(2) The system shall be zeroed and spanned daily, and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in the applicable Performance Specification Nos. 1 through 9 and 18 adapted for NH_3, 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days.

Each monitor shall be quality-assured at least quarterly using Cylinder Gas Audits (CGA) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, Section 5.1.2 and Procedure 6, Section 5.2.3 adapted for NH_3, with the following exception: a relative accuracy test audit (RATA) is not required once every four quarters (i.e., four successive quarterly CGA may be conducted). An equivalent quality-assurance method approved by the TCEQ may also be used. Successive quarterly audits shall occur no closer than two months.

All CGA exceedances of +15 percent accuracy indicate that the CEMS is out of control.

C. The monitoring data shall be reduced to hourly average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period. At least two (2) valid data points shall be generated during an hourly period in which zero and span is performed. At least once every week, the valid hourly average concentrations shall be reduced to and recorded in units of parts per million by volume dry at 15% oxygen (ppmvd at 15% O_2) and averaged over the specified averaging period to determine compliance with the concentration limits of Special Condition 6.

The measured average concentration from the CEMS shall be multiplied by the hourly average natural gas fuel consumption data required by Subpart F of this Special Condition to determine the hourly emission limits of the MAERT. Pounds per hour data from the CTG/HRSG stack shall be summed monthly to tons per year and used to determine compliance with the annual emission limits of the MAERT.

D. All monitoring data and quality-assurance data shall be maintained by the source for a period of five (5) years and shall be made available to the TCEQ Executive Director or designated representative upon request. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.

E. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to any required relative accuracy test audit (RATA) in order to provide them the opportunity to observe the testing.

F. The permit holder shall additionally install, calibrate, maintain, and operate continuous monitoring systems to monitor and record the natural gas consumption of the CTG and duct burner. The monitored data shall be reduced to an hourly average flow rate at least once every day, using a minimum of four equally-spaced data points from each one-hour period. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or at least annually, whichever is more frequent, and shall be accurate to within 5 percent. The permit holder shall comply with the initial certification and quality assurances as specified in 40 CFR Part 75. In lieu of monitoring fuel flow, the permit holder may monitor stack exhaust flow using the flow monitoring specifications of 40 Code of Federal Regulations (CFR) Part 60, Appendix B, Performance Specification 6 or 40 CFR Part 75, Appendix A.

G. If any emission monitor fails to meet specified performance, it shall be repaired or replaced as soon as reasonably possible.

H. Quality-assured (or valid) data must be generated when the gas turbine is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the gas turbine operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. Options to increase system reliability to an acceptable value, including a redundant CEMS, may be required by the TCEQ Regional Manager.

I. As an approved alternative to an NH_3 CEMS, the permit holder may install and operate a dual stream system of NO_x CEMS at the exit of the SCR. One of the exhaust streams would be routed, in an unconverted state, to one NO_x CEMS and the other exhaust stream would be routed through a NH_3 converter to convert NH_3 to NO_x and then to a second NOx CEMS. The NH_3 slip concentration shall be calculated from the delta between the two NOx CEMS readings (converted and unconverted). These results shall be recorded and used to determine compliance with Special Condition No. 6.

Maintenance, Startup, and Shutdown

23. This permit authorizes the emissions from the planned MSS activities listed in Attachment A, Attachment B, and the table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT) attached to this permit.

24. Attachment A identifies the inherently low emitting MSS activities that may be performed at the plant. Emissions from activities identified in Attachment A shall be considered to be equal to the potential to emit represented in the permit application. The estimated emissions from the activities listed in Attachment A must be revalidated annually. This revalidation shall consist of the estimated emissions for each type of activity and the basis for that emission estimate.

25. Compliance with the emissions limits for planned maintenance activities identified in Attachment B may be demonstrated as follows.

    A. For each pollutant emitted during planned maintenance activities which is measured using a CEMS, the permit holder shall for each calendar month compare the pollutant's short-term (hourly) emissions as measured by the CEMS to the applicable short-term planned MSS emissions limit in the MAERT.

    B. For each pollutant emitted during a planned maintenance activities which is not measured using a CEMS, the permit holder shall for each calendar month determine the total emissions of the pollutant.

    C. The performance of each planned MSS activity and the emissions associated with it shall be recorded and include at least the following information:

        (1) the type of planned MSS activity and the reason for the planned activity;

        (2) the date and time of the MSS activity and its duration; and

        (3) the estimated quantity of each air contaminant, or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.

    D. Sum the rolling 12-month emissions for each EPN on a monthly basis to show compliance with the MAERT.

26. The number of startup events and hours of operation of the CTGs may be demonstrated by using recorded operating parameters such as natural gas fuel feed rates and power or steam generation records.

27. Additional occurrences of MSS activities authorized by this permit in Attachment A and B may be authorized under permit by rule only if conducted in compliance with this permit's procedures, emission controls, monitoring, and recordkeeping requirements applicable to the activity.

Greenhouse Gases Special Conditions

28. Each CTG train shall not exceed the following limits based on a 12-month rolling average.

Turbine Operations[a]	Output Specific CO_2 Emission Rate (lbs CO_2/MWh-gross)	Applicability
Combined Cycle	800 or as specified in 40 CFR 60 Subpart	If emission standards in 40

	TTTTa prior to 1/1/2032	CFR 60 Subpart TTTTa apply
	100 or as specified in 40 CFR 60 Subpart TTTTa effective 1/1/2032 and later	

[a] Emissions associated with the planned MSS activities listed in Special Condition No. 6 shall not be included in determining compliance with the performance standards listed above and shall be minimized through the application of work practices. Emissions during all operating modes shall not exceed the carbon dioxide equivalent (CO_2e) mass emission rates identified in the MAERT.

Records shall be updated monthly and on a 12-month rolling average to demonstrate compliance with the table above.

29. Monitoring, quality assurance/quality control requirements, emission calculation methodologies, record keeping, and reporting requirements related to Greenhouse Gas (GHG) emissions shall adhere to the applicable requirements in 40 CFR Part 98 and in this permit.

30. The permit holder shall calculate the CO_2e emissions on a 12-month rolling basis, based on the procedures and Global Warming Potentials (GWP) contained in Greenhouse Gas Regulations, 40 CFR Part 98, Subpart A, Table A-1.

31. The permit holder shall minimize emissions from components and equipment containing GHG as follows:

    A. Piping and valves in natural gas service within the operating area shall be checked daily for leaks using audio, visual, and olfactory (AVO) sensing for natural gas leaks.

    B. The sulfur hexafluoride (SF_6)-enclosed circuit breakers shall be designed to meet the latest American National Standards Institute (ANSI) C37.013 standard for high voltage circuit breakers. The circuit breakers must be guaranteed to achieve a SF_6 leak rate of 0.5% by weight or less annually. The circuit interrupters must be in a totally enclosed, pressurized compartment equipped with an alarm that signals the plant control room in the event that any of the circuit breaker falls below the normal operating pressure as specified by the manufacturer.

        (1) SF_6 emissions shall be calculated annually (calendar year) in accordance with the mass balance approach provided in equation DD-1 of the Mandatory Greenhouse Gas Reporting Rule for Electrical Transmission and Distribution Equipment Use, 40 CFR Part 98, Subpart DD. The total SF_6 inventory of the circuit breakers shall not exceed 1,536 lb with leak detection.

        (2) The circuit breakers shall be equipped with a low pressure alarm and low pressure lockout. The SF_6 leak detection system shall be able to detect a leak of at least 0.5% by weight per year.

    C. As soon as practicable following the detection of a leak, plant personnel shall take one or more of the following actions:

        (1) Locate and isolate the leak, if necessary.

        (2) Commence repair or replacement of the leaking component.

        (3) Use a leak collection or containment system to control the leak until repair or replacement can be made if immediate repair is not possible.

32. After the first full calendar month of operation, the permit holder shall compare that month's gross heat rate and output specific CO_2 emission rate to the limits in this permit and the MAERT. Within

45 days after collecting the data, the permit holder shall submit a report to the region identifying whether the data causes any concerns regarding the permit holder's ability to comply with the applicable limitations.

Recordkeeping Requirements

33. 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 Texas Commission on Environmental Quality (TCEQ), EPA, or any local air pollution control agency with jurisdiction:

    A. A copy of this permit.

    B. Permit application received August 29, 2024, and subsequent representations submitted to the TCEQ.

    C. A complete copy of the testing reports and records of the initial performance testing completed 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. A copy of the manufacturer's design and operation specifications and all emission-related maintenance requirements.

34. The following records (written or electronic) shall be maintained by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction:

    A. The CEMS data of NO_X, CO, NH_3 (as applicable in Special Condition 22), and O_2 emissions from EPNs GT-1 and GT-2 to demonstrate compliance with the emission rates listed in the MAERT and Special Condition No. 6.

    B. Records of all CEMS data including calibration checks, adjustments, and maintenance performed on these systems in a permanent form suitable for inspection.

    C. Records of dates and times for startups and shutdowns of the CTGs.

    D. Records of the amount of natural gas fired monthly in each of the CTGs, duct burners, and the auxiliary boiler.

    E. Records of the auxiliary boiler hours of operation to demonstrate compliance with Special Condition No. 13.B.

    F. Records of visible emissions, opacity observations, and any corrective action taken to demonstrate compliance with Special Condition No. 11.

    G. Records of the number of tank trucks unloading ammonia for the CTGs to demonstrate compliance with Special Condition No. 12.C.

    H. Records of emergency engine hours of operations, as well as monthly diesel fuel deliveries, including delivery dates and fuel quantities to demonstrate compliance with Special Condition Nos. 15 and 16.

    I. Records of storage tank throughput to demonstrate compliance with Special Condition 17.

    J. Records of AVO checks, maintenance performed to any piping and valves or other equipment as required by 19.A.

K. Records of monitored or calculated maintenance emissions to demonstrate compliance with Special Condition No. 24, 25, 26, and 27.

L. Records of calculated GHG emissions to demonstrate compliance with Special Condition Nos. 29, 30, and 31.

Date: DRAFT

Permits 177380, PSDTX1650, and GHGPSDTX244

Attachment A

Inherently Low Emitting Activities

Planned Maintenance Activities							
Activities	EPN	Emissions					
		NO_x	CO	VOC	PM	SO_2	NH_3
Miscellaneous PM filter maintenance[1]	MSS-1				x		
Catalyst handling and maintenance[2]	MSS-1				x		
Inspection, repair, replacement, adjusting, testing, and calibration of analytical equipment, process instruments including sight glasses, meters, gauges, CEMS, PEMS	MSS-1	x	x	x			
Management of sludge from pits, ponds, sumps, and water conveyances[3]	MSS-1			x			

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Attachment B

Non-ILE Planned Maintenance Activities

Activities	EPN	Emissions					
		VOC	**NO_x**	**CO**	**PM**	**SO_2 and H_2SO_4**	**NH_3**
Process unit startup and shutdown	GT-1, GT-2	X	X	X	X	X	X
Combustion unit tuning optimization[4]	GT-1, GT-2	X	X	X	X	X	X
Turbine blade washing	MSS-1	X			X		
Gaseous fuel venting[5]	MSS-1	X					
Small equipment and fugitive component repair/replacement in VOC and NH_3 service[6]	MSS-1	X					

Date: DRAFT

[1] Includes, but is not limited to: baghouse filters and combustion turbine air intake filters

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

[3] Includes, but is not limited to: mgmt. by vacuum truck/dewatering of material in open pits/ponds/sumps/tanks and other closed or open vessels. Material managed include water and sludge materials containing miscellaneous VOCs such as diesel, lube oil, and other waste oils.

[4] Includes, but is not limited to: leak operability checks (e.g. turbine overspeed test, troubleshooting), seasonal tuning, islanding testing, and balancing.

[5] Includes, but is not limited to: venting prior to pipeline pigging and meter proving.

[6] Includes, but is not limited to: (1) repair/replacement of pumps, compressors, valves, pipes, flanges, transport lines, filters/screens in natural gas, fuel oil, diesel oil, ammonia, lube oil, and gasoline service; (2) vehicle and mobile equipment maintenance that may involve small VOC emissions, such as oil changes and transmission/hydraulic system service; (3) off-line NO_x control device maintenance including aqueous ammonia systems.