TCEQ Use Only

TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (*If other is checked please describe in space provided.*)

☒ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☐ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** *(if issued)*
CN		**RN**

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* — *If new Customer, enter previous Customer below:*

Pecos Power Generation Company, LLC

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
805382644	32093299918	99-1868269	

11. Type of Customer:

☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☒ Other: Limited Liability Corporation

12. Number of Employees

☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?

☒ **Yes** ☐ **No**

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:

414 Church Street, Suite 308

City	Sandpoint	**State**	ID	**ZIP**	83864	**ZIP + 4**	7002

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	george@madenergy.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(832) 864-3343		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

Pecos Power Generation

23. Street Address of the Regulated Entity: ***(No PO Boxes)***							
	City		**State**		**ZIP**		**ZIP + 4**
24. County	Reeves						

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	From the intersection of Interstate 20 and County Road 409, head north for 1.13 miles. Turn left (west) onto county road 411 and travel 0.75 miles. Facility will be on the left (to the south).				
26. Nearest City			**State**	**Nearest ZIP Code**	
Pecos			TX	79772	

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:			**28. Longitude (W) In Decimal:**		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
31	23	49.02	103	37	18.57

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4911		221112	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Electric Power Generation Facility

34. Mailing Address:	**414 Church Street, Suite 308**						
	City	**Sandpoint**	**State**	**ID**	**ZIP**	**83864**	**ZIP + 4**	**7002**
35. E-Mail Address:	**george@madenergy.com**						

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(208) 755-2904		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Hunter West	**41. Title:**	Air Compliance Specialist
42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(409) 200-1177		(318) 222-2425	hunterw@approachenv.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Pecos Power Generation Company, LLC	**Job Title:**	CEO
Name *(In Print)*:	George Wentz	**Phone:**	(208) 637- **5941**
Signature:		**Date:**	3/3/2025

P. O. Box 7192 (zip 71137-7192)
1000 Grimmett Dr.
Shreveport, LA 71107
Phone: (318) 222-2424
Fax: (318) 222-2425

March 3, 2025

Texas Commission on Environmental Quality
Air Quality Division
MC-164
12100 Park 35 Circle
Austin, Texas 78753

Re: Standard Permit Registration for Electric Generating Units
Pecos Power Generation Company, LLC
Pecos Power Generation
Pecos, Reeves County, Texas 79772

Dear Sir/Madam:

On behalf of Pecos Power Generation Company, LLC, and in accordance with Title 30 Texas Administrative Code Chapter 116, Approach Environmental, LLC is submitting this Standard Permit registration for Electric Generating Units. This documentation includes the project description, PI-1S form, area and survey maps, process flow diagram, emissions calculations, and all required supporting documentation. The registration fee is being submitted to the Texas Commission on Environmental Quality (TCEQ) via STEERS.

Should you have any questions and/or comments, please do not hesitate to contact me at (409) 200-1177, or via email at hunterw@approachenv.com.

Sincerely,

Hunter West
Air Compliance Specialist
Approach Environmental, LLC

STANDARD PERMIT REGISTRATION
FOR ELECTRIC GENERATING UNITS

PECOS POWER GENERATION
PECOS, REEVES COUNTY, TEXAS

PREPARED FOR:
PECOS POWER GENERATION COMPANY, LLC
414 CHURCH STREET, SUITE 308
SANDPOINT, IDAHO

MARCH 3, 2025

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1. INTRODUCTION

Pecos Power Generation Company, LLC (PPG) plans to own and operate an electric power generation facility, located at GPS coordinates: 31.396950°, -103.621825°, in Reeves County, Texas. Currently, the property (an 87-acre tract and 82-acre tract) is currently vacant except for two mobile homes and storage containers located on the western and southern edges of the property. As per the requirements of the standard permit registration, an area map, and a plot plan (survey map) are provided in Appendix A of this application. In addition to the standard permit for the proposed facility's gas turbines, PPG proposes to authorize: 1) emissions from the black start generator under §106.511 for its intended emergency operation, 2) gas turbine and black start generator routine maintenance under §106.263, and 3) emissions from the diesel and aqueous ammonia storage tanks under §106.472.

2. PROCESS DESCRIPTION

Under this standard permit registration, PPG will operate an electric power generation facility to supply power to a data center. The data center is a separate entity but will be located within the PPG property boundary. In conjunction with supplying power to the data center, the facility will also have the ability to send power to the local electric grid, as needed.

In addition to the process description below, a process flow diagram is included in this registration within **Appendix A**.

The facility will consist of 6-Siemens SGT-800 gas turbines (EPNs: GT-1 to GT-6) capable of producing up to 56 Megawatts (MW) per turbine at International Standards Organization (ISO) conditions and 1-SIEMENS SST-600 steam turbine capable of producing 142 MW at ISO conditions. The turbines will operate in combined cycle under normal operation (100% load, 8,760 hours/year). The gas turbines will be equipped with Selective Catalytic Reduction (SCR) to reduce emissions by an estimated 90%. The gas turbines are fueled by pipeline natural gas (EPN: NGP-FUG) containing 96.65% methane. A fuel composition of natural gas is included in **Appendix D**. During start-ups following either maintenance or commercial shutdowns, the gas turbines will operate in simple cycle and not utilize the SCR.

A diesel fuel powered black start generator (EPN: BS-1) will be present for emergency use where, in the event of a total power loss, power can be generated to get a gas turbine back online. The generator will be a Caterpillar 3516b, or equivalent, and capable of producing approximately 1.5 MW to 2.5 MW.

It should be emphasized that the data center will be located within the PPG property boundary as PPG will lease the land to the data center. The data center will contain electric generating units to be used in emergency situations that are completely independent of the units and operations of PPG. Also, those emergency units will be owned and operated solely by the data center. Lastly, the Standard Industrial Classification (SIC) code for the PPG facility is 4911 while the SIC code for the data center will likely be 7374. Given this information, any units, and their associated emissions, should be considered completely separate from the equipment, operations, and emissions from the PPG facility.

3. PROCESS EMISSIONS

Emissions resulting from the gas turbines (EPN: GT-1 to GT-6) are calculated using a Nominal Performance Data sheet provided by Siemens Energy which details the expected data and emission rates for the units to be used at the PPG facility. A copy of the Nominal Performance Data sheet is included in **Appendix D**. Following any shutdown periods, the turbines will operate in simple cycle for 30 minutes during the subsequent startup period. Emissions produced during the startup period are calculated using a conservative estimate of twice the emission rate during normal operation.

The black start generator (EPN: BS-1) is expected to be a Caterpillar 3516B, or equivalent, with a primary purpose of, in the event of a total power loss, serving as an emergency generator to get one of the gas turbines back online. PPG will perform routine maintenance on this generator by running it for 30 minutes each week. Emissions rates for these Maintenance, Startup, Shutdown (MSS) emissions are based on the CAT 3516B data sheet, Low Fuel Consumption (60°C SCAC), standby emission data. The CAT 3516B data sheet is included in **Appendix D**. The generator will be equipped with an approximate 2,200-gallon fuel tank mounted within the skid the generator is fastened too. Working/breathing and fugitive emissions for the tanks at the PPG facility are calculated utilizing Mitchell Scientific's Emission Master Tanks Software, version 8.4.5.24. The software does not have the capability to calculate emissions for a skid-mounted tank; therefore, the diesel tank emissions were calculated using a similar size and capacity, horizontal tank.

The aqueous ammonia to be utilized within the gas turbines to reduce Nitrogen Oxides (NOx) emissions will be stored in 2-3,000-barrel storage tanks (EPN: AAST-1 & AAST-2). Working/breathing and fugitive losses were calculated using the Emission Master Tanks Software.

Fugitive emissions were calculated for the natural gas pipeline supplying the facility. The Synthetic Organic Chemical Manufacturing Industry (SOCMI) fugitive factors for fugitive emissions without ethylene were used because the natural gas used does not contain ethylene. Detailed calculations and an emission summary table are provided in **Appendix B**.

4. COMPLIANCE WITH REQUIRMENTS OF 30 TAC §116.610 & §116.615

This project meets the applicable rules and registrations of 30 TAC §116.610 & §116.615 and the Texas Clean Air Act (TCAA), as discussed below.

4.1 §116.610 Applicability

(a) Under the TCAA, §382.051, a project that meets the requirements for a standard permit listed in this subchapter or issued by the commission is hereby entitled to the standard permit, provided the following conditions listed in this section are met. For the purposes of this subchapter, project means the construction or modification of a facility or a group of facilities submitted under the same registration.

(1) Any project that results in a net increase in emissions of air contaminants from the project other than water, nitrogen, ethane, hydrogen, oxygen, or greenhouse gases (GHGs) as defined in §101.1 of this title (relating to Definitions), or those for which a national ambient air quality standard has been established must meet the emission limitations of §106.261 of this title (relating to Facilities (Emission Limitations)), unless otherwise specified by a particular standard permit.

Per section 3(A) of the EGU Standard Permit, units that meet the conditions of the Standard Permit do not have to meet §116.610(a)(1).

(2) Construction or operation of the project must be commenced prior to the effective date of a revision to this subchapter under which the project would no longer meet the requirements for a standard permit.

There is no pending revision to this subchapter.

(3) The proposed project must comply with the applicable provisions of the Federal Clean Air Act (FCAA), §111 (concerning New Source Performance Standards) as listed under 40 Code of

Federal Regulations (CFR) Part 60, promulgated by the United States Environmental Protection Agency (EPA).

The gas turbines will be subject to New Source Performance Standard (NSPS) in 40 CFR Part 60, Subpart KKKK (Standards of Performance for Stationary Combustion Turbines) and will comply with all applicable requirements.

(4) The proposed project must comply with the applicable provisions of FCAA, §112 (concerning Hazardous Air Pollutants) as listed under 40 CFR 61, promulgated by the EPA;

There are no Subparts under 40 CFR Part 61 that are applicable to facilities affected by this registration.

(5) The proposed project must comply with the applicable maximum achievable control technology standards as listed under 40 CFR Part 63, promulgated by the EPA under FCAA, §112 or as listed under Chapter 113, Subchapter C of this title (relating to National Emissions Standards for Hazardous Air Pollutants for Source Categories (FCAA, §112, 40 CFR Part 63)).

40 CFR Part 63, Subpart YYYY, will not apply as the site is not a major source of HAPs.

(6) If subject to Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program) the proposed facility, group of facilities, or account must obtain allocations to operate.

The facility is not subject to Chapter 101, Subchapter H, Division 3.

(b) Any project that constitutes a new major stationary source or major modification as defined in §116.12 of this title (relating to Nonattainment and Prevention of Significant Deterioration Review Definitions) because of emissions of air contaminants other than greenhouse gases is subject to the requirements of §116.110 of this title (relating to Applicability) rather than this subchapter. Notwithstanding any provision in any specific standard permit to the contrary, any project that constitutes a new major stationary source or major modification which is subject to Subchapter B, Division 6 of this chapter (relating to Prevention of Significant Deterioration Review) due solely to emissions of greenhouse gases may use a standard permit under this chapter for air contaminants that are not greenhouse gases.

The facility will not be classified as a major source.

(c) Persons may not circumvent by artificial limitations the requirements of §116.110 of this title.

PPG will not circumvent the requirements of §116.110.

(d) Any project involving a proposed affected source (as defined in §116.15(1) of this title (relating to Section 112(g) Definitions)) shall comply with all applicable requirements under Subchapter E of this chapter (relating to Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources (FCAA, §112(g), 40 CFR Part 63)). Affected sources subject to Subchapter E of this chapter may use a standard permit under this subchapter only if the terms and conditions of the specific standard permit meet the requirements of Subchapter E of this chapter.

The facility will not be classified as a major source.

4.2 §116.615 General Conditions

The following general conditions are applicable to holders of standard permits but will not necessarily be specifically stated within the standard permit document.

(1) Protection of public health and welfare. The emissions from the facility, including dockside vessel emissions, must comply with all applicable rules and regulations of the commission adopted under Texas Health and Safety Code, Chapter 382, and with the intent of the Texas Clean Air Act (TCAA), including protection of health and property of the public.

(2) Standard permit representations. All representations with regard to construction plans, operating procedures, pollution control methods, and maximum emission rates in any registration for a standard permit become conditions upon which the facility or changes thereto, must be constructed and operated. It is unlawful for any person to vary from such representations if the change will affect that person's right to claim a standard permit under this section. Any change in condition such that a person is no longer eligible to claim a standard permit under this section requires proper authorization under §116.110 of this title (relating to Applicability). Any changes in representations are subject to the following requirements:

(A) For the addition of a new facility, the owner or operator shall submit a new registration incorporating existing facilities with a fee, in accordance with §116.611 and §116.614 of this title, (relating to Registration to use a Standard Permit and Standard Permit Fees) prior to commencing construction. If the applicable standard permit requires public notice, construction of the new facility or facilities may not commence until the new registration has been issued by the executive director.

(B) For any change in the method of control of emissions, a change in the character of the emissions, or an increase in the discharge of the various emissions, the owner or operator shall submit written notification to the executive director describing the change(s), along with the designated fee, no later than 30 days after the change.

(C) For any other change to the representations, the owner or operator shall submit written notification to the executive director describing the change(s) no later than 30 days after the change.

(D) Any facility registered under a standard permit which contains conditions or procedures for addressing changes to the registered facility which differ from subparagraphs (A) - (C) of this paragraph shall comply with the applicable requirements of the standard permit in place of subparagraphs (A) - (C) of this paragraph.

(3) Standard permit in lieu of permit amendment. All changes authorized by standard permit to a facility previously permitted under §116.110 of this title shall be administratively incorporated into that facility's permit at such time as the permit is amended or renewed.

(4) Construction progress. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office not later than 15 working days after occurrence of the event, except where a different time period is specified for a particular standard permit.

(5) Start-up notification.

(A) The appropriate air program regional office of the commission and any other air pollution control agency having jurisdiction shall be notified prior to the commencement of operations of the facilities authorized by a standard permit in such a manner that a representative of the executive director may be present.

(B) For phased construction, which may involve a series of units commencing operations at different times, the owner or operator of the facility shall provide separate notification for the commencement of operations for each unit.

(C) Prior to beginning operations of the facilities authorized by the permit, the permit holder shall identify to the Office of Permitting, Remediation, and Registration, the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program).

(D) A particular standard permit may modify start-up notification requirements.

(6) Sampling requirements. If sampling of stacks or process vents is required, the standard permit holder shall contact the commission's appropriate regional office and any other air pollution control agency having jurisdiction prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The standard permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant.

(7) Equivalency of methods. The standard permit holder shall demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the standard permit. Alternative methods must be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the standard permit.

(8) Recordkeeping. A copy of the standard permit along with information and data sufficient to demonstrate applicability of and compliance with the standard permit shall be maintained in a file at the plant site and made available at the request of representatives of the executive director, the United States Environmental Protection Agency, or any air pollution control agency having jurisdiction. For facilities that normally operate unattended, this information shall be maintained at the nearest staffed location within Texas specified by the standard permit holder in the standard permit registration. This information must include, but is not limited to, production records and operating hours. Additional recordkeeping requirements may be specified in the conditions of the standard permit. Information and data sufficient to demonstrate applicability of and compliance with the standard permit must be retained for at least two years following the date that the information or data is obtained. The copy of the standard permit must be maintained as a permanent record.

(9) Maintenance of emission control. The facilities covered by the standard permit may not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. Notification for emissions events and scheduled maintenance shall be made in accordance with §101.201 and §101.211 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; and Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements).

(10) Compliance with rules. Registration of a standard permit by a standard permit applicant constitutes an acknowledgment and agreement that the holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the claiming of the standard permit. If more than one state or federal rule or regulation or permit condition are applicable, the most stringent limit or condition shall govern. Acceptance includes consent to the entrance of commission employees and designated representatives of any air pollution control agency having jurisdiction into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the standard permit.

(11) Distance limitations, setbacks, and buffer zones. Notwithstanding any requirement in any standard permit, if a standard permit for a facility requires a distance, setback, or buffer from other property or structures as a condition of the permit, the determination of whether the distance, setback, or buffer is satisfied shall be made on the basis of conditions existing at the earlier of:

(A) the date new construction, expansion, or modification of a facility begins; or

(B) the date any application or notice of intent is first filed with the commission to obtain approval for the construction or operation of the facility.

PPG will adhere to these General Conditions and will operate the units authorized by the Standard Permit in compliance with the above subparagraphs.

5. COMPLIANCE WITH REQUIRMENTS OF THE STANDARD PERMIT FOR EGU

The following discussion presents the requirements of the Standard Permit for EGUs and explains how PPG will comply with each of the requirements.

Air Quality Standard Permit for Electric Generating Units
Effective Date May 16, 2007

This standard permit authorizes electric generating units that generate electricity for use by the owner or operator and/or generate electricity to be sold to the electric grid, and that meet all of the conditions listed below.

(1) Applicability

(A) This standard permit may be used to authorize electric generating units installed or modified after the effective date of this standard permit and that meet the requirements of this standard permit.

This Standard Permit is being used to authorize 6 – Gas Turbines that meet the requirements of this standard permit.

(B) This standard permit may not be used to authorize boilers. Boilers may be authorized under the Air Quality Standard Permit for Boilers; 30 TAC § 106.183, Boilers, Heaters, and Other Combustion Devices; or a permit issued under the requirements of 30 TAC Chapter 116.

The facility does not contain any boilers.

(2) Definitions

(A) East Texas Region - All counties traversed by or east of Interstate Highway 35 or Interstate Highway 37, including Bosque, Coryell, Hood, Parker, Somervell and Wise Counties.

(B) Installed - a generating unit is installed on the site when it begins generating electricity.

(C) West Texas Region - Includes all of the state not contained in the East Texas Region.

(D) Renewable fuel - fuel produced or derived from animal or plant products, byproducts or wastes, or other renewable biomass sources, excluding fossil fuels. Renewable fuels may include, but are not limited to, ethanol, biodiesel, and biogas fuels.

(3) Administrative Requirements

(A) Electric generating units shall be registered in accordance with 30 TAC § 116.611, Registration to Use a Standard Permit, using a current Form PI-1S. Units that meet the conditions of this standard permit do not have to meet 30 TAC § 116.610(a)(1), Applicability.

A completed PI-1S form is included in the application.

(B) Registration applications shall comply with 30 TAC § 116.614, Standard Permit Fees, for any single unit or multiple units at a site with a total generating capacity of 1 megawatt (MW) or greater. The fee for units or multiple units with a total generating capacity of less than 1 MW at a site shall be $100.00. The fee shall be waived for units or multiple units with a total generating capacity of less than 1 MW at a site that have certified nitrogen oxides (NOX) emissions that are less than 10 percent of the standards required by this standard permit.

A Standard Permit fee of $900 will be paid via STEERS during application submission.

(C) No owner or operator of an electric generating unit shall begin construction and/or operation without first obtaining written approval from the executive director.

PPG will not start construction until written approval from the executive director is received.

(D) Records shall be maintained and provided upon request to the Texas Commission on Environmental Quality (TCEQ) for the following:

i) Hours of operation of the unit;

ii) Maintenance records, maintenance schedules, and/or testing reports for the unit to document re-certification of emission rates as required by subsection (4)(G) below; and

iii) Records to document compliance with the fuel sulfur limits in subsection (4)(C).

Applicable records will be maintained.

(E) Electric generators powered by gas turbines must meet the applicable conditions, including testing and performance standards, of Title 40 Code of Federal Regulations (CFR) Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, and applicable requirements of 40 CFR Part 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines.

The gas turbines will meet the requirements of 40 CFR Part 60 Subpart KKKK.

(F) Compliance with this standard permit does not exempt the owner or operator from complying with any applicable requirements of 30 TAC Chapter 117, Control of Air Pollution from Nitrogen Compounds, or 30 TAC Chapter 114, Control of Air Pollution from Motor Vehicles.

PPG will comply with the applicable requirements of 30 TAC Chapter 114 & 117.

(4) General Requirements

(A) Emissions of NOX from the electric generating unit shall be certified by the manufacturer or by the owner or operator in pounds of pollutant per megawatt hour (lb/MWh). This certification must be displayed on the name plate of the unit or on a label attached to the unit. Test results from U.S. Environmental Protection Agency (EPA) reference methods, California Air Resources Board methods, or equivalent alternative testing methods approved by the executive director used to verify this certification shall be provided upon request to the TCEQ. The unit must operate on the same fuel(s) for which the unit was certified.

The emissions certification will be displayed on the unit's name plate or an attached label. The test results will be provided, upon request, to the TCEQ. There will be no deviation from natural gas as the fuel source for the gas turbines.

(B) Electric generating units that use combined heat and power (CHP) may take credit for the heat recovered from the exhaust of the combustion unit to meet the emission standards in subsections (4)(D), (4)(E), and (4)(F). Credit shall be at the rate of one MWh for each 3.4 million British Thermal Units of heat recovered. The following requirements must be met to take credit for CHP for units not sold and certified as an integrated package by the manufacturer:

i) The owner or operator must provide as part of the application documentation of the heat recovered, electric output, efficiency of the generator alone, efficiency of the generator including CHP, and the use for the non-electric output, and

ii) The heat recovered must equal at least 20 percent of the total energy output of the CHP unit.

No credit will be taken in the application

(C) Fuels combusted in these electric generating units are limited to:

i) Natural gas containing no more than ten grains total sulfur per 100 dry standard cubic feet;

ii) Landfill gas, digester gas, stranded oilfield gas, or gaseous renewable fuel containing no more than 30 grains total sulfur per 100 dry standard cubic feet; or

iii) Liquid fuels (including liquid renewable fuel) not containing waste oils or solvents and containing less than 0.05 percent by weight sulfur.

The natural gas used by the gas turbines will not contain more than ten grains total sulfur per 100 dry standard cubic feet.

(D) Except as provided in subsections (4)(F) and (4)(H), NOX emissions for units 10 MW or less shall meet the following limitations based upon the date the unit is installed and the region in which it operates:

East Texas Region:

i) Units installed prior to January 1, 2005 and

(a) operating more than 300 hours per year - 0.47 lb./MWh;

(b) operating 300 hours or less per year - 1.65 lb./MWh;

ii) Units installed on or after January 1, 2005 and

(a) operating more than 300 hours per year, with a capacity greater than 250 kilowatts (kW) - 0.14 lb./MWh;

(b) operating 300 hours or less per year - 0.47 lb./MWh; or

(c) any unit with a capacity of 250 kW or less - 0.47 lb./MWh.

West Texas Region:

i) Units operating more than 300 hours per year - 3.11 lb./MWh;

ii) Units operating 300 hours or less per year - 21 lb./MWh.

Units certified to comply with applicable Tier 1, 2, or 3 emission standards in 40 CFR Part 89, Control of Emissions from New and In-Use Nonroad Compression-Ignition Engines, are deemed to satisfy this emission limit.

This section does not apply as the gas turbines are rated greater than 10 MW in output.

(E) Except as provided in subsections (4)(F) and (4)(H), NOX emissions for units greater than 10 MW shall meet the following limitations:

i) Units operating more than 300 hours per year - 0.14 lb./MWh;

ii) Units operating 300 hours or less per year – 0.38 lb./MWh.

The gas turbines will operate more than 300 hours per year and will meet the emission limit 0.14 lb/MWh.

(F) Electric generating units firing any gaseous or liquid fuel that is at least 75 percent landfill gas, digester gas, stranded oil field gas, or renewable fuel content by volume, shall meet a NOX emission limit of 1.90 lb/MWh. Units in West Texas with a capacity of 10 MW or less that fire at least 75 percent landfill gas, digester gas, stranded oilfield gases, or gaseous or liquid renewable fuel by volume, must comply with the applicable West Texas NOX limit in subsection (4)(D).

This section does not apply as the gas turbines will use natural gas.

(G) To ensure continuing compliance with the emissions limitations, the owner or operator shall re-certify a unit every 16,000 hours of operation, but no less frequently than every three years. Re-certification may be accomplished by following a maintenance schedule that the manufacturer certifies will ensure continued compliance with the required NOX standard or by third party testing of the unit using appropriate EPA reference methods, California Air Resources Board methods, or equivalent alternative testing methods approved by the executive director to demonstrate that the unit still meets the required emission standards. After re-certification, the unit must operate on the same fuel(s) for which the unit was re-certified.

PPG will comply with the recertification requirements of this subparagraph.

(H) The NOX emission limits in subsections (4)(D)-(4)(F) are subject to the following exceptions:

i) The hourly NOX emission limits do not apply at times when the ambient air temperature at the location of the unit is less than 0 degrees Fahrenheit.

ii) At times when a unit is operating at less than 80% of rated load, an alternative NOX emission standard for that unit may be determined by multiplying the applicable emission standard in subsections (4)(D)-(4)(F) by the rated load of the EGU (in MW), to produce an allowable hourly mass NOX emission rate. In order to use this alternative standard, an owner or operator must maintain records that demonstrate compliance with the alternative emission standard, and make such records available to the TCEQ or any local air pollution control agency with jurisdiction upon request.

PPG will maintain appropriate records should an alternative NOx emission standard be claimed due to gas turbines operating less than 80% of the rated load. Maximum NOx emissions during MSS activities are presented within this application and are not considered subject to the lb./MWh normal operating limits specified in (4)(E)(i) because the units are in the start-up process.

6. COMPLIANCE WITH REQUIREMENTS OF 30 TAC §106

The following discussion presents the requirements of the Chapter 106 rules and explains how PPG will comply with each of the requirements.

6.1 §106.4 Requirements for Permitting by Rule

(a) To qualify for a permit by rule, the following general requirements must be met.

(1) Total actual emissions authorized under permit by rule from the facility shall not exceed the following limits, as applicable:

(A) 250 tons per year (tpy) of carbon monoxide (CO) or nitrogen oxides (NOX);

(B) 25 tpy of volatile organic compounds (VOC), sulfur dioxide (SO2), or inhalable particulate matter (PM);

(C) 15 tpy of particulate matter with diameters of 10 microns or less (PM10);

(D) 10 tpy of particulate matter with diameters of 2.5 microns or less (PM2.5); or

(E) 25 tpy of any other air contaminant except:

(i) water, nitrogen, ethane, hydrogen, and oxygen; and

(ii) notwithstanding any provision in any specific permit by rule to the contrary, greenhouse gases as defined in §101.1 of this title (relating to Definitions).

Units registering to be permitted by rule will not exceed the emission limits stated in §106.4(a)(1).

(2) Any facility or group of facilities, which constitutes a new major stationary source, as defined in §116.12 of this title (relating to Nonattainment and Prevention of Significant Deterioration Review Definitions), or any modification which constitutes a major modification, as defined in §116.12 of this title, under the new source review requirements of the Federal Clean Air Act (FCAA), Part D (Nonattainment) as amended by the FCAA Amendments of 1990, and regulations promulgated thereunder, must meet the permitting requirements of Chapter 116, Subchapter B of this title

(relating to New Source Review Permits) and cannot qualify for a permit by rule under this chapter. Persons claiming a permit by rule under this chapter should see the requirements of §116.150 of this title (relating to New Major Source or Major Modification in Ozone Nonattainment Areas) to ensure that any applicable netting requirements have been satisfied.

(3) Any facility or group of facilities, which constitutes a new major stationary source, as defined in 40 Code of Federal Regulations (CFR) §52.21, or any change which constitutes a major modification, as defined in 40 CFR §52.21, under the new source review requirements of the FCAA, Part C (Prevention of Significant Deterioration) as amended by the FCAA Amendments of 1990, and regulations promulgated thereunder because of emissions of air contaminants other than greenhouse gases, must meet the permitting requirements of Chapter 116, Subchapter B of this title and cannot qualify for a permit by rule under this chapter. Notwithstanding any provision in any specific permit by rule to the contrary, a new major stationary source or major modification which is subject to Chapter 116, Subchapter B, Division 6 of this title due solely to emissions of greenhouse gases may use a permit by rule under this chapter for air contaminants that are not greenhouse gases. However, facilities or projects which require a prevention of significant deterioration permit due to emissions of greenhouse gases may not commence construction or operation until the prevention of significant deterioration permit is issued.

§106.4(a)(2)-(3) Do not apply. The facility will not be a major source.

(4) Unless at least one facility at an account has been subject to public notification and comment as required in Chapter 116, Subchapter B or Subchapter D of this title (relating to New Source Review Permits or Permit Renewals), total actual emissions from all facilities permitted by rule at an account shall not exceed 250 tpy of CO or NOX ; or 25 tpy of VOC or SO2 or PM; or 15 tpy of PM10 ; or 10 tpy of PM2.5 ; or 25 tpy of any other air contaminant except water, nitrogen, ethane, hydrogen, oxygen, and GHGs (as specified in §106.2 of this title (relating to Applicability)).

Total actual emissions from all facilities permitted by rule will not exceed the limits stated in §106.4(a)(4).

(5) Construction or modification of a facility commenced on or after the effective date of a revision of this section or the effective date of a revision to a specific permit by rule in this chapter must meet the revised requirements to qualify for a permit by rule.

The facility will meet the requirements of the applicable version of this rule on the date of construction.

(6) A facility shall comply with all applicable provisions of the FCAA, §111 (Federal New Source Performance Standards) and §112 (Hazardous Air Pollutants), and the new source review requirements of the FCAA, Part C and Part D and regulations promulgated thereunder.

The facility will comply with all applicable provisions of the FCAA, §111 & §112, and the NSR requirements of the FCAA, Part C & D and regulations promulgated thereunder.

(7) There are no permits under the same commission account number that contain a condition or conditions precluding the use of a permit by rule under this chapter.

There are not any permits under the same commission account.

(8) The proposed facility or group of facilities shall obtain allowances for NOX if they are subject to Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program).

The facility is not subject to Chapter 101, Subchapter H, Division 3.

(b) No person shall circumvent by artificial limitations the requirements of §116.110 of this title (relating to Applicability).

PPG will not circumvent the requirements of §116.110.

(c) The emissions from the facility shall comply with all rules and regulations of the commission and with the intent of the Texas Clean Air Act (TCAA), including protection of health and property of the public, and all emissions control equipment shall be maintained in good condition and operated properly during operation of the facility.

The facility will comply with all rules and regulations and will keep all emission control equipment in good condition.

(d) Facilities permitted by rule under this chapter are not exempted from any permits or registrations required by local air pollution control agencies. Any such requirements must be in accordance with Texas Health and Safety Code, §382.113 and any other applicable law.

The facility will not be in an area subject to any permits or registrations required by local air pollution control agencies.

6.2 §106.8 Recordkeeping

§106.8(c) - PPG will maintain all records required to demonstrate compliance, per §106.8, and will make them available in a reviewable format at the request of personnel from the commission or any air pollution control program having jurisdiction.

6.3 §106.263 Routine Maintenance, Start-up and Shutdown of Facilities, and Temporary Maintenance Facilities

§106.263(f) – All emissions resulting from MSS activities will remain below, collectively and cumulatively in any rolling 12-month period, the applicable emission limits under §106.4(a)(1)-(3).

6.4 §106.472 Organic and Inorganic Liquid Loading and Unloading

Diesel fuel and aqueous ammonia will be stored at the facility and will not have any visible emissions. The aqueous ammonia will be vented through a water scrubber.

6.5 §106.511 Portable and Emergency Engines and Turbines

The facility will possess a black start generator for emergency situations and will not exceed an annual operational time of 876 hours.

7. FEDERAL REGULATORY REQUIREMENTS AND APPLICABILITY

The following discussion presents the applicable Title 40 CFR requirements and how PPG will comply with each of the requirements.

7.1 Title 40 CFR Part 60, Subpart KKKK

Standards

§60.4305(b) – The facility is subject to subpart KKKK and therefore is exempt from the requirements of Part 60, subpart GG.

§60.4320(a) – Table 1: As a new turbine firing natural gas, with a heat input at peak load of > 50 MMBtu/h and < 850 MMBtu/h, PPG will comply with the NOx emission limit of 0.43 lb./MWh.

§60.4330(a)(2): PPG will not burn any fuel in the turbine which contains total potential sulfur emission in excess of 0.060 lb. SO2/MMBtu heat input.

§60.4333(a): PPG will operate and maintain the turbines, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

Monitoring / Testing

§60.4400(a): PPG will conduct an initial performance test, as required in Part 60, Subpart A (General Provisions). Subsequent NOx performance tests shall be conducted on an annual basis (not to exceed 14 calendar months following the previous performance test.)

§60.4400b(4): Compliance with §60.4320 will be demonstrated at each tested load level. The three-run arithmetic average NOx emission rate at each tested level will meet the applicable limit in §60.4320.

§60.4400b(6): Test will be performed when the ambient temperature is greater than 0 °F.

§60.4340: Since neither water nor steam injection is used to control NOx within the turbines, PPG will demonstrate compliance for NOx through the alternative option regarding SCRs. For the turbines using SCR to reduce NOx emissions, PPG will continuously monitor appropriate parameters to verify the proper operation of the emission controls.

§60.4415: PPG will conduct an initial performance test, as required in Part 60, Subpart A. Subsequent SO2 performance test will be conducted on an annual basis (not to exceed 14 calendar months). Performance tests will be conducted via periodically determining the sulfur content of the fuel combusted in the turbines through the collection of a fuel sample or, by use of a current, valid purchase contract, tariff sheet, or transportation contract for the fuel specifying the maximum total sulfur content of all fuels combusted in the turbines. Alternately, the fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D of part 75 may be used. Samples will be analyzed using ASTM D1072 or alternatively, D3246, D4084, D4468, D4810, D6228, D6667, or GPA 2140, 2261, or 2377.

§60.4365(b): PPG will demonstrate compliance with representative fuel sampling data which show the sulfur content of the fuel does not exceed 0.060 lb. SO2/MMBtu heat input. At a minimum the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D in subchapter C part 75.

Reporting

§60.4375: For the units that require continuously monitored parameters or emissions, or to periodically determine the fuel sulfur content, PPG will submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions will be reported for all periods of unit operation, including MSS and malfunction.

7.2 Title 40 CFR Part 63, Subpart IIII

Emission Limits

- NMHC + NOx: 6.4 g/KW-hr. (675.14 lbs./hr.)
- CO: 3.5 g/KW-hr. (369.42 lbs./hr.)
- PM: 0.20 g/KW-hr. (21.10 lbs./hr.)

Regulations

§60.4205(b): PPG will comply with the emission standards for new non-road CI engines in §60.4202, for all pollutants.

§60.4202: PPG will certify the IC ICE emission standards as per the Tier 2 or Tier 3 emission standards for new nonroad CI engines described in 40 CFR part 1039, appendix I, for all pollutants, and the smoke standards specified in 40 CFR 1039.105.

§60.4206: PPG will operate and maintain the CI ICE that achieves the emission standards as required in §60.4204 & 60.4205 over the life of the engine.

§60.4207(b): The diesel fuel will meet the requirements of 40 CFR 1090.305 for nonroad diesel fuel.

§60.4211(f): PPG will not exceed 100 operational hours for purposes listed in §60.4211(f)(2)(i) or 50 operational hours for the purposes listed in §60.4211(f)(3)(i).

Monitoring / Testing

§60.4209(a): PPG will install a non-resettable hour meter prior to startup of the engine.

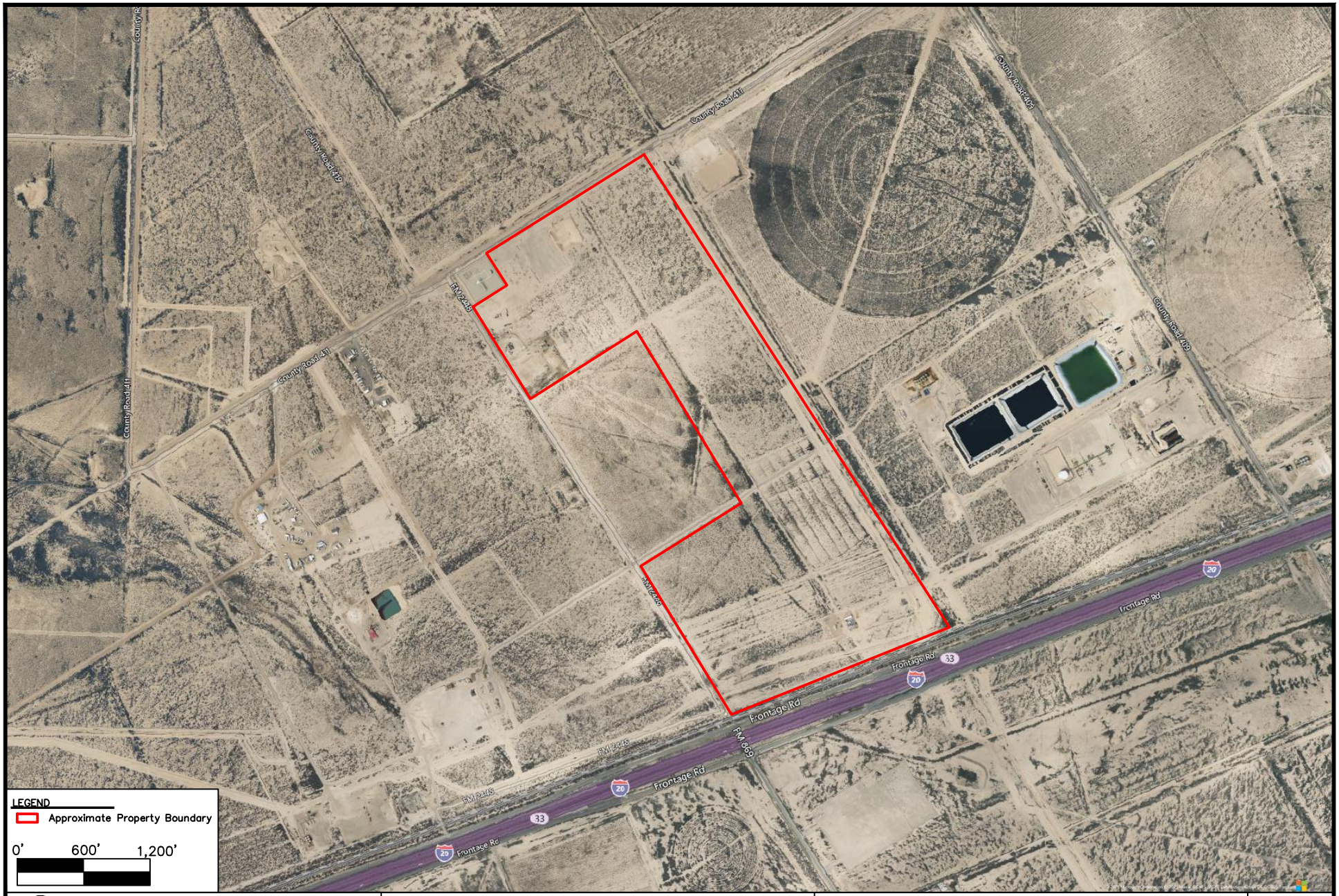
Recordkeeping

§60.4214(b): PPG will maintain records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. PPG will record the time and reason for operation.

Appendices

Appendix A

Maps and Diagram



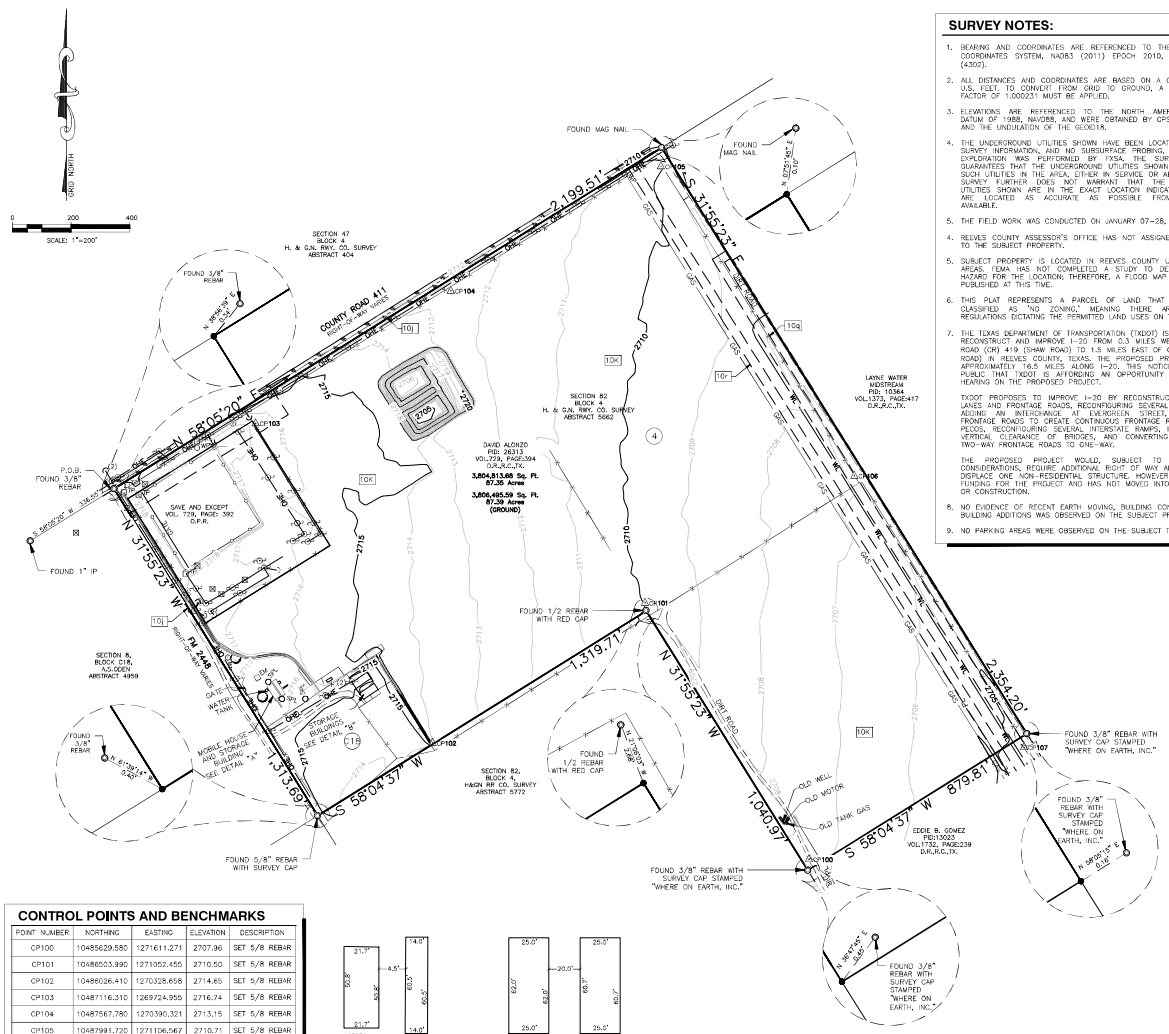
Approach Environmental
1000 Grimmett Drive
Shreveport, Louisiana 71107
Toll Free: (866) 674-1993 Fax: (318) 222-2425

DRAWN DATE:	DRAWN BY:	SCALE:
02/25/2025	HLW	1" = 1200'

PECOS POWER GENERATION COMPANY, LLC
PECOS POWER GENERATION
GPS COORDINATES: 31.396950°, -103.621825°
REEVES COUNTY, TEXAS

AREA MAP

FIGURE NUMBER
1



SURVEY NOTES:

1. BEARING AND COORDINATES ARE REFERENCED TO THE STATE PLANE COORDINATES SYSTEM, NAD83 (2011) EPOCH 2010, CENTRAL ZONE (4302).
2. ALL DISTANCES AND COORDINATES ARE BASED ON A GRID SYSTEM IN U.S. FEET. TO CONVERT FROM GRID TO GROUND, A GROUND SCALE FACTOR OF 1.000231 MUST BE APPLIED.
3. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD88, AND WERE OBTAINED BY GPS OBSERVATIONS AND THE UNDULATION OF THE GEOID18.
4. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND NO SUBSURFACE PROBING, EXCAVATION OR EXPLORATION WAS PERFORMED BY FXSA. THE SURVEY MAKE NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THIS SURVEY FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, AND THEY ARE LOCATED AS ACCURATE AS POSSIBLE FROM INFORMATION AVAILABLE.
5. THE FIELD WORK WAS CONDUCTED ON JANUARY 07-28, 2025.
4. REEVES COUNTY ASSESSOR'S OFFICE HAS NOT ASSIGNED AN ADDRESS TO THE SUBJECT PROPERTY.
5. SUBJECT PROPERTY IS LOCATED IN REEVES COUNTY UNINCORPORATED AREAS. FEMA HAS NOT COMPLETED A STUDY TO DETERMINE FLOOD HAZARD FOR THE LOCATION; THEREFORE, A FLOOD MAP HAS NOT BEEN PUBLISHED AT THIS TIME.
6. THIS PLAT REPRESENTS A PARCEL OF LAND THAT IS CURRENTLY CLASSIFIED AS "NO ZONING," MEANING THERE ARE NO LOCAL REGULATIONS DICTATING THE PERMITTED LAND USES ON THIS PROPERTY.
7. THE TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) IS PROPOSING TO RECONSTRUCT AND IMPROVE I-20 FROM 0.3 MILES WEST OF COUNTY ROAD (CR) 419 (SHAW ROAD) TO 1.5 MILES EAST OF CR 117 (COLLIE ROAD) IN REEVES COUNTY, TEXAS. THE PROPOSED PROJECT EXTENDS APPROXIMATELY 16.5 MILES ALONG I-20. THIS NOTICE ADVISES THE PUBLIC THAT TXDOT IS AFFORDING AN OPPORTUNITY FOR A PUBLIC HEARING ON THE PROPOSED PROJECT.

   TXDOT PROPOSES TO IMPROVE I-20 BY RECONSTRUCTING THE MAIN LANES AND FRONTAGE ROADS, RECONFIGURING SEVERAL INTERCHANGES, ADDING AN INTERCHANGE AT EVERGREEN STREET, ADDING NEW FRONTAGE ROADS TO CREATE CONTINUOUS FRONTAGE ROADS THROUGH PECOS, RECONFIGURING SEVERAL INTERSTATE RAMPS, INCREASING THE VERTICAL CLEARANCE OF BRIDGES, AND CONVERTING THE EXISTING TWO-WAY FRONTAGE ROADS TO ONE-WAY.

   THE PROPOSED PROJECT WOULD, SUBJECT TO FINAL DESIGN CONSIDERATIONS, REQUIRE ADDITIONAL RIGHT OF WAY AND POTENTIALLY DISPLACE ONE NON-RESIDENTIAL STRUCTURE. HOWEVER, THERE IS NO FUNDING FOR THE PROJECT AND HAS NOT MOVED INTO DETAIL DESIGN OR CONSTRUCTION.
8. NO EVIDENCE OF RECENT EARTH MOVING, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WAS OBSERVED ON THE SUBJECT PROPERTY.
9. NO PARKING AREAS WERE OBSERVED ON THE SUBJECT TRACTS.

GF NO.: 24-22771 SCHEDULE B ITEMS

ANY EASEMENT, ROADWAY DEDICATION, OR PIPELINE OR OTHER RIGHT OF WAY SERVITUDES ON, UNDER, OVER OR ACROSS THE PROPERTY HEREIN DESCRIBED, OF ANY PART THEREOF, VISIBLE, INVISIBLE, SIMILAR OR DISSIMILAR, IF ANY, SO AS TO GIVE NOTICE THEREOF, BUT NOT OF RECORD.

ALL LEASES, GRANTS, EXCEPTIONS OR RESERVATIONS OF COAL, LIGNITE, OIL GAS AND OTHER MINERALS, TOGETHER WITH ALL RIGHTS, PRIVILEGES, AND IMMUNITIES RELATING THERETO, APPEARING IN THE PUBLIC RECORDS WHETHER LISTED IN SCHEDULE B OR NOT. THERE MAY BE LEASES, GRANTS, EXCEPTIONS OR RESERVATIONS OF MINERALS INTEREST THAT ARE NOT LISTED.

ALL LEASES, GRANTS, EXCEPTIONS OR RESERVATIONS OF THE GEOTHERMAL ENERGY AND ASSOCIATED RESOURCES BELOW THE SURFACE OF THE LAND, TOGETHER WITH ALL RIGHTS, PRIVILEGES, AND IMMUNITIES RELATING THERETO, APPEARING IN THE PUBLIC RECORDS WHETHER LISTED IN SCHEDULE B OR NOT. THERE MAY BE LEASES, GRANTS, EXCEPTIONS OR RESERVATIONS OF THE GEOTHERMAL ENERGY AND ASSOCIATED RESOURCES BELOW THE SURFACE OF THE LAND THAT ARE NOT LISTED.

ANY INACCURACY IN THE AREA, SQUARE FOOTAGE, OR ACREAGE OF THE LAND, OR ATTACHED PLAT, IF ANY. THE COMPANY DOES NOT INSURE THE AREA, SQUARE FOOTAGE, OR ACREAGE OF THE LAND.

RIGHTS OF PARTIES IN POSSESSION.

10f SUBJECT TO THE GRANT OF RIGHT OF WAY, RECORDED ON AUGUST 26, 1938 IN BOOK 67, PAGE 435 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. AFFECT SUBJECT PROPERTY, BLANKET IN NATURE.

10g SUBJECT TO THE RIGHT OF WAY, RECORDED ON JULY 2, 1938 IN BOOK 76, PAGE 251 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. DOES NOT AFFECT SUBJECT PROPERTY.

10h SUBJECT TO THE RIGHT OF WAY EASEMENT, RECORDED ON JULY 2, 1949 IN BOOK 123, PAGE 509 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. DOES NOT AFFECT SUBJECT PROPERTY.

10i SUBJECT TO THE EASEMENT AND RIGHT OF WAY, RECORDED ON SEPTEMBER 26, 1951 IN BOOK 137, PAGE 286 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. AFFECT SUBJECT PROPERTY, BLANKET IN NATURE.

10j SUBJECT TO THE RIGHT OF WAY EASEMENT, RECORDED ON JULY 27, 1953 IN BOOK 152, PAGE 449 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. AFFECT SUBJECT PROPERTY, BLANKET IN NATURE.

10k SUBJECT TO THE RIGHT OF WAY GRANT, RECORDED ON MARCH 12, 1956 IN BOOK 163, PAGE 427 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. AFFECT SUBJECT PROPERTY, BLANKET IN NATURE.

10l SUBJECT TO THE ELECTRIC TRANSMISSION LINE EASEMENT, RECORDED ON DECEMBER 5, 1967 IN BOOK 271, PAGE 590 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. DOES NOT AFFECT SUBJECT PROPERTY.

10m SUBJECT TO THE RIGHT-OF-WAY EASEMENT, RECORDED ON MARCH 4, 1968 IN BOOK 274, PAGE 638 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. DOES NOT AFFECT SUBJECT PROPERTY.

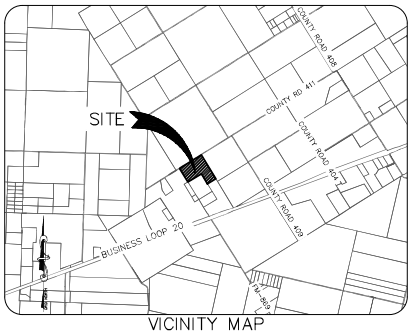
10n SUBJECT TO THE RIGHT OF WAY, RECORDED ON MARCH 24, 1975 IN BOOK 332, PAGE 143 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. DOES NOT AFFECT SUBJECT PROPERTY.

10o SUBJECT TO THE SURFACE EASEMENT AGREEMENT, RECORDED ON SEPTEMBER 21, 1993 IN BOOK 530, PAGE 748 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. DOES NOT AFFECT SUBJECT PROPERTY.

10p SUBJECT TO THE ELECTRIC TRANSMISSION LINE EASEMENT, RECORDED ON APRIL 3, 2018 IN BOOK 1568, PAGE 89 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. AFFECT SUBJECT PROPERTY, AS SHOWN.

10q SUBJECT TO THE PIPELINE RIGHT OF WAY AND EASEMENT AGREEMENT, RECORDED ON APRIL 30, 2018 IN BOOK 1581, PAGE 713 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. AFFECT SUBJECT PROPERTY, AS SHOWN.

10r SUBJECT TO THE EASEMENT AGREEMENT, RECORDED ON JULY 17, 2018 IN BOOK 1626, PAGE 965 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. AFFECT SUBJECT PROPERTY, AS SHOWN.



VICINITY MAP
N.T.S.

LEGEND

SET CONTROL POINT AS NOTED	△CP
FOUND MONUMENT AS NOTED	○
CALCULATED POINT	●
PROJECT BOUNDARY	———
CHAINLINK FENCE	-o-o-o-
WIRE FENCE	-x-x-x-
RAILROAD TRACKS	-|-|-|-
EDGE OF PAVEMENT	EP EP EP
OVERHEAD ELECTRIC LINE	OHE
GAS LINE	GAS
WATER LINE	WL
EXPOSED POLY PIPELINE	PL
FIBER OPTIC CABLE	FOC
MINOR CONTOURS	2709
MAJOR CONTOURS	2710
FLOW LINE	>>>
ELECTRIC METER	□EM
TELEPHONE PEDESTAL	□TP
POWER POLE	-○-
SERVICE POLE LIGHT ELECTRIC	○SPL
POST	○PST
WOOD POST	○WP
GUY WIRE	——⟩
ELECTRIC CONDUIT	⊠
WATER FAUCET	○H
SIGN AS NOTED	○|
GAS VALVE	⋈GV
TREE	○
D.R.,R.C.,TX.	DEED RECORD, REEVES COUNTY, TEXAS
P.O.B.	POINT OF BEGINNING

METES AND BOUNDS DESCRIPTION

A 87.35-ACRE TRACT SITUATE WITHIN THE CORPORATE LIMITS OF THE TOWN OF PECOS CITY, REEVES COUNTY, TEXAS AS A PORTION OF SECTION 82, BLOCK 4, H. & G.N. RWY. CO. SURVEY, AS FILED IN VOLUME 729, PAGE 394 OF THE PLAT RECORDS OF REEVES COUNTY AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT A CALCULATED POINT IN PAVEMENT OF COUNTY ROAD 411, FOR THE MOST WESTERN CORNER OF SECTION 82, BLOCK 4 OF THE H. & G.N. RWY. CO. SURVEY, FROM WHICH A 1" IRON PIPE FOUND FOR THE SOUTHWEST CORNER OF SECTION 47, BLOCK 4 OF THE H. & G.N. RWY. CO. SURVEY, BEARS SOUTH 58°05'20" EAST, A DISTANCE OF 336.55 FEET; THENCE, WITH THE SOUTHEAST LINE OF SAID SECTION 47, BEEN THE NORTHWEST LINE OF SAID SECTION 82, NORTH 58°05'20" EAST, A DISTANCE OF 2,199.51 FEET TO A CALCULATED POINT IN PAVEMENT OF SAID COUNTY ROAD 411, ON THE NORTHWEST LINE OF SAID SECTION 82, FROM WHICH A MAG NAIL FOUND BEARS NORTH 07°51'45" EAST, A DISTANCE OF 0.10 FEET;

THENCE, SOUTH 31°55'23" EAST, 2354.20 FEET TO A CALCULATED POINT FOR THE EAST CORNER OF THE TRACT HEREIN DESCRIBED FROM WHICH A 5/8" REBAR FOUND WITH A CAP LABELED "WHERE ON EARTH", BEARS NORTH 58°05'15" EAST, A DISTANCE OF 0.16 FEET;

THENCE, SOUTH 58°04'37" WEST, 879.81 FEET TO A CALCULATED POINT FOR THE SOUTH CORNER OF THE TRACT HEREIN DESCRIBED FROM WHICH A 3/8" REBAR WHICH A CAP LABELED "WHERE ON EARTH", BEARS NORTH 36°47'45" EAST, A DISTANCE OF 0.65 FEET;

THENCE, NORTH 31°55'23" WEST, 1040.97 FEET TO A CALCULATED POINT FOR AN ANGLE CORNER, FROM WHICH A 3/8" REBAR FOUND WHICH A CAP LABELED "WHERE ON EARTH", BEARS NORTH 21°06'03" WEST, A DISTANCE OF 2.68 FEET;

THENCE, SOUTH 58°04'37" WEST, 1319.71 FEET TO A CALCULATED POINT FOR THE MOST SOUTHWESTERN CORNER, FROM WHICH A 5/8" REBAR WITH RED SURVEY CAP, BEARS NORTH 61°-39'-14" WEST, A DISTANCE OF 0.40 FEET;

THENCE, NORTH 31°55'23" WEST, 1313.69 FEET WITH THE SOUTHWEST LINE OF SAID SECTION 82 TO THE POINT OF BEGINNING.

SAID TRACT CONTAINING 87.35 ACRES (3,804,813.68 SQUARE FEET GRID), EQUIVALENT TO 87.39 ACRES (3,806,495.59 SQUARE FEET GROUND), MORE OR LESS AND BEING SUBJECT TO ALL EASEMENTS OF RECORD.

SAVE AND EXCEPT THAT CERTAIN 5.739 ACRE-TRACT RECORDED AND DESCRIBED IN BOOK 729, PAGE 392, AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUND AS FOLLOW ACCORDINGLY TO THE DATA COLLECTED DATA IN THE FIELD: BEGINNING AT A CALCULATED POINT IN PAVEMENT OF COUNTY ROAD 411, FOR THE MOST WESTERN CORNER OF SECTION 82, BLOCK 4 OF THE H. & G.N. RWY. CO. SURVEY, FROM WHICH A 1 1/2" IRON PIPE FOUND FOR THE SOUTHWEST CORNER OF SECTION 47, BLOCK 4 OF THE H. & G.N. RWY. CO. SURVEY, BEARS SOUTH 58°05'20" EAST, A DISTANCE OF 336.55 FEET; THENCE WITH THE SOUTHWEST LINE OF SAID SECTION 82, SOUTH 54°45'34" EAST, A DISTANCE OF 58.55 FEET TO A 5/8" REBAR FOUND FOR THE WEST CORNER OF SAID 5.739 ACRE TRACT; THENCE NORTH 58°05'02" EAST, A DISTANCE OF 499.89 FEET TO A 5/8" REBAR FOUND FOR THE NORTH CORNER OF SAID 5.739 ACRE-TRACT, THENCE SOUTH 31°54'57" EAST, A DISTANCE OF 499.89 FEET TO 5/8" REBAR FOUND FOR THE EAST CORNER OF THE TRACT DESCRIBED HEREIN, THENCE SOUTH 58°05'02" WEST, A DISTANCE OF 499.89 FEET TO 5/8" REBAR FOUND FOR THE SOUTH CORNER OF THE TRACT DESCRIBED HEREIN, THENCE NORTH 31°54'57" WEST, A DISTANCE OF 499.89 FEET TO THE POINT OF BEGINNING OF SAID TRACT CONTAINING 5.737 ACRES (GRID VALUE).

THE FINAL ACREAGE OF THE EXTERIOR TRACT IS 81.61 ACRES IN GRID UNITS, EQUIVALENT TO 81.65 ACRES IN GROUND UNITS.

CONTROL POINTS AND BENCHMARKS

POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP100	10485629.580	1271611.271	2707.96	SET 5/8 REBAR
CP101	10486553.390	1271052.455	2710.50	SET 5/8 REBAR
CP102	10486026.410	1270328.658	2714.65	SET 5/8 REBAR
CP103	10487116.310	1269724.955	2716.74	SET 5/8 REBAR
CP104	10487567.780	1270390.321	2713.15	SET 5/8 REBAR
CP105	10487991.720	1271106.567	2710.71	SET 5/8 REBAR
CP106	10486937.260	1271765.757	2707.20	SET 5/8 REBAR
CP107	10486011.510	1272344.023	2705.16	SET 5/8 REBAR
CP108	10483682.710	1273791.645	2701.06	SET 5/8 REBAR
CP109	10482905.010	1271791.499	2707.41	SET 5/8 REBAR
CP110	10483540.740	1271395.725	2708.43	SET 5/8 REBAR
CP111	10484212.650	1272475.562	2706.44	SET 5/8 REBAR

Texas 811 Know what's below. Call before you dig.

IT'S THE LAW
AND IT'S FREE - CALL BEFORE YOU DIG
CALL TWO WORKING DAYS BEFORE YOU DIG IN TEXAS, DIAL 811
OR CONTACT US AT: 1-800-344-8377
ES LA LEY
GRATIS PARA USTED - LLAME ANTES
LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS, MARQUE 811
O LLAME AL NUMERO: 1-800-344-8377

UTILITY NOTE:

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CERTIFICATION:

TO: FIRST AMERICAN TITLE GUARANTY COMPANY AND ALLIANT NATIONAL TITLE INSURANCE COMPANY.

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6(a), 6(b), 7(a), 7(b)(1), 8, 9, 11(a), 11(b), 13, 14, 16 and 17 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON JANUARY 10, 2025.

PRELIMINARY
THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT.

PEDRO GONZALEZ-OCASIO
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF TEXAS No. 6429

DATE 01-21-2025

SHEET 1 OF 3

REV.	DATE	BY	DESCRIPTION
1	1/16/2025		

DRAWN BY: A.G.
FXSA JOB NO. 525019P

ALTA NSPS LAND TITLE SURVEY OF A 159.76 ACRE PARCEL OF LAND, BEING A PORTION OF SECTION 82, BLOCK 4, OF H. & G.N. RWY. CO. SURVEY, REEVES COUNTY, TEXAS.

FXSA Consulting Civil Engineers & Surveyors
1135 Montana Ave., El Paso, Texas 79902
Ph: (915) 533-4600 Fax:(915)533-4673
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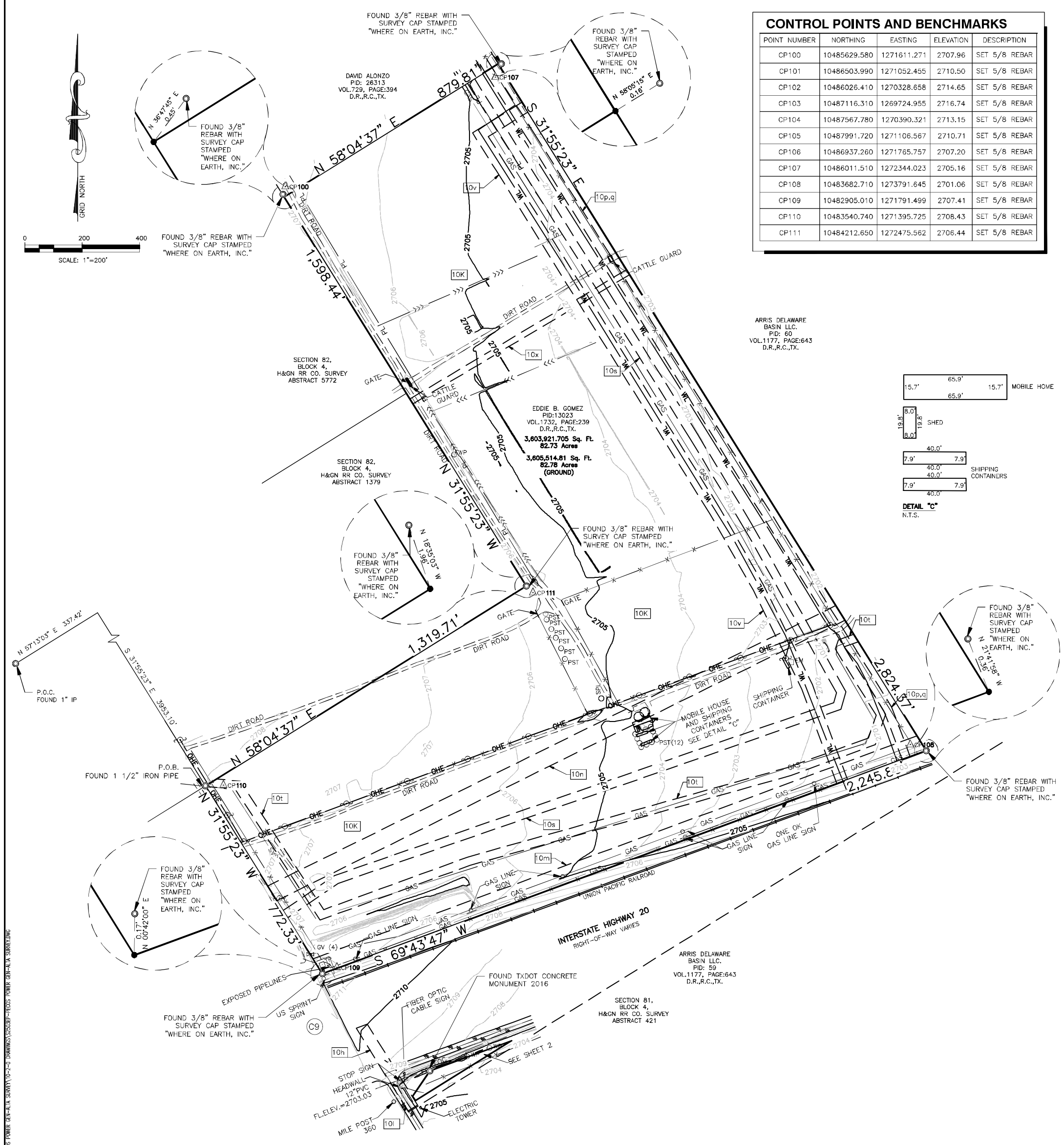
TBPELS F-3584, TBPLS 100480-00



CONTROL POINTS AND BENCHMARKS

POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP100	10485629.580	1271611.271	2707.96	SET 5/8 REBAR
CP101	10486503.990	1271052.455	2710.50	SET 5/8 REBAR
CP102	10486026.410	1270328.658	2714.65	SET 5/8 REBAR
CP103	10487116.310	1269724.955	2716.74	SET 5/8 REBAR
CP104	10487567.780	1270390.321	2713.15	SET 5/8 REBAR
CP105	10487991.720	1271106.567	2710.71	SET 5/8 REBAR
CP106	10486937.260	1271765.757	2707.20	SET 5/8 REBAR
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CP111	10484212.650	1272475.562	2706.44	SET 5/8 REBAR

METES AND BOUNDS DESCRIPTION

A 82.73-ACRE PARCEL SITUATE WITHIN THE CORPORATE LIMITS OF THE TOWN OF PECOS CITY, REEVES COUNTY, TEXAS AS A PORTION OF SECTION 82, BLOCK 4, H. & G.N. RWY. CO. SURVEY, AS FILED IN VOLUME 1732, PAGE 239 OF THE PLAT RECORDS OF REEVES COUNTY AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING AT A CALCULATED POINT IN PAVEMENT OF COUNTY ROAD 411, FOR THE MOST WESTERN CORNER OF SECTION 82, BLOCK 4 OF THE H. & G.N. RWY. CO. SURVEY, FROM WHICH A 1 1/2" IRON PIPE FOUND FOR THE SOUTHWEST CORNER OF SECTION 47, BLOCK 4 OF THE H. & G.N. RWY. CO. SURVEY, BEARS SOUTH 58°05'20" EAST, A DISTANCE OF 336.55 FEET; THENCE, WITH THE SOUTHWEST LINE OF SAID SECTION 82, SOUTH 31°55'23" EAST, A DISTANCE OF 2,881.78 FEET PASSING A 1 ½" IRON PIPE FOUND, FOR A TOTAL DISTANCE OF 3,953.10 FEET TO A A 1 ½" IRON PIPE FOUND FOR THE WEST CORNER OF SAID 82.74 ACRE-TRACT;

THENCE LEAVING THE SOUTHWEST SECTION LINE OF SAID SECTION 82, NORTH 58°04'37" EAST, A DISTANCE OF 1,319.71 FEET TO A CALCULATED POINT FOR AN INTERIOR CORNER FROM WHICH A 3/8" REBAR FOUND WHICH A CAP LABELED "WHERE ON EARTH", BEARS NORTH 18-06-13 WEST, A DISTANCE OF 2.01 FEET;

THENCE, NORTH 31°55'23" WEST, 1,598.441 FEET TO A CALCULATED POINT FROM WHICH A 3/8" REBAR FOUND WHICH A CAP LABELED "WHERE ON EARTH", BEARS NORTH 36-52-57 EAST, A DISTANCE OF 0.45 FEET;

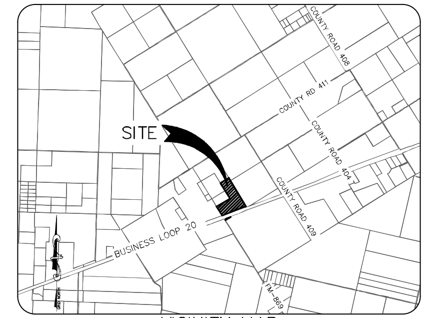
THENCE, NORTH 58°04'37" WEST, 879.81 FEET TO A CALCULATED POINT FOR THE NORTH CORNER FROM WHICH A 3/8" REBAR FOUND WITH A CAP LABELED "WHERE ON EARTH", BEARS NORTH 58-05-20 EAST, A DISTANCE OF 0.16 FEET;

THENCE, SOUTH 31°55'23" EAST, 2824.38 FEET TO A CALCULATED POINT FOR THE EAST CORNER OF THE PARCEL HEREIN DESCRIBED, FROM WHICH FROM WHICH A 3/8" REBAR FOUND WITH A CAP LABELED "WHERE ON EARTH", BEARS NORTH 22-00-13 WEST, A DISTANCE OF 0.38 FEET;

THENCE, SOUTH 69°43'47" WEST, 2245.80 FEET TO A CALCULATED POINT THE SOUTH CORNER OF THE PARCEL HEREIN DESCRIBED, FROM WHICH FROM WHICH A 3/8" REBAR FOUND WITH A CAP LABELED "WHERE ON EARTH", BEARS NORTH 1-11-05 WEST, A DISTANCE OF 0.18 FEET;

THENCE, NORTH 31°55'23" WEST, 772.33 FEET WITH THE SOUTHWEST LINE OF SAID SECTION 82 TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINING 82.73 ACRES (3,603,921.705 SQUARE FEET), EQUIVALENT TO 82.78 ACRES (3,605,514.81 SQUARE FEET GROUND) MORE OR LESS AND BEING SUBJECT TO ALL EASEMENTS OF RECORD.



VICINITY MAP
N.T.S.

LEGEND

SET CONTROL POINT AS NOTED	CP
FOUND MONUMENT AS NOTED	
CALCULATED POINT	
PROJECT BOUNDARY	
CHAINLINK FENCE	
WIRE FENCE	
RAILROAD TRACKS	
EDGE OF PAVEMENT	
OVERHEAD ELECTRIC LINE	OHE
GAS LINE	GAS
WATER LINE	WL
EXPOSED POLY PIPELINE	PL
FIBER OPTIC CABLE	FOC
MINOR CONTOURS	2709
MAJOR CONTOURS	2710
FLOW LINE	>>>
ELECTRIC METER	EM
TELEPHONE PEDESTAL	TP
POWER POLE	
SERVICE POLE LIGHT ELECTRIC	SPL
POST	PST
WOOD POST	WP
GUY WIRE	
ELECTRIC CONDUIT	
WATER FAUCET	
SIGN AS NOTED	
GAS VALVE	GV
TREE	
D.R.,R.C.,TX.	DEED RECORD, REEVES COUNTY, TEXAS
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING

CERTIFICATION:
TO; FIRST AMERICAN TITLE GUARANTY COMPANY AND ALLIANT NATIONAL TITLE INSURANCE COMPANY.

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STATE OF TEXAS No. 6429
DATE 01-21-2025

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AGONZALEZ 01/31/2025 12:39PM K:\2025\S2503EP-PECOS POWER GEN-ALTA SURVEY\

REV.	DATE	BY	DESCRIPTION

1/16/2025
DRAWN BY: A.G.
FXSA JOB NO. S2501EP

ALTA NSPS LAND TITLE SURVEY OF A 159.76 ACRE PARCEL OF LAND, BEING A PORTION OF SECTION 82, BLOCK 4, OF H. & G.N. RWY. CO. SURVEY, REEVES COUNTY, TEXAS.

FXSA
www.fxsa.com
Consulting Civil Engineers & Surveyors
1130 Montana Ave., El Paso, Texas 79902
Ph: (915) 533-4600 Fax:(915)533-4673
(TBPE# F-3584, TBPLS# 100490-00)

GF NO.:24–22772 SCHEDULE B ITEMS

ANY EASEMENT, ROADWAY DEDICATION, OR PIPELINE OR OTHER RIGHT OF WAY SERVITUDES ON, UNDER, OVER OR ACROSS THE PROPERTY HEREIN DESCRIBED, OR ANY PART THEREOF, VISIBLE, INVISIBLE, SIMILAR OR DISSIMILAR, IF ANY, SO AS TO GIVE NOTICE THEREOF, BUT NOT OF RECORD.

ALL LEASES, GRANTS, EXCEPTIONS OR RESERVATIONS OF THE GEOTHERMAL ENERGY AND ASSOCIATED RESOURCES BELOW THE SURFACE OF THE LAND, TOGETHER WITH ALL RIGHTS, PRIVILEGES, AND IMMUNITIES RELATING THERETO, APPEARING IN THE PUBLIC RECORDS WHETHER LISTED IN SCHEDULE B OR NOT. THERE MAY BE LEASES, GRANTS, EXCEPTIONS OR RESERVATIONS OF THE GEOTHERMAL ENERGY AND ASSOCIATED RESOURCES BELOW THE SURFACE OF THE LAND THAT ARE NOT LISTED.

ALL LEASES, GRANTS, EXCEPTIONS OR RESERVATIONS OF COAL, LIGNITE, OIL GAS AND OTHER MINERALS, TOGETHER WITH ALL RIGHTS, PRIVILEGES, AND IMMUNITIES RELATING THERETO, APPEARING IN THE PUBLIC RECORDS WHETHER LISTED IN SCHEDULE B OR NOT. THERE MAY BE LEASES, GRANTS, EXCEPTIONS OR RESERVATIONS OF MINERALS INTEREST THAT ARE NOT LISTED.

RIGHTS OF PARTIES IN POSSESSION.

ANY INACCURACY IN THE AREA, SQUARE FOOTAGE, OR ACREAGE OF THE LAND, OR ATTACHED PLAT, IF ANY. THE COMPANY DOES NOT INSURE THE AREA, SQUARE FOOTAGE, OR ACREAGE OF THE LAND.

10f SUBJECT TO THE GRANT OF RIGHT OF WAY, RECORDED ON AUGUST 24, 1928 IN BOOK 67, PAGE 635 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. SUBJECT TO BUT NOT PLOTTABLE.

10g SUBJECT TO THE RIGHT OF WAY, RECORDED ON JULY 2, 1932 IN BOOK 76, PAGE 251 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. DOES NOT AFFECT SUBJECT PROPERTY.

10h SUBJECT TO THE RIGHT OF WAY EASEMENT, RECORDED ON JULY 2, 1949 IN BOOK 123, PAGE 509 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. DOES NOT AFFECT THE SUBJECT PROPERTY.

10i SUBJECT TO THE EASEMENT AND RIGHT OF WAY, RECORDED ON SEPTEMBER 26, 1951 IN BOOK 137, PAGE 286 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. SUBJECT TO BUT NOT PLOTTABLE.

10j SUBJECT TO THE RIGHT OF WAY EASEMENT, RECORDED ON JULY 27, 1953 IN BOOK 152, PAGE 449 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. DOES NOT AFFECT SUBJECT PROPERTY.

10k SUBJECT TO THE RIGHT OF WAY GRANT, RECORDED ON MARCH 12, 1955 IN BOOK 163, PAGE 427 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. SUBJECT TO BUT NOT PLOTTABLE.

10l SUBJECT TO THE ELECTRIC TRANSMISSION LINE EASEMENT, RECORDED ON DECEMBER 5, 1967 IN BOOK 271, PAGE 590 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. PLOTTED AND SHOWN.

10m SUBJECT TO THE RIGHT–OF–WAY EASEMENT, RECORDED ON MARCH 4, 1968 IN BOOK 274, PAGE 638 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. PLOTTED AND SHOWN.

10n SUBJECT TO THE RIGHT OF WAY, RECORDED ON MARCH 24, 1975 IN BOOK 332, PAGE 143 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. PLOTTED AND SHOWN.

10o SUBJECT TO THE SURFACE EASEMENT AGREEMENT, RECORDED ON SEPTEMBER 21, 1993 IN BOOK 530, PAGE 748 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. DOES NOT AFFECT SUBJECT PROPERTY.

10p SUBJECT TO THE PIPELINE RIGHT OF WAY AND EASEMENT AGREEMENT, RECORDED ON MAY 1, 2018 IN BOOK 1583, PAGE 62 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. PLOTTED AND SHOWN.

10q SUBJECT TO THE PIPELINE RIGHT OF WAY AND EASEMENT AGREEMENT, RECORDED ON MAY 1, 2018 IN BOOK 1583, PAGE 70 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. PLOTTED AND SHOWN. SAME AS PREVIOUS

10r SUBJECT TO THE PIPELINE EASEMENT AND RIGHT OF WAY AGREEMENT, RECORDED ON JUNE 7, 2018 IN BOOK 1607, PAGE 768 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. DEED NOT LEGIBLE.

10s SUBJECT TO THE EASEMENT AGREEMENT, RECORDED ON JULY 3, 2018 IN BOOK 1621, PAGE 228 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. PLOTTED AND SHOWN.

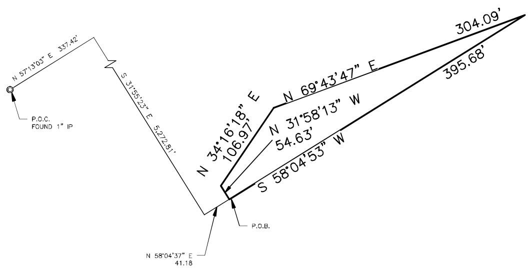
10t SUBJECT TO THE PIPELINE EASEMENT AND RIGHT OF WAY AGREEMENT, RECORDED ON FEBRUARY 21, 2019 IN BOOK 1735, PAGE 105 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. PLOTTED AND SHOWN.

10u SUBJECT TO THE MEMORANDUM OF WATER TRANSFER EASEMENT, RECORDED ON MAY 10, 2019 IN BOOK 1779, PAGE 399 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. CONTRACT EXPIRED.

10v SUBJECT TO THE EASEMENT AND RIGHT OF WAY AGREEMENT, RECORDED ON SEPTEMBER 9, 2019 AS INSTRUMENT #2019014676 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK.

10w SUBJECT TO THE RECORDATION NOTICE AND MEMORANDUM OF SALTWATER DISPOSAL AND LEASE AGREEMENT, RECORDED ON NOVEMBER 21, 2019 AS INSTRUMENT #2019018930 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK. SUBJECT TO BUT NOT PLOTTABLE.

10x SUBJECT TO THE UTILITY LINE EASEMENT AGREEMENT, RECORDED ON FEBRUARY 26, 2020 AS INSTRUMENT #2020002957 IN THE OFFICIAL RECORDS OF THE REEVES COUNTY CLERK



METES AND BOUNDS DESCRIPTION

A 0.300–ACRE PARCEL SITUATE WITHIN THE CORPORATE LIMITS OF THE TOWN OF PECOS CITY, REEVES COUNTY, TEXAS AS A PORTION OF SECTION 82, BLOCK 4, H. & G.N. RWY. CO. SURVEY, AS FILED IN VOLUME 1732, PAGE 239 OF THE PLAT RECORDS OF REEVES COUNTY AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

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THENCE LEAVING THE SOUTHWEST SECTION LINE OF SAID SECTION 82, NORTH 58°04'37" EAST, A DISTANCE OF 41.18 FEET TO A CALCULATED POINT FOR THE POINT OF BEGINNING;

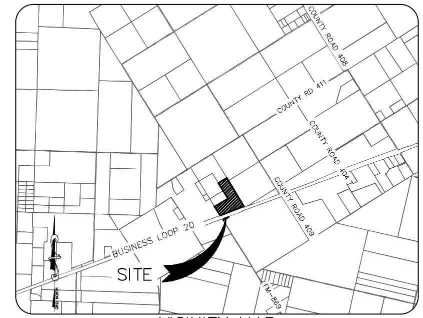
THENCE, NORTH 31°58'13" WEST, 18.21 FEET TO A CALCULATED POINT FOR THE WESTERLY CORNER OF THE PARCEL HEREIN DESCRIBED;

THENCE, NORTH 34°16'18" WEST, 106.97 FEET TO A FOUND TXDOT CONCRETE MONUMENT FOR THE NORTH CORNER OF THE PARCEL HEREIN DESCRIBED;

THENCE, NORTH 69°43'47" EAST, 303.91 FEET TO CALCULATED POINT FOR THE EASTERLY CORNER OF THE PARCEL HEREIN DESCRIBED,

THENCE, SOUTH 58°04'37" WEST, 395.51 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINING 0.300 ACRES (13,031 SQUARE FEET), EQUIVALENT TO 0.300 ACRES (13,033 SQUARE FEET GROUND) MORE OR LESS AND BEING SUBJECT TO ALL EASEMENTS OF RECORD.



VICINITY MAP
N.T.S.

SURVEY NOTES:

1. BEARING AND COORDINATES ARE REFERENCED TO THE STATE PLANE COORDINATES SYSTEM, NAD83 (2011) EPOCH 2010, CENTRAL ZONE (4302).
2. ALL DISTANCES AND COORDINATES ARE BASED ON A GRID SYSTEM IN U.S. FEET. TO CONVERT FROM GRID TO GROUND, A GROUND SCALE FACTOR OF 1.000231 MUST BE APPLIED.
3. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD88, AND WERE OBTAINED BY GPS OBSERVATIONS AND THE UNDULATION OF THE GEOID18.
4. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION, AND NO SUBSURFACE PROBING, EXCAVATION OR EXPLORATION WAS PERFORMED BY FXSA. THE SURVEY MAKE NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THIS SURVEY FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, AND THEY ARE LOCATED AS ACCURATE AS POSSIBLE FROM INFORMATION AVAILABLE.
5. THE FIELD WORK WAS CONDUCTED ON JANUARY 07–28, 2025.
4. REEVES COUNTY ASSESSOR'S OFFICE HAS NOT ASSIGNED AN ADDRESS TO THE SUBJECT PROPERTY.
5. SUBJECT PROPERTY IS LOCATED IN REEVES COUNTY UNINCORPORATED AREAS. FEMA HAS NOT COMPLETED A STUDY TO DETERMINE FLOOD HAZARD FOR THE LOCATION; THEREFORE, A FLOOD MAP HAS NOT BEEN PUBLISHED AT THIS TIME.
6. THIS PLAT REPRESENTS A PARCEL OF LAND THAT IS CURRENTLY CLASSIFIED AS 'NO ZONING,' MEANING THERE ARE NO LOCAL REGULATIONS DICTATING THE PERMITTED LAND USES ON THIS PROPERTY.
7. THE TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) IS PROPOSING TO RECONSTRUCT AND IMPROVE I–20 FROM 0.3 MILES WEST OF COUNTY ROAD (CR) 419 (SHAW ROAD) TO 1.5 MILES EAST OF CR 117 (COLLIE ROAD) IN REEVES COUNTY, TEXAS. THE PROPOSED PROJECT EXTENDS APPROXIMATELY 16.5 MILES ALONG I–20. THIS NOTICE ADVISES THE PUBLIC THAT TXDOT IS AFFORDING AN OPPORTUNITY FOR A PUBLIC HEARING ON THE PROPOSED PROJECT.

   TXDOT PROPOSES TO IMPROVE I–20 BY RECONSTRUCTING THE MAIN LANES AND FRONTAGE ROADS, RECONFIGURING SEVERAL INTERCHANGES, ADDING AN INTERCHANGE AT EVERGREEN STREET, ADDING NEW FRONTAGE ROADS TO CREATE CONTINUOUS FRONTAGE ROADS THROUGH PECOS, RECONFIGURING SEVERAL INTERSTATE RAMPS, INCREASING THE VERTICAL CLEARANCE OF BRIDGES, AND CONVERTING THE EXISTING TWO–WAY FRONTAGE ROADS TO ONE–WAY.

   THE PROPOSED PROJECT WOULD, SUBJECT TO FINAL DESIGN CONSIDERATIONS, REQUIRE ADDITIONAL RIGHT OF WAY AND POTENTIALLY DISPLACE ONE NON–RESIDENTIAL STRUCTURE. HOWEVER, THERE IS NO FUNDING FOR THE PROJECT AND HAS NOT MOVED INTO DETAIL DESIGN OR CONSTRUCTION.
8. NO EVIDENCE OF RECENT EARTH MOVING, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WAS OBSERVED ON THE SUBJECT PROPERTY.
9. NO PARKING AREAS WERE OBSERVED ON THE SUBJECT TRACTS.

Texas811 Know what's below. Call before you dig.

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AND IT'S FREE – CALL BEFORE YOU DIG
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OR CONTACT US AT: 1–800–344–8377

ES LA LEY
GRATIS PARA USTED – LLAME ANTES
LLAME 2 DIAS DE TRABAJO ANTES DE EXCAVAR EN TEXAS, MARQUE 811
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PEDRO GONZALEZ–OCASIO
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF TEXAS No. 6429

DATE 01–21–2025

REV.	DATE	BY	DESCRIPTION

1/16/2025
DRAWN BY: A.G.
FXSA JOB NO. S2501EP

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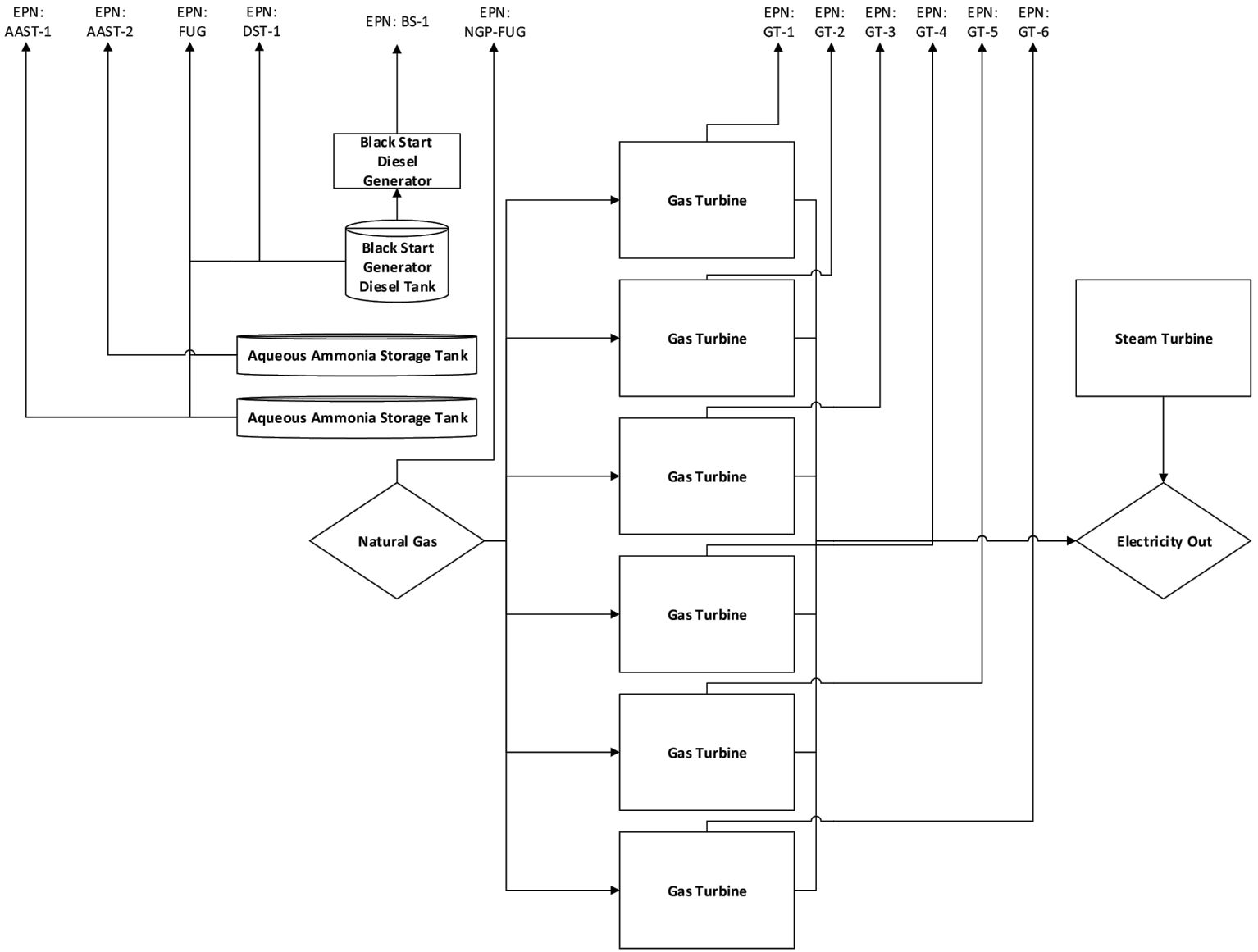
(TBPE# F–3584, TBPLS# 100490–00)



Approach Environmental
1000 Grimmett Drive
Shreveport, Louisiana 71107
Toll Free: (866) 674-1993 Fax: (318) 222-2425

DRAWN DATE:	DRAWN BY:	SCALE:
02/25/2025	HLW	NTS

PECOS POWER GENERATION COMPANY, LLC
PECOS POWER GENERATION
GPS COORDINATES: 31.396950°, −103.621825°
REEVES COUNTY, TEXAS

PROCESS FLOW DIAGRAM

FIGURE NUMBER
2

Appendix B

Emissions Summary Table & Calculations

Emission Point Summary Table

Source Name (Applicable Permit/Rule)	EPN	Air Contaminant Name	Air Contaminant Emission Rate lb/hr	Air Contaminant Emission Rate TPY
Gas Turbine 1 (Operation: Standard Permit) (Maintenance: §106.263)	GT-1	NOx	3.08	13.49
		CO	0.52	2.28
		VOC	1.19	5.21
		PM	2.16	9.46
		NH3	5.10	22.41
Gas Turbine 2 (Standard Permit) (Maintenance: §106.263)	GT-2	NOx	3.08	13.49
		CO	0.52	2.28
		VOC	1.19	5.21
		PM	2.16	9.46
		NH3	5.10	22.41
Gas Turbine 3 (Standard Permit) (Maintenance: §106.263)	GT-3	NOx	3.08	13.49
		CO	0.52	2.28
		VOC	1.19	5.21
		PM	2.16	9.46
		NH3	5.10	22.41
Gas Turbine 4 (Standard Permit) (Maintenance: §106.263)	GT-4	NOx	3.08	13.49
		CO	0.52	2.28
		VOC	1.19	5.21
		PM	2.16	9.46
		NH3	5.10	22.41
Gas Tubine 5 (Standard Permit) (Maintenance: §106.263)	GT-5	NOx	3.08	13.49
		CO	0.52	2.28
		VOC	1.19	5.21
		PM	2.16	9.46
		NH3	5.10	22.41
Gas Turbine 6 (Standard Permit) (Maintenance: §106.263)	GT-6	NOx	3.08	13.49
		CO	0.52	2.28
		VOC	1.19	5.21
		PM	2.16	9.46
		NH3	5.10	22.41
Black Start Generator (Operation: §106.511) (Maintenance: §106.263)	BS-1	NOx	311.42	3.74
		CO	16.26	0.10
		VOC	10.34	0.06
		PM	2.98	0.02
Diesel Storage Tank (§106.472)	DST-1	VOC	0.04	0.18
Aqueous Ammonia Tank (§106.472)	AAST-1	Base	0.01	0.37
Aqueous Ammonia Tank (§106.472)	AAST-2	Base	0.01	0.37
Natural Gas Pipeline (Standard Permit)	NGP-FUG	VOC	1.16	5.06
Diesel Storage Tank Fugitives (§106.472)	FUG	VOC	0.04	0.18
Aqueous Ammonia Tank Fugitives (§106.472)		Base	0.08	0.37

Gas Turbine NOx Emission Calculations
EPN: GT1 - GT6

Gas Turbine Emission Calculation (NOx)

Data		
Gas Turbine Generator Model	Siemens SGT-800	56 MegaWatt
Operational Hours Per Year	8760	365-days per Year
Exhaust Mass Flow (lbs/s)	268.5	Data from Siemens Emission Data Sheet
NOx Emission (lbs/hr)	30.75	Siemens Emission Data Sheet (Run #3)
Uncontrolled NOx Emission Rate (per Turbine)		
NOx Emissions TPY * 8760 / 2000 =		134.7 TPY
Controlled Emission Rate/Recovery (per Turbine)		
SEIMENS Certified NOx Concentration (Post SCR):		3.08 lbs/hr
SCR Efficiency = 1 - (Post SCR lbs/hr / Uncontrolled lbs/hr)		
SCR Efficiency = 1 - (3.08 / 30.75) =		90.0% Recovery Efficiency
Controlled NOx Emission Rate (per Turbine)		
NOx TPY Emission = NOx lbs/hr * 8760 / 2000 =		13.49 TPY
Controlled NOx Emissions (6-Natural Gas Turbines)		
Total NOx lbs/hr Turbine Emissions = Controlled NOx lbs/hr Emissions * 6		18.48 lbs/hr
Total NOx TPY Turbine Emissions = Controlled NOx TPY Emissions * 6		**80.94 TPY**

Gas Turbine - Simple Cycle Due to Maintenance Shutdown - Emission Calculation (NOx)

Uncontrolled NOx Emission Rate (per Turbine)	
Following a shutdown - Turbine will operate in simple cycle for 30 minutes following start-up	
NOx Emission Rate during Start-Up	30.75 lbs per Start-up
Start-Up events per Year	10 per Year
Time in Simple Cycler per Startup	0.5 Hours
Maintenance NOx Emissions (lbs) = Start-Up NOx Emission Rate * Start-ups per Year	307.5 lbs.
Mainenance NOx Emissions (TPY) = Maintenance NOx Emissions (lbs) / 2000	**0.15 TPY**

Gas Turbine - Simple Cycle Due to Commercial Shutdown - Emission Calculation (NOx)

Uncontrolled NOx Emission Rate (per Turbine)	
Following a shutdown - Turbine will operate in simple cycle for 30 minutes following start-up	
NOx Emission Rate during Start-Up	30.75 lbs per Start-up
Start-Up events per Year	180 per Year
Time in Simple Cycler per Startup	0.5 Hours
Maintenance NOx Emissions (lbs) = Start-Up NOx Emission Rate * Start-ups per Year	5535.0 lbs.
Mainenance NOx Emissions (TPY) = Maintenance NOx Emissions (lbs) / 2000	**2.77 TPY**

Gas Turbine CO Emission Calculations
EPN: GT1 - GT6

Gas Turbine Emission Calculation (CO)		
Data		
Gas Turbine Generator Model	Siemens SGT-800	56 MegaWatt
Operational Hours Per Year	8760	365-days per Year
Exhaust Mass Flow (lbs/s)	268.5	Data from Siemens Emission Data Sheet
CO Emission (lbs/hr)	5.2	Siemens Emission Data Sheet (Run #3)
Uncontrolled CO Emission Rate (per Turbine)		
CO Emissions TPY * 8760 / 2000 =		22.8 TPY
Controlled Emission Rate/Recovery (per Turbine)		
SEIMENS Certified NOx Concentration (Post SCR):		0.52 lbs/hr
SCR Efficiency = 1 - (Post SCR lbs/hr / Uncontrolled lbs/hr)		
SCR Efficiency = 1 - (0.52 / 5.2) =		90.0% Recovery Efficiency
Controlled NOx Emission Rate (per Turbine)		
CO TPY Emissions = CO lbs/hr * 8760 / 2000 =		2.28 TPY
Controlled Emissions (6-Natural Gas Turbines)		
Total CO lbs/hr Turbine Emissions = Controlled NOx lbs/hr Emissions * 6		3.12 lbs/hr
Total CO TPY Turbine Emissions = Controlled NOx TPY Emissions * 6		**13.67 TPY**

Gas Turbine - Simple Cycle Due to Maintenance Shutdown - Emission Calculation (CO)	
Uncontrolled CO Emission Rate (per Turbine)	
Following a shutdown - Turbine will operate in simple cycle for 30 minutes following start-up	
CO Emission Rate during Start-Up	5.2 lbs per Start-up
Start-Up events per Year	10 per Year
Time in Simple Cycler per Startup	0.5 Hours
Maintenance CO Emissions (lbs) = Start-Up CO Emission Rate * Start-ups per Year	52.0 lbs.
Mainenance CO Emissions (TPY) = Maintenance CO Emissions (lbs) / 2000	**0.03 TPY**

Gas Turbine - Simple Cycle Due to Commercial Shutdown - Emission Calculation (CO)	
Uncontrolled CO Emission Rate (per Turbine)	
Following a shutdown - Turbine will operate in simple cycle for 30 minutes following start-up	
CO Emission Rate during Start-Up	5.2 lbs per Start-up
Start-Up events per Year	180 per Year
Time in Simple Cycler per Startup	0.5 Hours
Maintenance CO Emissions (lbs) = Start-Up CO Emission Rate * Start-ups per Year	936.0 lbs.
Mainenance CO Emissions (TPY) = Maintenance CO Emissions (lbs) / 2000	**0.47 TPY**

Gas Turbine VOC Emission Calculations
EPN: GT1 - GT6

Gas Turbine Emission Calculation (VOC)

Data		
Gas Turbine Generator Model	Siemens SGT-800	56 MegaWatt
Operational Hours Per Year	8760	365-days per Year
Exhaust Mass Flow (lbs/s)	268.5	Data from Siemens Emission Data Sheet
VOC Emission (lbs/hr)	1.19	Siemens Emission Data Sheet (Run #3)

Uncontrolled VOC Emissions	
VOC Emissions lbs/hr * 8760 / 2000 =	5.21 TPY (Uncontrolled)
VOC TPY Emissions per Turbine * 6 =	**31.27 TPY (Uncontrolled)**

Gas Turbine - Simple Cycle Due to Maintenance Shutdown - Emission Calculation (VOC)

Uncontrolled VOC Emission Rate (per Turbine)	
Following a shutdown - Turbine will operate in simple cycle for 30 minutes following start-up	
VOC Emission Rate during Start-Up	1.19 lbs per Start-up
Start-Up events per Year	10 per Year
Time in Simple Cycler per Startup	0.5 Hours
Maintenance VOC Emissions (lbs) = Start-Up VOC Emission Rate * Start-ups per Year	11.9 lbs.
Mainenance VOC Emissions (TPY) = Maintenance VOC Emissions (lbs) / 2000	**0.01 TPY**

Gas Turbine - Simple Cycle Due to Commercial Shutdown - Emission Calculation (VOC)

Uncontrolled VOC Emission Rate (per Turbine)	
Following a shutdown - Turbine will operate in simple cycle for 30 minutes following start-up	
VOC Emission Rate during Start-Up	1.19 lbs per Start-up
Start-Up events per Year	180 per Year
Time in Simple Cycler per Startup	0.5 Hours
Maintenance VOC Emissions (lbs) = Start-Up VOC Emission Rate * Start-ups per Year	214.2 lbs.
Mainenance VOC Emissions (TPY) = Maintenance VOC Emissions (lbs) / 2000	**0.11 TPY**

Gas Turbine PM Emission Calculations
EPN: GT1 - GT6

Gas Turbine Emission Calculation (PM2.5 + PM10)

Data		
Gas Turbine Generator Model	Siemens SGT-800	56 MegaWatt
Operational Hours Per Year	8760	365-days per Year
Exhaust Mass Flow (lbs/s)	268.5	Data from Siemens Emission Data Sheet
PM Emission (lbs/hr)	2.16	Siemens Emission Data Sheet (Run #3)

Uncontrolled VOC Emissions		
PM Emissions lbs/hr * 8760 / 2000 =	9.46	TPY (Uncontrolled)
PM TPY Emissions per Turbine * 6 =	**56.76**	**TPY (Uncontrolled)**

Gas Turbine - Simple Cycle Due to Maintenance Shutdown - Emission Calculation (PM2.5 + PM10)

Uncontrolled PM Emission Rate (per Turbine)		
Following a shutdown - Turbine will operate in simple cycle for 30 minutes following start-up		
PM Emission Rate during Start-Up	2.16	lbs per Start-up
Start-Up events per Year	10	per Year
Time in Simple Cycler per Startup	0.5	Hours
Maintenance PM Emissions (lbs) = Start-Up PM Emission Rate * Start-ups per Year	21.6	lbs.
Mainenance PM Emissions (TPY) = Maintenance PM Emissions (lbs) / 2000	**0.01**	**TPY**

Gas Turbine - Simple Cycle Due to Commercial Shutdown - Emission Calculation (PM2.5 + PM10)

Uncontrolled PM Emission Rate (per Turbine)		
Following a shutdown - Turbine will operate in simple cycle for 30 minutes following start-up		
PM Emission Rate during Start-Up	2.16	lbs per Start-up
Start-Up events per Year	180	per Year
Time in Simple Cycler per Startup	0.5	Hours
Maintenance PM Emissions (lbs) = Start-Up PM Emission Rate * Start-ups per Year	388.8	lbs.
Mainenance PM Emissions (TPY) = Maintenance PM Emissions (lbs) / 2000	**0.19**	**TPY**

Gas Turbine Ammonia Emission Calculations
EPN: GT1 - GT6

Gas Turbine Emission Calculation (Ammonia)

Data		
Gas Turbine Generator Model	Siemens SGT-800	56 MegaWatt
Operational Hours Per Year	8760	365-days per Year
Exhaust Mass Flow (lbs/s)	268.5	Data from Siemens Emission Data Sheet
NOx Concentration (ppmv)	9	Data from Siemens Emission Data Sheet
Molecular Weight (MW) of NH3	17.031	
Molecular Weight (MW) of Air	28.96	
ppmvd to lb/lb		
NH3 concentration by mass = ppmvd * (Molecular weight of NH3 / Molecular Weight of Air) * 10^{-6}		
NH3 concentration by mass = 15 * (46.01/28.96) * 10-6 =		0.0000053 lb. NOx per lb. exhaust gas
NH3 Emission Rate		
NH3 Emission Rate = Exhaust Mass Flow * Concentration by Mass		
NH3 Emission Rate = 268.5 * 0.0000053 =		0.0014 lbs/sec
NH3 lbs/hr Emissions = lbs/sec * 3,600 =		5.12 lbs/hr
NH3 Emissions lbs/hr * 8760 / 2000 =		22.41 TPY (Per Turbine)
Total NH3 TPY Turbine Emissions = NH3 TPY Emissions * 6		**134.45 TPY**

Black Start NOx Emission Calculations
EPN: BS-1

Black Start Generator - Routine Maintenance Emission Calculation (NOx)	
Certified Emissions from CAT (3516 Diesel Generator)	
NOx Emission Rate:	5373.9 mg/Nm^3
Exhaust Flow Rate:	438.1 m^3/min
NOx Emission Calculation	
NOx Concentration lbs/Nm^3 = NOx Concentration mg/m^3 * 2.2046E-6 lbs/mg	
NOx Concentration lbs/Nm3 = 5373.9 mg/m3 * 2.2046E-6 =	0.01185 lbs/m^3
NOx Mass Flow = NOx Concentration lbs/m^3 * Exhaust Mass Flow	
NOx Mass Flow = 0.01184729994 lbs/m3 * 438.1 m3/min * 60	311.42 lbs/hr
Expected Total Blackstart Generator Emissions	
Expected Yearly Operational Hours:	24 hrs/yr
NOx Emissions (TPY) = (NOx lbs/hr) * (Operational hrs/yr) / 2000	
NOx Emissions (TPY) = (311.42 lbs/hr) * (24 hrs/yr) / 2000	**3.74 TPY**

Black Start CO Emission Calculations
EPN: BS-1

Blackstart Generator - Routine Maintenance Emission Calculation (CO)	
Certified Emissions from CAT (3516b Diesel Generator)	
CO Emission Rate:	280.6 mg/Nm^3
Exhaust Flow Rate:	438.1 m^3/min
CO Emission Calculation:	
CO Concentration lbs/Nm^3 = CO Concentration mg/m^3 * 2.2046E-6 lbs/mg	
CO Concentration lbs/Nm3 = 280.6 mg/m3 * 2.2046E-6 =	0.00062 lbs/m^3
CO Mass Flow = CO Concentration lbs/m^3 * Exhaust Mass Flow	
CO Mass Flow = 0.00062 lbs/m3 * 438.1 m3/min * 60	16.26 lbs/hr
Expected Total Blackstart Generator Emissions:	
Expected Yearly Operational Hours:	12 hrs/yr
CO Emissions (TPY) = (CO lbs/hr) * (Operational hrs/yr) / 2000	
CO Emissions (TPY) = (16.26 lbs/hr) * (12 hrs/yr) / 2000	**0.10 TPY**

Black Start VOC Emission Calculations
EPN: BS-1

Black Start Generator - Routine Maintenance Emission Calculation (VOCs)	
Certified Emissions from CAT (3516 Diesel Generator)	
VOC Emission Rate:	178.5 mg/Nm^3
Exhaust Flow Rate:	438.1 m^3/min
VOC Emission Calculation:	
VOC Concentration lbs/Nm^3 = NOx Concentration mg/m^3 * 2.2046E-6 lbs/mg	
VOC Concentration lbs/Nm3 = 178.5 mg/m3 * 2.2046E-6 =	0.00039 lbs/m^3
VOC Mass Flow = NOx Concentration lbs/m^3 * Exhaust Mass Flow	
VOC Mass Flow = 0.0003935211 lbs/m3 * 438.1 m3/min * 60	10.34 lbs/hr
Expected Total Blackstart Generator Emissions:	
Expected Yearly Operational Hours:	12 hrs/yr
VOC Emissions (TPY) = (VOC lbs/hr) * (Operational hrs/yr) / 2000	
VOC Emissions (TPY) = (10.34 lbs/hr) * (12 hrs/yr) / 2000	**0.06 TPY**

Black Start Generator - Diesel Storage Tank Emissions (VOCs)	
Tank Capacity	2,200 Gallons
Throughput	26,400 Gallons
Calculations from Emission Master Tanks Software	
Working/Breathing Losses	**0.001 TPY**
Fugitive Loss	**0.18 TPY**

Note:
Detailed diesel storage tank calculations are presented following this page.

Black Start PM Emission Calculations
EPN: BS-1

Blackstart Generator - Routine Maintenance Emission Calculation (PM)	
Certified Emissions from CAT (3516 Diesel Generator)	
PM Emission Rate:	51.4 mg/Nm^3
Exhaust Flow Rate:	438.1 m^3/min
CO Emission Calculation:	
PM Concentration lbs/Nm^3 = CO Concentration mg/m^3 * 2.2046E-6 lbs/mg	
PM Concentration lbs/Nm3 = 51.4 mg/m3 * 2.2046E-6 =	0.00011 lbs/m^3
PM Mass Flow = CO Concentration lbs/m^3 * Exhaust Mass Flow	
PM Mass Flow = 0.00011 lbs/m3 * 438.1 m3/min * 60	2.98 lbs/hr
Expected Total Blackstart Generator Emissions:	
Expected Yearly Operational Hours:	12 hrs/yr
PM Emissions (TPY) = (PM lbs/hr) * (Operational hrs/yr) / 2000	
PM Emissions (TPY) = (2.98 lbs/hr) * (12 hrs/yr) / 2000	**0.02 TPY**

Natural Gas Pipeline Fugitive Emission Calculations
EPN: NGP-FUG

Natural Gas Pipeline - Fugitive Emissions (VOC)			
Fugitive Factors			
Flange/Connectors (Gas)	SOCMI Without Ethylene	0.0029	lbs/hr
Valve (Gas)	SOCMI Without Ethylene	0.0089	lbs/hr
Relief Valve (Gas)	SOCMI Without Ethylene	0.2293	lbs/hr
Component Count			
Flange/Connectors (Gas)		72	count
Valve (Gas)		29	count
Relief Valves (Gas)		3	count
Fugitive Emission Calculation			
Component Emissions (TPY) = (Fug. Factor lbs/hr * 8760 / 2000) * Count			
Flange/Connectors Emissions (TPY)		0.91	TPY
Valves Emissions (TPY)		1.13	TPY
Relief Valves Emissions (TPY)		3.01	TPY
Total Natural Gas Fugitives Emissions		**5.06**	**TPY**

Diesel Tank Emission Calculations
EPN: DST-1

Black Start Generator - Diesel Storage Tank Emissions (VOCs)	
Tank Capacity	2,200 Gallons
Throughput	26,400 Gallons
Calculations from Emission Master Tanks Software	
Working/Breathing Losses	**0.001 TPY**
Fugitive Loss	**0.18 TPY**

Note:
Detailed diesel storage tank emission calculations are presented following this page.

Diesel Tank Emission Calculation
Overview
EPN: DST-1

Tank ID	Storage Tank Paramenters										
	Vessel Type	Diameter D (ft)	Straight Side (ft)	Roof Height (ft)	Effective Tank Height (ft)	Void Volume (gal)	Maximum Working Volume (gal)	Isothermal Yes/No	Conservation Vent Low (psig)	Conservation Vent High (psig)	Paint Solar Absorptance dimensonless
2,200-Gal Industrial Generator Fuel Tank	Horizontal Storage	5	15	N/A	N/A	2203.19	2200	Normal	-0.03	0.03	0.97

Diesel Tank Emission Calculation
Overview
EPN: DST-1

Material Stored			Annual Standing Storage Losses (Uncontrolled)				
Material Type	Material Name	Composition Reference	Vapor Space Vv (ft^3)	Vapor Density Wv (lb/ft^3)	Vapor Space Expansion Factor KE dimensionless	Vented Vapor Saturation Factor Ks dimensionless	VOC Standing Losses Ls (lb/yr)
Compound	No. 2 Fuel Oil (Diesel)	composition link	147.3511	2.50E-04	0.090533333	0.998766667	1.3554

Diesel Tank Emission Calculation
Overview
EPN: DST-1

Annual Working Losses (Uncontrolled)								Annual Emissions		Annual Emissions	
Tla	Vapor Molecular Weight Mv	VP at Tla Pva	Throughput Q	Q	Turnover Factor Kn	Crude Oil Factor Kp	Working Losses VOC Lw	Uncontrolled VOC	Controlled VOC	Uncontrolled VOC	Controlled VOC
(°F)	(lb/lb-mole)	(psia)	(gal/yr)	(bbl/yr)	dimensionless	dimensionless	(lb/yr)	(lb)	(lb)	(tpy)	(tpy)
75.27915833	130	0.011841667	26400	628.5714	1	1	0.9255	2.281	2.281	0.001	0.001

Diesel Tank Emission Calculation
Detailed
EPN: DST-1

Activity Title	2,200-Gallon Diesel Generator Tank
Climate:	Texas, Midland
pa	13.26 psia
Equipment Tag	2,200-Gal Industrial Generator Fuel Tank
Storage Vessel Style	Horizontal Storage
Calculation Type	Normal Storage Tank (11/2019 Rev.)
	Working and Breathing Loss Calculation
Void Space Volume	2203.19 gal
Working Volume	2200 gal
Working Volume	294.0972 ft^3
Shell Diameter	5 ft
Straight Side Height	15 ft
Paint Solar Absorptance	0.97
Roof Color / Condition	black / new
Shell Color / Condition	black / new
pbp	0.03
pbv	-0.03
Equipment Comment	Using horizontial cylindrical tank to approximate a skid incorporated industrial generator fuel tank.
Activity Comment	
Pi (constant)	3.1416
R (constant)	998.9

Vessel Contents	1652.393 gal	20.000 °C	11748.975 lb	90.377 lb-M
Mixture Name:	Mixture			

[Liquid]	mmHg	lb	W[i]	lb-M	X[i]	A[i]	X*Pi*Ai (mmHg)
No. 2 Fuel Oil (Diesel	0.4344	11748.9748	1	90.3767	1	1	0.4344

Kp (product factor) 1

Month		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Q	(gal)	2242.192	2025.2055	2242.192	2169.863	2242.192	2169.863	2242.192	2242.192	2169.863	2242.192	2169.863	2242.192	26400	(sum)
Vq	(ft^3)	299.7374	270.7306	299.7374	290.0685	299.7374	290.0685	299.7374	299.7374	290.0685	299.7374	290.0685	299.7374	3529.166	(sum)
N (period)	(number)	1.0192	0.9205	1.0192	0.9863	1.0192	0.9863	1.0192	1.0192	0.9863	1.0192	0.9863	1.0192	12.0001	(sum)
N (scaled to annual)	(number)	12	12	12	12	12	12	12	12	12	12	12	12		
Kn	(number)	1	1	1	1	1	1	1	1	1	1	1	1	1	(avg)
Days	(number)	31	28	31	30	31	30	31	31	30	31	30	31	365	(sum)
Compound Molecular Weights (lb/lb-M)															
No. 2 Fuel Oil (Diesel)	(Mv)	130	130	130	130	130	130	130	130	130	130	130	130	130	(lb/lb-mole)
Compound Vapor Pressures (Pva)															
No. 2 Fuel Oil (Diesel)	(mmHg)	0.2502	0.3092	0.4198	0.5952	0.8211	1.0273	1.0583	0.9801	0.7596	0.5346	0.3374	0.2521	0.612075	(avg)

Diesel Tank Emission Calculation
Detailed
EPN: DST-1

Working Loss Calculations (Uncontrolled)														
tLa	(°F)	51.2949	57.5852	66.9302	78.029	88.6827	96.3495	97.3861	94.7235	86.0645	74.567	60.2194	51.5179	75.27916 (average)
tan	(°R)	491.47	495.57	501.77	509.77	520.57	528.17	530.67	529.37	522.37	512.07	499.47	491.77	511.0867 (average)
taa	(°R)	504.27	508.72	515.42	523.92	533.67	540.42	542.07	540.72	534.02	524.62	512.37	504.77	523.7492 (average)
tax	(°R)	517.07	521.87	529.07	538.07	546.77	552.67	553.47	552.07	545.67	537.17	525.27	517.77	536.4117 (average)
tb	(°R)	507.2236	512.4855	520.3525	529.999	540.1477	547.3022	548.6815	546.7524	539.1882	528.8628	515.6874	507.6014	528.6904 (average)
pC	(psia)	0.0048	0.006	0.0081	0.0115	0.0159	0.0199	0.0205	0.019	0.0147	0.0103	0.0065	0.0049	0.011842 (average)
pNc	(psia)	13.2552	13.254	13.2519	13.2485	13.2441	13.2401	13.2395	13.241	13.2453	13.2497	13.2535	13.2551	13.24816 (average)
pVa	(psia)	0.0048	0.006	0.0081	0.0115	0.0159	0.0199	0.0205	0.019	0.0147	0.0103	0.0065	0.0049	0.011842 (average)
vq	(ft^3)	299.7374	270.7306	299.7374	290.0685	299.7374	290.0685	299.7374	299.7374	290.0685	299.7374	290.0685	299.7374	294.0972 (average)
i	(Btu/ft^{2}day)	1015	1294	1695	2089	2226	2365	2272	2073	1776	1458	1140	973	1698 (average)
wVnc	(number)	0.07	0.0692	0.0679	0.0665	0.0652	0.0643	0.0641	0.0645	0.0655	0.0669	0.0688	0.07	0.066908 (average)
tv	(°R)	514.017	521.1463	531.6971	543.9807	555.0463	563.1311	563.888	560.627	551.0749	538.6212	523.3174	514.1137	540.0551 (average)
kb	(number)	1	1	1	1	1	1	1	1	1	1	1	1	1 (average)
kn	(number)	1	1	1	1	1	1	1	1	1	1	1	1	1 (average)
n	(number)	1.0192	0.9205	1.0192	0.9863	1.0192	0.9863	1.0192	1.0192	0.9863	1.0192	0.9863	1.0192	12.0001 (sum)
Compound Vapor Density (vW(i))														
No. 2 Fuel Oil (Diesel)	(lb/ft^3)	1.00E-04	1.00E-04	2.00E-04	3.00E-04	3.00E-04	4.00E-04	4.00E-04	4.00E-04	3.00E-04	2.00E-04	2.00E-04	1.00E-04	2.50E-04 (avg)
Working Losses (Lw)														
Air	(lb)	20.986	18.723	20.3579	19.2896	19.5389	18.6422	19.2269	19.3215	19.001	20.0635	19.9579	20.9768	236.0852 (sum)
No. 2 Fuel Oil (Diesel)	(lb)	0.0342	0.0376	0.0554	0.0743	0.1039	0.124	0.1318	0.1228	0.0937	0.0697	0.0438	0.0344	0.9256 (sum)
Breathing Loss Calculations (Uncontrolled)														
tan	(°R)	491.47	495.57	501.77	509.77	520.57	528.17	530.67	529.37	522.37	512.07	499.47	491.77	511.0867 (avg)
taa	(°R)	504.27	508.72	515.42	523.92	533.67	540.42	542.07	540.72	534.02	524.62	512.37	504.77	523.7492 (avg)
tax	(°R)	517.07	521.87	529.07	538.07	546.77	552.67	553.47	552.07	545.67	537.17	525.27	517.77	536.4117 (avg)
tLn	(°F)	41.8922	46.7068	53.932	62.9449	73.3016	80.5918	82.3769	80.697	73.3734	63.1032	50.1754	42.2489	62.61201 (avg)
tLa	(°F)	51.2949	57.5852	66.9302	78.029	88.6827	96.3495	97.3861	94.7235	86.0645	74.567	60.2194	51.5179	75.27916 (avg)
tLx	(°F)	60.6977	68.4636	79.9285	93.1132	104.0638	112.1073	112.3953	108.7501	98.7556	86.0308	70.2634	60.787	87.94636 (avg)
i	(Btu/ft^{2}day)	1015	1294	1695	2089	2226	2365	2272	2073	1776	1458	1140	973	1698 (avg)
tb	(°R)	507.2236	512.4855	520.3525	529.999	540.1477	547.3022	548.6815	546.7524	539.1882	528.8628	515.6874	507.6014	528.6904 (avg)
pC	(psia)	0.0048	0.006	0.0081	0.0115	0.0159	0.0199	0.0205	0.019	0.0147	0.0103	0.0065	0.0049	0.011842 (avg)
pNc	(psia)	13.2552	13.254	13.2519	13.2485	13.2441	13.2401	13.2395	13.241	13.2453	13.2497	13.2535	13.2551	13.24816 (avg)
pVa	(psia)	0.0048	0.006	0.0081	0.0115	0.0159	0.0199	0.0205	0.019	0.0147	0.0103	0.0065	0.0049	0.011842 (avg)
dPv	(psia)	0.0031	0.0044	0.0069	0.011	0.0148	0.0184	0.018	0.0157	0.0113	0.0075	0.0044	0.0031	0.009883 (avg)
dPb	(psia)	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06 (avg)
dTv	(°R)	37.611	43.5136	51.993	60.3366	61.5244	63.031	60.0368	56.1062	50.7644	45.8552	40.176	37.0762	50.6687 (avg)
hVo	(ft)	1.9635	1.9635	1.9635	1.9635	1.9635	1.9635	1.9635	1.9635	1.9635	1.9635	1.9635	1.9635	1.9635 (avg)
ks	(number)	0.9995	0.9994	0.9992	0.9988	0.9983	0.9979	0.9979	0.998	0.9985	0.9989	0.9993	0.9995	0.998767 (avg)
Vv	(ft^3)	147.3511	147.3511	147.3511	147.3511	147.3511	147.3511	147.3511	147.3511	147.3511	147.3511	147.3511	147.3511	147.3511 (avg)
wVnc	(number)	0.07	0.0692	0.0679	0.0665	0.0652	0.0643	0.0641	0.0645	0.0655	0.0669	0.0688	0.07	0.066908 (avg)
kE	(number)	0.0693	0.0799	0.0947	0.1085	0.1088	0.1102	0.1046	0.0979	0.0893	0.0819	0.0731	0.0682	0.090533 (avg)

Diesel Tank Emission Calculation
Detailed
EPN: DST-1

tv	(°R)	514.017	521.1463	531.6971	543.9807	555.0463	563.1311	563.888	560.627	551.0749	538.6212	523.3174	514.1137	540.0551 (avg)
plx	(psia)	0.0066	0.0085	0.0122	0.0181	0.0247	0.0309	0.0311	0.0282	0.0213	0.0147	0.009	0.0066	0.017658 (avg)
pln	(psia)	0.0035	0.0041	0.0053	0.0071	0.0099	0.0125	0.0131	0.0125	0.01	0.0072	0.0047	0.0035	0.007783 (avg)
Compound Vapor Density (wV(i))														
No. 2 Fuel Oil (Diesel)	(lb/ft^3)	1.00E-04	1.00E-04	2.00E-04	3.00E-04	3.00E-04	4.00E-04	4.00E-04	4.00E-04	3.00E-04	2.00E-04	2.00E-04	1.00E-04	2.50E-04 (avg)
Breathing Losses (Ls)														
Air	(lb)	22.1693	22.8062	29.3888	31.8984	32.3926	31.3143	30.6496	28.814	25.8716	25.0329	22.2276	21.8142	324.3795 (sum)
No. 2 Fuel Oil (Diesel)	(lb)	0.0361	0.0458	0.08	0.1228	0.1719	0.2078	0.2096	0.1827	0.1273	0.0869	0.0488	0.0358	1.3555 (sum)
Total Losses (Lt)														
Air	(lb)	43.1553	41.5292	49.7467	51.188	51.9314	49.9565	49.8765	48.1354	44.8726	45.0964	42.1855	42.791	560.4645 (sum)
No. 2 Fuel Oil (Diesel)	(lb)	0.0703	0.0834	0.1354	0.1971	0.2758	0.3317	0.3414	0.3055	0.221	0.1565	0.0926	0.0702	2.2809 (sum)

Aqueous Ammonia Tank Emission Calculations
EPN: AAST-1 & AAST-2

Aqueous Ammonia - Storage Tanks Emissions (Ammonia)	
Tanks: 2 - 3,000 bbl Horizontal Tanks	
Tank Capacity	126,000 Gallons (per tank)
Throughput per Year	1,470,000 Gallons (per tank)
Calculations from Emission Master Tanks Software	
Total Working/Breathing Losses	**9.578 TPY**
Total Fugitive Loss	**0.37 TPY**

Note:
Detailed aqueous ammonia storage tank emission and associated fugitive calculations are presented following this page.

Tank Emission Calculation
Overview
EPN: AAST-1 & AAST-2

Tank ID	Storage Tank Paramenters									
	Vessel Type	Diameter D (ft)	Straight Side (ft)	Roof Height (ft)	Effective Tank Height (ft)	Void Volume (gal)	Maximum Working Volume (gal)	Isothermal Yes/No	Conservation Vent Low (psig)	Conservation Vent High (psig)	Paint Solar Absorptance dimensonless
3000-BBL Aqueous Ammonia Tank	Cone Roof Storage	23.5	39	0.7344	39.245	127333.21	126000	Normal	-0.03	0.03	0.35
3000-BBL Aqueous Ammonia Tank	Cone Roof Storage	23.5	39	0.7344	39.245	127333.21	126000	Normal	-0.03	0.03	0.35

Tank Emission Calculation
Overview
EPN: AAST-1 & AAST-2

Material Stored			Annual Standing Storage Losses (Uncontrolled)				
Material Type	Material Name	Composition Reference	Vapor Space Vv (ft^3)	Vapor Density Wv (lb/ft^3)	Vapor Space Expansion Factor KE dimensionless	Vented Vapor Saturation Factor Ks dimensionless	Base Standing Losses Ls (lb/yr)
Compound	Aqueous Ammonia	composition link	4255.4935	0.01935	0.458916667	0.472433333	5757.4116
Compound	Aqueous Ammonia	composition link	4255.4935	0.01935	0.458916667	0.472433333	5757.4116

Tank Emission Calculation
Overview
EPN: AAST-1 & AAST-2

Annual Working Losses (Uncontrolled)								Annual Emissions		Annual Emissions	
Tla	Vapor Molecular Weight Mv	VP at Tla Pva	Throughput Q	Q	Turnover Factor Kn	Crude Oil Factor Kp	Working Losses Base Lw	Uncontrolled Base	Controlled Base	Uncontrolled Base	Controlled Base
(°F)	(lb/lb-mole)	(psia)	(gal/yr)	(bbl/yr)	dimensionless	dimensionless	(lb/yr)	(lb)	(lb)	(tpy)	(tpy)
68.1204	35.05	3.205175	1.47E+06	35000	1	1	3820.7793	9578.191	9578.191	4.789	4.789
68.1204	35.05	3.205175	1.47E+06	35000	1	1	3820.7793	9578.191	9578.191	4.789	4.789

Aqueous Ammonia Tank Emission Calculation
Detailed
EPN: AAST-1

Activity Title	1 of 2 Aqueous Ammonia Tank
Climate:	Texas, Midland
pa	13.26 psia
Equipment Tag	3000-BBL Aqueous Ammonia Tank
Storage Vessel Style	Cone Roof Storage
Calculation Type	Normal Storage Tank (11/2019 Rev.)
	Working and Breathing Loss Calculation
Void Space Volume	127333.21 gal
Working Volume	126000 gal
Working Volume	16843.7499 ft^3
Shell Diameter	23.5 ft
Straight Side Height	39 ft
Hro	0.245 ft
Paint Solar Absorptance	0.35
Roof Color / Condition	beige/cream / new
Shell Color / Condition	beige/cream / new
pbp	0.03
pbv	-0.03
Equipment Comment	Pecos Power Gen.
Activity Comment	
Pi (constant)	3.1416
R (constant)	998.9

Vessel Contents 95499.908 gal 20.000 °C 717286.442 lb 20464.663 lb-M

Mixture Name: Mixture

[Liquid]	mmHg	lb	W[i]	lb-M	X[i]	A[i]	X*Pi*Ai (mmHg)
Aqueous Ammonia	115	717286.4422	1	20464.6631	1	1	115

Kp (product factor) 1

Hl 29.4336 ft

Month		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Q	(gal)	124849.3	112767.1233	124849.3	120821.9178	124849.3	120821.9	124849.3	124849.3	120821.9	124849.3	120821.9	124849.3	1470000	(sum)
Vq	(ft^3)	16689.92	15074.7699	16689.92	16151.5392	16689.92	16151.54	16689.92	16689.92	16151.54	16689.92	16151.54	16689.92	196510.4	(sum)
N (period)	(number)	0.9909	0.895	0.9909	0.9589	0.9909	0.9589	0.9909	0.9909	0.9589	0.9909	0.9589	0.9909	11.6669	(sum)
N (scaled to annual)	(number)	11.6667	11.6667	11.6667	11.6667	11.6667	11.6667	11.6667	11.6667	11.6667	11.6667	11.6667	11.6667		
Kn	(number)	1	1	1	1	1	1	1	1	1	1	1	1	1	(avg)
Days	(number)	31	28	31	30	31	30	31	31	30	31	30	31	365	(sum)
Compound Molecular Weights (lb/lb-M)															
Aqueous Ammonia	(Mv)	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	(lb/lb-mole)
Compound Vapor Pressures (Pva)															
Aqueous Ammonia	(mmHg)	29.1258	41.128	68.065	124.1557	230.449	351.0791	381.6983	343.0298	220.6421	118.0735	51.143	29.9302	165.71	(avg)

Aqueous Ammonia Tank Emission Calculation
Detailed
EPN: AAST-1

Working Loss Calculations (Uncontrolled)														
tLa	(°F)	47.0157	52.1297	59.7841	69.2218	79.2979	86.3787	87.8074	85.9837	78.5769	68.42	55.4132	47.4157	68.1204 (average)
tan	(°R)	491.47	495.57	501.77	509.77	520.57	528.17	530.67	529.37	522.37	512.07	499.47	491.77	511.0867 (average)
taa	(°R)	504.27	508.72	515.42	523.92	533.67	540.42	542.07	540.72	534.02	524.62	512.37	504.77	523.7492 (average)
tax	(°R)	517.07	521.87	529.07	538.07	546.77	552.67	553.47	552.07	545.67	537.17	525.27	517.77	536.4117 (average)
tb	(°R)	505.3358	510.0787	517.1998	526.1135	536.0073	542.9033	544.4556	542.8967	535.8848	526.1509	513.567	505.7917	525.5321 (average)
pC	(psia)	0.5634	0.7955	1.3165	2.4014	4.4574	6.7906	7.3828	6.6349	4.2677	2.2838	0.9892	0.5789	3.205175 (average)
pNc	(psia)	12.6966	12.4645	11.9435	10.8586	8.8026	6.4694	5.8772	6.6251	8.9923	10.9762	12.2708	12.6811	10.05483 (average)
pVa	(psia)	0.5634	0.7955	1.3165	2.4014	4.4574	6.7906	7.3828	6.6349	4.2677	2.2838	0.9892	0.5789	3.205175 (average)
vq	(ft^3)	16689.92	15074.7699	16689.92	16151.5392	16689.92	16151.54	16689.92	16689.92	16151.54	16689.92	16151.54	16689.92	16375.87 (average)
i	(Btu/ft^{2}day)	1015	1294	1695	2089	2226	2365	2272	2073	1776	1458	1140	973	1698 (average)
wVnc	(number)	0.0676	0.0657	0.0621	0.0554	0.0441	0.032	0.029	0.0328	0.0451	0.0561	0.0643	0.0675	0.051808 (average)
tv	(°R)	507.787	513.2037	521.2932	531.1584	541.3831	548.6147	549.9425	547.9029	540.1738	529.672	516.3201	508.1414	529.6327 (average)
kb	(number)	1	1	1	1	1	1	1	1	1	1	1	1	1 (average)
kn	(number)	1	1	1	1	1	1	1	1	1	1	1	1	1 (average)
n	(number)	0.9909	0.895	0.9909	0.9589	0.9909	0.9589	0.9909	0.9909	0.9589	0.9909	0.9589	0.9909	11.6669 (sum)
Compound Vapor Density (vW(i))														
Aqueous Ammonia	(lb/ft^3)	0.0036	0.0051	0.0082	0.0148	0.0269	0.0404	0.0438	0.0395	0.0258	0.0141	0.0063	0.0037	0.01935 (avg)
Working Losses (Lw)														
Air	(lb)	1128.756	990.8792	1035.698	894.9832	735.6974	516.4654	483.5599	546.9198	728.2814	936.2548	1038.495	1126.483	10162.47 (sum)
Aqueous Ammonia	(lb)	60.463	76.3021	137.6369	238.4487	448.7072	652.8147	731.6373	659.9653	416.6845	234.984	101.0461	62.0895	3820.779 (sum)
Breathing Loss Calculations (Uncontrolled)														
tan	(°R)	491.47	495.57	501.77	509.77	520.57	528.17	530.67	529.37	522.37	512.07	499.47	491.77	511.0867 (avg)
taa	(°R)	504.27	508.72	515.42	523.92	533.67	540.42	542.07	540.72	534.02	524.62	512.37	504.77	523.7492 (avg)
tax	(°R)	517.07	521.87	529.07	538.07	546.77	552.67	553.47	552.07	545.67	537.17	525.27	517.77	536.4117 (avg)
tLn	(°F)	40.7595	45.2627	52.0404	60.6136	70.8174	77.9525	79.8414	78.3835	71.3914	61.476	48.9032	41.163	60.71705 (avg)
tLa	(°F)	47.0157	52.1297	59.7841	69.2218	79.2979	86.3787	87.8074	85.9837	78.5769	68.42	55.4132	47.4157	68.1204 (avg)
tLx	(°F)	53.272	58.9967	67.5279	77.8301	87.7784	94.805	95.7734	93.584	85.7624	75.364	61.9232	53.6685	75.5238 (avg)
i	(Btu/ft^{2}day)	1015	1294	1695	2089	2226	2365	2272	2073	1776	1458	1140	973	1698 (avg)
tb	(°R)	505.3358	510.0787	517.1998	526.1135	536.0073	542.9033	544.4556	542.8967	535.8848	526.1509	513.567	505.7917	525.5321 (avg)
pC	(psia)	0.5634	0.7955	1.3165	2.4014	4.4574	6.7906	7.3828	6.6349	4.2677	2.2838	0.9892	0.5789	3.205175 (avg)
pNc	(psia)	12.6966	12.4645	11.9435	10.8586	8.8026	6.4694	5.8772	6.6251	8.9923	10.9762	12.2708	12.6811	10.05483 (avg)
pVa	(psia)	0.5634	0.7955	1.3165	2.4014	4.4574	6.7906	7.3828	6.6349	4.2677	2.2838	0.9892	0.5789	3.205175 (avg)
dPv	(psia)	0.4926	0.7512	1.3685	2.6901	4.7177	6.9412	7.0703	6.0893	3.8002	2.0422	0.8712	0.5051	3.111633 (avg)
dPb	(psia)	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06 (avg)
dTv	(°R)	25.025	27.468	30.975	34.433	33.922	33.705	31.864	30.401	28.742	27.776	26.04	25.011	29.6135 (avg)
hVo	(ft)	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112 (avg)
ks	(number)	0.7734	0.7074	0.5936	0.4447	0.3014	0.2207	0.2067	0.2247	0.3106	0.4571	0.6603	0.7686	0.472433 (avg)
Vv	(ft^3)	4255.494	4255.4935	4255.494	4255.4935	4255.494	4255.494	4255.494	4255.494	4255.494	4255.494	4255.494	4255.494	4255.494 (avg)
wVnc	(number)	0.0676	0.0657	0.0621	0.0554	0.0441	0.032	0.029	0.0328	0.0451	0.0561	0.0643	0.0675	0.051808 (avg)
kE	(number)	0.0835	0.1091	0.1692	0.3073	0.5921	1.1254	1.251	0.9658	0.4693	0.2332	0.1167	0.0844	0.458917 (avg)
tv	(°R)	507.787	513.2037	521.2932	531.1584	541.3831	548.6147	549.9425	547.9029	540.1738	529.672	516.3201	508.1414	529.6327 (avg)

Aqueous Ammonia Tank Emission Calculation
Detailed
EPN: AAST-1

plx	(psia)	0.8584	1.2509	2.1593	4.0792	7.3704	11.0508	11.6758	10.3074	6.5491	3.5109	1.5115	0.8813	5.100417 (avg)
pln	(psia)	0.3658	0.4997	0.7908	1.3892	2.6527	4.1096	4.6056	4.2181	2.749	1.4687	0.6404	0.3763	1.988825 (avg)
Compound Vapor Density (wV(i))														
Aqueous Ammonia	(lb/ft^3)	0.0036	0.0051	0.0082	0.0148	0.0269	0.0404	0.0438	0.0395	0.0258	0.0141	0.0063	0.0037	0.01935 (avg)
Breathing Losses (Ls)														
Air	(lb)	744.6301	854.652	1385.023	2173.9787	3442.903	4594.1	4781.527	4175.041	2701.682	1725.668	957.5978	751.6644	28288.47 (sum)
Aqueous Ammonia	(lb)	30.8498	46.5545	109.2613	257.5718	632.9043	1281.587	1495.043	1132.106	480.1741	197.9896	61.5265	31.8442	5757.412 (sum)
Total Losses (Lt)														
Air	(lb)	1873.386	1845.5312	2420.722	3068.9619	4178.6	5110.566	5265.087	4721.961	3429.964	2661.923	1996.092	1878.148	38450.94 (sum)
Aqueous Ammonia	(lb)	91.3127	122.8566	246.8982	496.0205	1081.612	1934.402	2226.68	1792.071	896.8586	432.9736	162.5726	93.9337	9578.191 (sum)

Aqueous Ammonia Tank Emission Calculation
Detailed
EPN: AAST-2

Activity Title	2 of 2 Aqueous Ammonia Tank
Climate:	Texas, Midland
pa	13.26 psia
Equipment Tag	3000-BBL Aqueous Ammonia Tank
Storage Vessel Style	Cone Roof Storage
Calculation Type	Normal Storage Tank (11/2019 Rev.)
	Working and Breathing Loss Calculation
Void Space Volume	127333.21 gal
Working Volume	126000 gal
Working Volume	16843.7499 ft^3
Shell Diameter	23.5 ft
Straight Side Height	39 ft
Hro	0.245 ft
Paint Solar Absorptance	0.35
Roof Color / Condition	beige/cream / new
Shell Color / Condition	beige/cream / new
pbp	0.03
pbv	-0.03
Equipment Comment	Pecos Power Gen.
Activity Comment	
Pi (constant)	3.1416
R (constant)	998.9

Vessel Contents	95499.908 gal	20.000 °C	717286.442 lb	20464.663 lb-M

Mixture Name:	Mixture						
	[Liquid]	mmHg	lb	W[i]	lb-M	X[i]	A[i]	X*Pi*Ai (mmHg)
	Aqueous Ammonia	115	717286.4422	1	20464.6631	1	1	115
Kp (product factor)	1							
Hl	29.4336 ft							

Month		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Q	(gal)	124849.3	112767.1233	124849.3	120821.9178	124849.3	120821.9	124849.3	124849.3	120821.9	124849.3	120821.9	124849.3	1470000	(sum)
Vq	(ft^3)	16689.92	15074.7699	16689.92	16151.5392	16689.92	16151.54	16689.92	16689.92	16151.54	16689.92	16151.54	16689.92	196510.4	(sum)
N (period)	(number)	0.9909	0.895	0.9909	0.9589	0.9909	0.9589	0.9909	0.9909	0.9589	0.9909	0.9589	0.9909	11.6669	(sum)
N (scaled to annual)	(number)	11.6667	11.6667	11.6667	11.6667	11.6667	11.6667	11.6667	11.6667	11.6667	11.6667	11.6667	11.6667		
Kn	(number)	1	1	1	1	1	1	1	1	1	1	1	1	1	(avg)
Days	(number)	31	28	31	30	31	30	31	31	30	31	30	31	365	(sum)
Compound Molecular Weights (lb/lb-M)															
Aqueous Ammonia	(Mv)	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	(lb/lb-mole)
Compound Vapor Pressures (Pva)															
Aqueous Ammonia	(mmHg)	29.1258	41.128	68.065	124.1557	230.449	351.0791	381.6983	343.0298	220.6421	118.0735	51.143	29.9302	165.71	(avg)

Aqueous Ammonia Tank Emission Calculation
Detailed
EPN: AAST-2

Working Loss Calculations (Uncontrolled)														
tLa	(°F)	47.0157	52.1297	59.7841	69.2218	79.2979	86.3787	87.8074	85.9837	78.5769	68.42	55.4132	47.4157	68.1204 (average)
tan	(°R)	491.47	495.57	501.77	509.77	520.57	528.17	530.67	529.37	522.37	512.07	499.47	491.77	511.0867 (average)
taa	(°R)	504.27	508.72	515.42	523.92	533.67	540.42	542.07	540.72	534.02	524.62	512.37	504.77	523.7492 (average)
tax	(°R)	517.07	521.87	529.07	538.07	546.77	552.67	553.47	552.07	545.67	537.17	525.27	517.77	536.4117 (average)
tb	(°R)	505.3358	510.0787	517.1998	526.1135	536.0073	542.9033	544.4556	542.8967	535.8848	526.1509	513.567	505.7917	525.5321 (average)
pC	(psia)	0.5634	0.7955	1.3165	2.4014	4.4574	6.7906	7.3828	6.6349	4.2677	2.2838	0.9892	0.5789	3.205175 (average)
pNc	(psia)	12.6966	12.4645	11.9435	10.8586	8.8026	6.4694	5.8772	6.6251	8.9923	10.9762	12.2708	12.6811	10.05483 (average)
pVa	(psia)	0.5634	0.7955	1.3165	2.4014	4.4574	6.7906	7.3828	6.6349	4.2677	2.2838	0.9892	0.5789	3.205175 (average)
vq	(ft^3)	16689.92	15074.7699	16689.92	16151.5392	16689.92	16151.54	16689.92	16689.92	16151.54	16689.92	16151.54	16689.92	16375.87 (average)
i	(Btu/ft^{2}day)	1015	1294	1695	2089	2226	2365	2272	2073	1776	1458	1140	973	1698 (average)
wVnc	(number)	0.0676	0.0657	0.0621	0.0554	0.0441	0.032	0.029	0.0328	0.0451	0.0561	0.0643	0.0675	0.051808 (average)
tv	(°R)	507.787	513.2037	521.2932	531.1584	541.3831	548.6147	549.9425	547.9029	540.1738	529.672	516.3201	508.1414	529.6327 (average)
kb	(number)	1	1	1	1	1	1	1	1	1	1	1	1	1 (average)
kn	(number)	1	1	1	1	1	1	1	1	1	1	1	1	1 (average)
n	(number)	0.9909	0.895	0.9909	0.9589	0.9909	0.9589	0.9909	0.9909	0.9589	0.9909	0.9589	0.9909	11.6669 (sum)
Compound Vapor Density (vW(i))														
Aqueous Ammonia	(lb/ft^3)	0.0036	0.0051	0.0082	0.0148	0.0269	0.0404	0.0438	0.0395	0.0258	0.0141	0.0063	0.0037	0.01935 (avg)
Working Losses (Lw)														
Air	(lb)	1128.756	990.8792	1035.698	894.9832	735.6974	516.4654	483.5599	546.9198	728.2814	936.2548	1038.495	1126.483	10162.47 (sum)
Aqueous Ammonia	(lb)	60.463	76.3021	137.6369	238.4487	448.7072	652.8147	731.6373	659.9653	416.6845	234.984	101.0461	62.0895	3820.779 (sum)
Breathing Loss Calculations (Uncontrolled)														
tan	(°R)	491.47	495.57	501.77	509.77	520.57	528.17	530.67	529.37	522.37	512.07	499.47	491.77	511.0867 (avg)
taa	(°R)	504.27	508.72	515.42	523.92	533.67	540.42	542.07	540.72	534.02	524.62	512.37	504.77	523.7492 (avg)
tax	(°R)	517.07	521.87	529.07	538.07	546.77	552.67	553.47	552.07	545.67	537.17	525.27	517.77	536.4117 (avg)
tLn	(°F)	40.7595	45.2627	52.0404	60.6136	70.8174	77.9525	79.8414	78.3835	71.3914	61.476	48.9032	41.163	60.71705 (avg)
tLa	(°F)	47.0157	52.1297	59.7841	69.2218	79.2979	86.3787	87.8074	85.9837	78.5769	68.42	55.4132	47.4157	68.1204 (avg)
tLx	(°F)	53.272	58.9967	67.5279	77.8301	87.7784	94.805	95.7734	93.584	85.7624	75.364	61.9232	53.6685	75.5238 (avg)
i	(Btu/ft^{2}day)	1015	1294	1695	2089	2226	2365	2272	2073	1776	1458	1140	973	1698 (avg)
tb	(°R)	505.3358	510.0787	517.1998	526.1135	536.0073	542.9033	544.4556	542.8967	535.8848	526.1509	513.567	505.7917	525.5321 (avg)
pC	(psia)	0.5634	0.7955	1.3165	2.4014	4.4574	6.7906	7.3828	6.6349	4.2677	2.2838	0.9892	0.5789	3.205175 (avg)
pNc	(psia)	12.6966	12.4645	11.9435	10.8586	8.8026	6.4694	5.8772	6.6251	8.9923	10.9762	12.2708	12.6811	10.05483 (avg)
pVa	(psia)	0.5634	0.7955	1.3165	2.4014	4.4574	6.7906	7.3828	6.6349	4.2677	2.2838	0.9892	0.5789	3.205175 (avg)
dPv	(psia)	0.4926	0.7512	1.3685	2.6901	4.7177	6.9412	7.0703	6.0893	3.8002	2.0422	0.8712	0.5051	3.111633 (avg)
dPb	(psia)	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06 (avg)
dTv	(°R)	25.025	27.468	30.975	34.433	33.922	33.705	31.864	30.401	28.742	27.776	26.04	25.011	29.6135 (avg)
hVo	(ft)	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112	9.8112 (avg)
ks	(number)	0.7734	0.7074	0.5936	0.4447	0.3014	0.2207	0.2067	0.2247	0.3106	0.4571	0.6603	0.7686	0.472433 (avg)
Vv	(ft^3)	4255.494	4255.4935	4255.494	4255.4935	4255.494	4255.494	4255.494	4255.494	4255.494	4255.494	4255.494	4255.494	4255.494 (avg)
wVnc	(number)	0.0676	0.0657	0.0621	0.0554	0.0441	0.032	0.029	0.0328	0.0451	0.0561	0.0643	0.0675	0.051808 (avg)
kE	(number)	0.0835	0.1091	0.1692	0.3073	0.5921	1.1254	1.251	0.9658	0.4693	0.2332	0.1167	0.0844	0.458917 (avg)
tv	(°R)	507.787	513.2037	521.2932	531.1584	541.3831	548.6147	549.9425	547.9029	540.1738	529.672	516.3201	508.1414	529.6327 (avg)

Aqueous Ammonia Tank Emission Calculation
Detailed
EPN: AAST-2

plx	(psia)	0.8584	1.2509	2.1593	4.0792	7.3704	11.0508	11.6758	10.3074	6.5491	3.5109	1.5115	0.8813	5.100417 (avg)
pln	(psia)	0.3658	0.4997	0.7908	1.3892	2.6527	4.1096	4.6056	4.2181	2.749	1.4687	0.6404	0.3763	1.988825 (avg)
Compound Vapor Density (wV(i))														
Aqueous Ammonia	(lb/ft^3)	0.0036	0.0051	0.0082	0.0148	0.0269	0.0404	0.0438	0.0395	0.0258	0.0141	0.0063	0.0037	0.01935 (avg)
Breathing Losses (Ls)														
Air	(lb)	744.6301	854.652	1385.023	2173.9787	3442.903	4594.1	4781.527	4175.041	2701.682	1725.668	957.5978	751.6644	28288.47 (sum)
Aqueous Ammonia	(lb)	30.8498	46.5545	109.2613	257.5718	632.9043	1281.587	1495.043	1132.106	480.1741	197.9896	61.5265	31.8442	5757.412 (sum)
Total Losses (Lt)														
Air	(lb)	1873.386	1845.5312	2420.722	3068.9619	4178.6	5110.566	5265.087	4721.961	3429.964	2661.923	1996.092	1878.148	38450.94 (sum)
Aqueous Ammonia	(lb)	91.3127	122.8566	246.8982	496.0205	1081.612	1934.402	2226.68	1792.071	896.8586	432.9736	162.5726	93.9337	9578.191 (sum)

Fugitive Report (EPN: FUG)

Product: Pecos Power Plant
Process: Tank & Fugitive Emissions
File: Tank Emissions.emm

	Fugitive Emissions (lb)
All Emissions	1108.0962
Base	738.7308
Aqueous Ammonia	738.7308
VOC	369.3654
No. 2 Fuel Oil (Diesel)	369.3654

Fugitive Activity Report (EPN: FUG)

Act #	Type	Vessel	Fugitive ID	Act Start Date	Act End Date	Act Time (Hr.)	Fug. Start Date	Fug. End Date	Fug. Time (Hr.)	Fug Factor	Mixture	Compound	Wt. Frac.	Contents (lb)	Fug. Em. (lb)
1	Storage	2,200-Gal Industrial Ger		1/1/2025	12/31/2025	8760	1/1/2025	12/31/2025	8760	0.0422	Final	No. 2 Fuel Oil (Diese	1	11748.9748	369.3654
2	Storage	3000-BBL Aqueous Amr		1/1/2025	12/31/2025	8760	1/1/2025	12/31/2025	8760	0.0422	Final	Aqueous Ammonia	1	717286.4422	369.3654
3	Storage	3000-BBL Aqueous Amr		1/1/2025	12/31/2025	8760	1/1/2025	12/31/2025	8760	0.0422	Final	Aqueous Ammonia	1	717286.4422	369.3654

Fugitive Factor Report (EPN: FUG)

Vessel	Factor Desc.	Point Count	Point Rate (lb/hr)	Total Rate (lb/hr)
2,200-Gal In	<Vessel Total>			0.0422
	Connector (Light Oil)	18	2.00E-04	0.0044
	Flange (Light Oil)	7	2.00E-04	0.0017
	Open-ended Line (Light Oil)	1	0.0031	0.0031
	Valve (Light Oil)	6	0.0055	0.033
3000-BBL A	<Vessel Total>			0.0422
	Connector (Light Oil)	18	2.00E-04	0.0044
	Flange (Light Oil)	7	2.00E-04	0.0017
	Open-ended Line (Light Oil)	1	0.0031	0.0031
	Valve (Light Oil)	6	0.0055	0.033

Appendix C

TCEQ Form 10370 PI-1S

Form PI-1S
Registrations for Air Standard Permit
(Page 1)
Texas Commission on Environmental Quality

I.	**Registrant Information**
A.	Company or Other Legal Customer Name:
	Pecos Power Generation Company, LLC
B.	Company Official Contact Information:
	☒ Mr.
	☐ Mrs.
	☐ Ms.
	☐ Other:_____
Name: George Wentz	
Title: CEO	
Mailing Address: 414 Church Street, Suite 308	
City: Sandpoint	
State: ID	
ZIP Code: 83864	
Telephone Number: (832) 864-3343	
Fax Number:	
Email Address: george@madenergy.com	
All permit correspondence will be sent via email.	
C.	Technical Contact Information
	☒ Mr.
	☐ Mrs.
	☐ Ms.
	☐ Other:_____
Name: Hunter West	
Title: Air Compliance Specialist	
Company Name: Approach Environmental, LLC	
Mailing Address: 1000 Grimmett Drive	
City: Shreveport	
State: LA	
ZIP Code: 71107	

Form PI-1S
Registrations for Air Standard Permit
(Page 2)
Texas Commission on Environmental Quality

I.	**Registrant Information *(continued)***
C.	Technical Contact Information *(continued)*
Telephone Number: (409) 200-1177	
Fax Number: (318) 222-2425	
Email Address: hunterw@approachenv.com	
II.	**Facility and Site Information**
A.	Name and Type of Facility
Facility Name: Pecos Power Generation	
Type of Facility: ☒ Permanent ☐ Temporary	
For portable units, please provide the serial number of the equipment being authorized below.	
Serial No(s):	
B.	Facility Location Information
Street Address:	
If there is no street address, provide written driving directions to the site and provide the closest city or town, county, and ZIP code for the site (attach description if additional space is needed).	
From the intersection of Interstate 20 and County Road 409, head north for 1.13 miles.	
Turn left (west) onto county road 411 and travel 0.75 miles.	
Facility will be on the left (to the south).	
City: Pecos	
County: Reeves	
ZIP Code: 79772	
C.	Core Data Form (**required** for Standard Permits 6006, 6007, and 6013).
Is the Core Data Form (TCEQ Form 10400) attached? ☑ Yes ☐ No	
Customer Reference Number (CN): TBD	
Regulated Entity Number (RN): TBD	
D.	TCEQ Account Identification Number (if known):

II. Facility and Site Information *(continued)*
E. Type of Action ☒ Initial Application ☐ Change to Registration ☐ Renewal ☐ Renewal Certification
For Change to Registration, Renewal, or Renewal Certification actions provide the following:
Registration Number:
Expiration Date:
F. Standard Permit Claimed: Standard Permit for Electric Generating Units
G. Previous Standard Exemption or PBR Registration Number: N/A
Is this authorization for a change to an existing facility previously authorized under a standard exemption or PBR? ☐ Yes ☒ No
If "Yes," enter previous standard exemption number(s) and PBR registration number(s) and associated effective date in the spaces provided below.
Standard Exemption Number(s):
PBR Registration Number(s):
H. Other Facilities at this Site Authorized by Standard Exemption, PBR, or Standard Permit
Are there any other facilities at this site that are authorized by an Air Standard Exemption, PBR, or Standard Permit? ☐ Yes ☒ No
If "Yes," enter standard exemption number(s), PBR registration number(s), Standard Permit Registration Number(s), and associated effective date in the spaces provided below.
Standard Exemption Number(s):
PBR Registration Number(s):
Standard Permit Registration Number(s):

II. Facility and Site Information *(continued)*
I. Other Air Preconstruction Permits
Are there any other air preconstruction permits at this site? ☐ Yes ☒ No
If "Yes," enter permit number(s) in the spaces provided below.
J. Affected Air Preconstruction Permits
Does the standard permit directly affect any permitted facility? ☐ Yes ☒ No
If "Yes," enter permit number(s) in the spaces provided below.
K. Federal Operating Permit (FOP) Requirements
Is this facility located at a site that is required to obtain a FOP pursuant to 30 TAC Chapter 122? ☐ Yes ☒ No ☐ To Be Determined
Check the requirements of 30 TAC Chapter 122 that will be triggered if this standard permit is approved (*check all that apply).* ☐ Initial Application for a FOP ☐ Significant Revision for a SOP ☐ Minor Revision for a SOP ☐ Operational Flexibility/Off Permit Notification for a SOP ☐ Revision for a GOP ☐ To be Determined ☒ None
Identify the type(s) of FOP issued and/or FOP application(s) submitted/pending for the site. *(check all that apply)* ☐ SOP ☐ SOP application/revision (submitted or under APD review) ☐ GOP ☐ GOP application/revision (submitted or under APD review) ☒ N/A

Form PI-1S
Registrations for Air Standard Permit
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Texas Commission on Environmental Quality

III.	**Fee Information** ***(go to www.tceq.texas.gov/epay to pay online)***
A.	Fee Amount: $900
B.	Voucher number from ePay: Payment via STEERS
IV.	**Public Notice** ***(if applicable)***
A.	Responsible Person ☐ Mr. ☐ Mrs. ☐ Ms. ☐ Other:_____
Name:	
Title:	
Company:	
Mailing Address:	
City:	
State:	
ZIP Code:	
Telephone No.:	
Fax No.:	
Email Address:	
B.	Technical Contact ☐ Mr. ☐ Mrs. ☐ Ms. ☐ Other:_____
Name:	
Title:	
Company:	
Mailing Address:	
City:	
State:	
ZIP Code:	

Form PI-1S
Registrations for Air Standard Permit
(Page 6)
Texas Commission on Environmental Quality

IV. Public Notice *(if applicable)*
B. Technical Contact
Telephone Number:
Fax Number:
Email Address:
C. Bilingual Notice
Is a bilingual program required by the Texas Education Code in the School District? ☐ Yes ☐ No
Are the children who attend either the elementary school or the middle school closest to your facility eligible to be enrolled in a bilingual program provided by the district? ☐ Yes ☐ No
If "Yes," list which language(s) are required by the bilingual program below? Language(s):_____ Language(s):_____
D. Small Business Classification and Alternate Public Notice
Does this company (including parent companies and subsidiary companies) have fewer than 100 employees or less than $6 million in annual gross receipts? ☐ Yes ☐ No
Is the site a major source under 30 TAC Chapter 122, Federal Operating Permit Program? ☐ Yes ☐ No
Are the site emissions of any individual regulated air contaminant equal to or greater than 50 tpy? ☐ Yes ☐ No
Are the site emissions of all regulated air contaminant combined equal to or greater than 75 tpy? ☐ Yes ☐ No

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V.	Renewal Certification Option
A.	Does the permitted facility emit an air contaminant on the Air Pollutant Watch List, and is the permitted facility located in an area on the watch list? ☐ Yes ☐ No
B.	For facilities participating in the Houston/Galveston/Brazoria area (HGB) cap and trade program for highly reactive VOCs (HRVOCs), do the HRVOCs need to be speciated on the maximum allowable emission rates table (MAERT)? ☐ Yes ☐ No
C.	Does the company and/or site have an unsatisfactory compliance history? ☐ Yes ☐ No
D.	Are there any applications currently under review for this standard permit registration? ☐ Yes ☐ No
E.	Are scheduled maintenance, startup, or shutdown emissions required to be included in the standard permit registration at this time? ☐ Yes ☐ No
F.	Are any of the following actions being requested at the time of renewal: ☐ Yes ☐ No
1.	Are there any facilities that have been permanently shut down that are proposed to be removed from the standard permit registration? ☐ Yes ☐ No
2.	Do changes need to be made to the standard permit registration in order to remain in compliance? ☐ Yes ☐ No
3.	Are sources or facilities that have always been present and represented, but never identified in the standard permit registration, proposed to be included with this renewal? ☐ Yes ☐ No
4.	Are there any changes to the current emission rates table being proposed? ☐ Yes ☐ No
*Note: If answers to all of the questions in Section V. Renewal Certification Option are "No," use the certification option and skip to Section VII. of this form. If the answers to any of the questions in Section V. Renewal Certification Option are "Yes," the certification option **cannot** be used.*	
*If notice is applicable and comments are received in response to the public notice, the application does not qualify for the renewal certification option.	

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VI. Technical Information Including State and Federal Regulatory Requirements
Place a check next to the appropriate box to indicate what you have included in your submittal. *Note: Any technical or essential information needed to confirm that facilities are meeting the requirements of the standard permit must be provided. Not providing key information could result in an automatic deficiency and voiding of the project*.
A. Standard Permit requirements (Checklists are optional; however, your review will go faster if you provide applicable checklists.)
Did you demonstrate that the general requirements in 30 TAC§§116.610 and 116.615 are met? ☒ Yes ☐ No
Did you demonstrate that the individual requirements of the specific standard permit are met? ☒ Yes ☐ No
B. Confidential Information (All pages properly marked "CONFIDENTIAL"). ☐ Yes ☒ No
C. Process Flow Diagram. ☒ Yes ☐ No
D. Process Description. ☒ Yes ☐ No
E. Maximum Emissions Data and Calculations. ☒ Yes ☐ No
F. Plot Plan. ☒ Yes ☐ No
G. Projected Start of Construction Date, Start of Operation Date, and Length of Time at Site: ☒ Yes ☐ No
Projected Start of Construction (provide date): 06/01/2025
Projected Start of Operation (provide date): 01/01/2026
Length of Time at the Site: Not Constructed.

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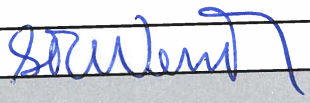
VII. Delinquent Fees and Penalties
This form **will not be processed** until all delinquent fees and/or penalties owed to TCEQ or the Office of the Attorney General on behalf of TCEQ are paid in accordance with the Delinquent Fee and Penalty Protocol. For more information regarding Delinquent Fees and Penalties, go to the TCEQ website at: www.tceq.texas.gov/agency/financial/fees/delin/index.html
VIII. Signature Requirements
The signature below confirms that I have knowledge of the facts included in this application and that these facts are true and correct to the best of my knowledge and belief. I further state that to the best of my knowledge and belief, the project for which application is made will not in any way violate any provision of the Texas Water Code (TWC), Chapter 7; the Texas Health and Safety Code (THSC), Chapter 382, the Texas Clean Air Act (TCAA) the air quality rules of the Texas Commission on Environmental Quality; or any local governmental ordinance or resolution enacted pursuant to the TCAA. I further state that I understand my signature indicates that this application meets all applicable nonattainment, prevention of significant deterioration, or major source of hazardous air pollutant permitting requirements. The signature further signifies awareness that intentionally or knowingly making or causing to be made false material statements or representations in the application is a criminal offense subject to criminal penalties.
Name (printed): George Wentz
Signature (original signature required): 
IX. Copies of the Registration
The Form PI-1S application must be submitted through ePermits. No additional copies need to be sent to the Regional Office or local Air Pollution Control Program(s). The link to ePermits can be found here: www3.tceq.texas.gov/steers/.

Appendix D

Supplemental Documentation

Nominal Performance Data

Introduction

This document describes the nominal performance for a SGT-800 (56MWe) in cycle application for the PECOS project.

Summary performance data

Nominal performance, the data below is for information only and shall not be considered as guaranteed. The power output is based at the generator terminals. Auxiliary power and the transformer losses have not been included in this document.

Anti-icing is not included in the calculations.

Basic data

Type of Drive	Generator Drive
Generator frequency	60.0 Hz
Power factor :	0.90
Inlet loss @ ISO ambient	4.00 Inch H_20
Outlet loss @ ISO ambient	8.00 Inch H_20
LHV	20217 Btu/lb
Fuel Temperature	59.0 °F
Altitude	2710 feet above sea level
Barometric pressure	13.313 psia

Fuel Composition

Component	Vol %	Component	Vol %	Component	Vol %
Methane **CH_4**	96.6500	n-Pentane **NC_5H_{12}**	0.0000	Water **H_2O**	0.0000
Ethylene **C_2H_4**	0.0000	n-Hexane **NC_6H_{14}**	0.0000	Hydrogen Sulfide **H_2S**	0.0000
Ethane **C_2H_6**	0.6500	n-Heptane **NC_7H_{16}**	0.0000	Hydrogen **H_2**	0.0000
Propylene **C_3H_6**	0.0000	Argon **Ar**	0.0000	Nitrogen **N_2**	1.2200
Propane **C_3H_8**	0.0000	Carbon Mono **CO**	0.0000	Oxygen **O_2**	0.0000
Iso Butane **IC_4H_{10}**	0.0000	Carbon Dioxide **CO_2**	1.4800	Sulphur Dioxide **SO_2**	0.0000
n-Butane **NC_4H_{10}**	0.0000	Carbon DiSulfide **CS_2**	0.0000	Sulphur Trioxide **SO_3**	0.0000
Iso Pentane **IC_5H_{12}**	0.0000	Helium **He**	0.0000	Other	0.0000

Run Results

SGT-800 (56MWe)
Site Altitude: 2710 ft

INPUT DATA						
Run identity		1	2	3	4	5
Ambient temp.	°C	-7	10	20	30	42
Ambient temp.	F	19.4	50	68	86	107.6
Relative humidity	%	50	50	50	50	50
Load	%	100	100	100	100	100
Rotor speed	rpm	6600	6600	6600	6600	6600
OUTPUT DATA						
Power output	kW	52411	49685	47856	44834	39021
Power output	HP	70283	66627	64175	60122	52327
Efficiency	%	38.82	38.72	38.54	37.94	36.45
Heat Rate	Btu/kWh	8790	8813	8855	8994	9362
Fuel flow	lb/s	6.33	6.016	5.822	5.541	5.02
Fuel flow	MMSCFD	12.41	11.79	11.41	10.86	9.84
Exhaust flow	lb/s	285.1	275.2	268.5	256.8	230.6
Exhaust temp.	°F	1041	1051	1058	1072	1108
Heat cont. Ref. T	°F	212	212	212	212	212
Exhaust heat cont.	MBtu/h	224	220	217	212	202
ADDITIONAL INFORMATION						
Actual inlet loss	Inch H2O	3.7	3.7	3.6	3.4	2.9
Actual outlet loss	Inch H2O	7.9	7.4	7.1	6.5	5.4
EXHAUST GAS COMPOSITION						
SO2	% WT	0	0	0	0	0
H2O	% WT	4.8	5.01	5.35	5.97	7.35
CO2	% WT	5.86	5.78	5.73	5.7	5.75
N2	% WT	73.81	73.62	73.35	72.87	71.84
O2	% WT	14.28	14.34	14.33	14.23	13.84
Ar	% WT	1.25	1.25	1.24	1.24	1.22
SO2	% VOL	0	0	0	0	0
H2O	% VOL	7.58	7.91	8.42	9.36	11.44
CO2	% VOL	3.79	3.73	3.69	3.66	3.66
N2	% VOL	75.02	74.72	74.29	73.54	71.91
O2	% VOL	12.7	12.75	12.71	12.57	12.13
Ar	% VOL	0.89	0.89	0.88	0.88	0.86
GT EMISSIONS (ACTUAL)						
NOx	Lb/h	33.48	31.78	30.75	29.26	26.51
CO	Lb/h	5.66	5.37	5.20	4.95	4.48
SO2	Lb/h	0.00	0.00	0.00	0.00	0.00
VOC	Lb/h	1.30	1.23	1.19	1.13	1.03
CO2	Lb/h	60138.89	57201.85	55333.22	52675.04	47689.78
PM2.5 + PM10	Lb/h	2.31	2.22	2.16	2.05	1.82
GT EMISSIONS AFTER SCR (ACTUAL)*						
NOx	Lb/h	3.35	3.18	3.08	2.93	2.65
CO	Lb/h	0.57	0.54	0.52	0.49	0.45

NOx controlled by 90% effective SCR catalyst with ammonia injection (assumed 90% effective)
CO controlled by 90% effective CO catalyst (assumed 90% effective)

D-1000A/B/C/D/E/F
GAS TURBINE

T-2300
WATER STORAGE TANK

V-2000A/B
DEAERATOR

E-2100A/B
FEEDWATER HEATER

P-2200A/B
LP FEEDWATER PUMP

P-2300A/B
HP FEEDWATER PUMP

E-3000A/B/C/D/E/F
HEAT RECOVERY
STEAM GENERATOR

D-1500A/B/C/D/E/F
SELECTIVE CATALYTIC REDUCTIONS

D-4000
STEAM TURBINE

E-5000
CONDENSER

P-5100A/B
VACUUM PUMP

V-5200
CONDENSATE TANK

T-7100
DIESEL STORAGE
TANK

D-7000
DIESEL
GENERATOR

P-5300A/B
CONDENSATE
PUMP

DEMINERALIZED WATER
FROM WATER TREATMENT
PFD-000X

CONDENSATE
FROM CONDENSATE PUMP
PFD-0001

FUEL GAS
FROM METERING SKID
PFD-000X

DEMINERALIZED WATER
FROM WATER TREATMENT
PFD-000X

CONDENSATE
TO FEEDWATER HEATER
PFD-0001

T-2300
V-2000A/B
LC
TC
P-2200A/B
P-2300A/B
E-2100A/B
E-3000A
E-3000B
E-3000C
E-3000D
E-3000E
E-3000F
T-7100
D-7000
D-1000A
D-1500A
D-1000B
D-1500B
D-1000C
D-1500C
D-1000D
D-1500D
D-1000E
D-1500E
D-1000F
D-1500F
ATM
SDV
FC
D-4000
M
E-5000
P-5100A/B
V-5200
P-5300A/B

NOTES:

NO.	DATE	REVISION DESCRIPTION	BY	FCE	CLIENT
C	02/04/25	ISSUED FOR REVIEW	EF	JH	–
B	01/31/25	ISSUED FOR REVIEW	EF	JH	–
A	01/29/25	ISSUED FOR REVIEW	EF	JH	–

F&C ENGINEERS
TX REG. NO. 8419

CLIENT : PECOS POWER GEN
PROJECT : POWER GEN PREFEED
TITLE : BLOCK FLOW DIAGRAM
POWER GENERATION

DRAWN	CHECKED	SCALE	DATE	JOB NO.	DRAWING NO.	SHEET NO.	
JH	EF	NTS	01/25/25	PPG240311	PR-BFD-0001	0001	C

Cat® 3516B

Diesel Generator Sets

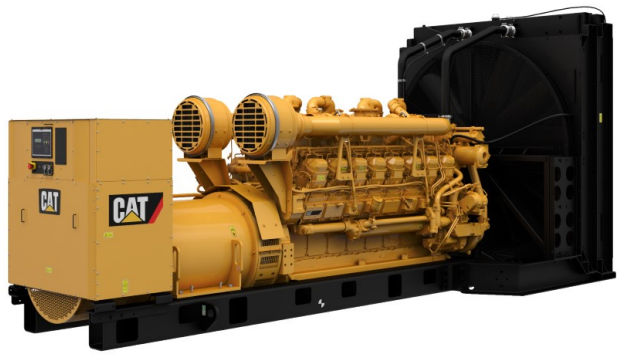


Image shown may not reflect actual configuration

Bore – mm (in)	170 (6.69)
Stroke – mm (in)	190 (7.48)
Displacement – L (in^3)	69 (4210.64)
Compression Ratio	14.0:1
Aspiration	TA
Fuel System	EUI
Governor Type	ADEM™ A3

Standby 60 Hz ekW (kVA)	Mission Critical 60 Hz ekW (kVA)	Prime 60 Hz ekW (kVA)	Continuous 560 Hz ekW (kVA)	Emissions Performance
2000 (2500)	2000 (2500)	1825 (2281)	1640 (2050)	Optimized for Low Fuel Consumption and Low Emissions

Standard Features

Cat® Diesel Engine

- Designed and optimized for low emissions or low fuel consumption
- Reliable performance proven in thousands of applications worldwide

Generator Set Package

- Accepts 100% block load in one step and meets NFPA 110 loading requirements
- Conforms to ISO 8528-5 G3 load acceptance requirements
- Reliability verified through torsional vibration, fuel consumption, oil consumption, transient performance, and endurance testing

Alternators

- Superior motor starting capability minimizes need for oversizing generator
- Designed to match performance and output characteristics of Cat diesel engines

Cooling System

- Cooling systems available to operate in ambient temperatures up to 50°C (122°F)
- Tested to ensure proper generator set cooling

EMCP 4 Control Panels

- User-friendly interface and navigation
- Scalable system to meet a wide range of installation requirements
- Expansion modules and site specific programming for specific customer requirements

Warranty

- 24 months/1000-hour warranty for standby and mission critical ratings
- 12 months/unlimited hour warranty for prime and continuous ratings
- Extended service protection is available to provide extended coverage options

Worldwide Product Support

- Cat dealers have over 1,800 dealer branch stores operating in 200 countries
- Your local Cat dealer provides extensive post-sale support, including maintenance and repair agreements

Financing

- Caterpillar offers an array of financial products to help you succeed through financial service excellence
- Options include loans, finance lease, operating lease, working capital, and revolving line of credit
- Contact your local Cat dealer for availability in your region

Optional Equipment

Engine

Air Cleaner
- ❑ Single element
- ❑ Dual element

Muffler
- ❑ Industrial grade (15 dB)

Starting
- ❑ Standard batteries
- ❑ Oversized batteries
- ❑ Standard electric starter(s)
- ❑ Heavy duty electric starter(s)
- ❑ Air starter(s)
- ❑ Jacket water heater

Alternator

Output voltage
- ❑ 380V ❑ 6300V
- ❑ 440V ❑ 6600V
- ❑ 480V ❑ 6900V
- ❑ 600V ❑ 12470V
- ❑ 2400V ❑ 13200V
- ❑ 4160V ❑ 13800V

Temperature Rise (over 40°C ambient)
- ❑ 150°C
- ❑ 125°C/130°C
- ❑ 105°C
- ❑ 80°C

Winding type
- ❑ Random wound
- ❑ Form wound

Excitation
- ❑ Internal excitation (IE)
- ❑ Permanent magnet (PM)

Attachments
- ❑ Anti-condensation heater
- ❑ Stator and bearing temperature monitoring and protection

Power Termination

Type
- ❑ Bus bar
- ❑ Circuit breaker
- ❑ 1600A ❑ 2000A
- ❑ 2500A ❑ 3000A
- ❑ 3200A ❑ 4000A
- ❑ 5000A
- ❑ UL ❑ IEC
- ❑ 3-pole ❑ 4-pole
- ❑ Manually operated
- ❑ Electrically operated

Trip Unit
- ❑ LSI ❑ LSI-G
- ❑ LSIG-P

Control System

Controller
- ❑ EMCP 4.2B
- ❑ EMCP 4.3
- ❑ EMCP 4.4

Attachments
- ❑ Local annunciator module
- ❑ Remote annunciator module
- ❑ Expansion I/O module
- ❑ Remote monitoring software

Charging

- ❑ Battery charger – 10A
- ❑ Battery charger – 20A
- ❑ Battery charger – 35A

Vibration Isolators

- ❑ Rubber
- ❑ Spring
- ❑ Seismic rated

Cat Connect

Connectivity
- ❑ Ethernet
- ❑ Cellular
- ❑ Satellite

Extended Service Options

Terms
- ❑ 2 year (prime)
- ❑ 3 year
- ❑ 5 year
- ❑ 10 year

Coverage
- ❑ Silver
- ❑ Gold
- ❑ Platinum
- ❑ Platinum Plus

Ancillary Equipment

- ❑ Automatic transfer switch (ATS)
- ❑ Uninterruptible power supply (UPS)
- ❑ Paralleling switchgear
- ❑ Paralleling controls

Certifications

- ❑ UL2200
- ❑ CSA
- ❑ IBC seismic certification
- ❑ OSHPD pre-approval

Note: *Some options may not be available on all models. Certifications may not be available with all model configurations. Consult factory for availability.*

Package Performance

Low Fuel Consumption (30°C SCAC)

Performance	Standby		Mission Critical		Prime		Continuous	
Frequency	60 Hz		60 Hz		60 Hz		60 Hz	
Gen set power rating with fan	2000 ekW		2000 ekW		1825 ekW		1640 ekW	
Gen set power rating with fan @ 0.8 power factor	2500 kVA		2500 kVA		2281 kVA		2050 kVA	
Emissions	Low Fuel		Low Fuel		Low Fuel		Low Fuel	
Performance number	EM2630-00		EM2633-00		DM7919-02		DM7922-02	
Aftercooler (separate circuit) – °C (°F)	30	(86)	30	(86)	30	(86)	30	(86)
Fuel Consumption								
100% load with fan – L/hr (gal/hr)	613.9	(135.8)	613.9	(135.8)	466.4	(123.2)	421.5	(111.4)
75% load with fan – L/hr (gal/hr)	386.2	(102.0)	386.2	(102.0)	353.6	(93.4)	320.2	(84.6)
50% load with fan – L/hr (gal/hr)	268.2	(70.9)	268.2	(70.9)	248.4	(65.6)	227.6	(60.1)
25% load with fan – L/hr (gal/hr)	158.8	(42.0)	158.8	(42.0)	148.9	(39.3)	138.3	(36.5)
Cooling System								
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)
Radiator air flow – m^3/min (cfm)	2348	(82918)	2348	(82918)	2348	(82918)	2348	(82918)
Engine coolant capacity – L (gal)	250.2	(66.1)	250.2	(66.1)	250.2	(66.1)	250.2	(66.1)
Radiator coolant capacity – L (gal)	128.7	(34.0)	128.7	(34.0)	128.7	(34.0)	128.7	(34.0)
Total coolant capacity – L (gal)	378.9	(100.1)	378.9	(100.1)	378.9	(100.1)	378.9	(100.1)
Inlet Air								
Combustion air inlet flow rate – m^3/min (cfm)	171.4	(6052.3)	171.4	(6052.3)	164.1	(5794.5)	156.0	(5508.4)
Exhaust System								
Exhaust stack gas temperature – °C (°F)	449.9	(841.8)	449.9	(841.8)	424.7	(796.5)	406.1	(763.0)
Exhaust gas flow rate – m^3/min (cfm)	430.6	(15205.1)	430.6	(15205.1)	397.4	(14032.5)	367.2	(12966.0)
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)
Heat Rejection								
Heat rejection to jacket water – kW (Btu/min)	733	(41686)	733	(41686)	684	(38898)	634	(36055)
Heat rejection to exhaust (total) – kW (Btu/min)	1881	(106973)	1881	(106973)	1692	(96222)	1516	(86212)
Heat rejection to aftercooler – kW (Btu/min)	555	(31563)	555	(31563)	492	(27980)	426	(24226)
Heat rejection to atmosphere from engine – kW (Btu/min)	136	(7734)	136	(7734)	126	(7165)	119	(6767)
Heat rejection from alternator – kW (Btu/min)	96	(5464)	96	(5464)	86	(4895)	76	(4326)
Emissions* (Nominal)								
NOx mg/Nm^3 (g/hp-h)	4032.6	(8.28)	4032.6	(8.28)	4149.6	(8.46)	3795.1	(7.75)
CO mg/Nm^3 (g/hp-h)	190.1	(0.39)	190.1	(0.39)	200.9	(0.41)	211.7	(0.43)
HC mg/Nm^3 (g/hp-h)	136.7	(0.28)	136.7	(0.28)	126.3	(0.26)	100.1	(0.20)
PM mg/Nm^3 (g/hp-h)	44.9	(0.09)	44.9	(0.09)	43.9	(0.09)	44.2	(0.09)
Emissions* (Potential Site Variation)								
NOx mg/Nm^3 (g/hp-h)	4839.1	(9.94)	4839.1	(9.94)	4979.5	(10.16)	4554.2	(9.31)
CO mg/Nm^3 (g/hp-h)	342.2	(0.70)	342.2	(0.70)	361.6	(0.74)	381.1	(0.78)
HC mg/Nm^3 (g/hp-h)	181.8	(0.37)	181.8	(0.37)	168.0	(0.34)	133.1	(0.27)
PM mg/Nm^3 (g/hp-h)	62.9	(0.13)	62.9	(0.13)	61.5	(0.13)	61.9	(0.13)

**mg/Nm^3 levels are corrected to 5% O_2. Contact your local Cat dealer for further information.*

Package Performance

Low Fuel Consumption (60°C SCAC)

Performance	Standby		Mission Critical		Prime		Continuous	
Frequency	60 Hz		60 Hz		60 Hz		60 Hz	
Gen set power rating with fan	2000 ekW		2000 ekW		1825 ekW		1640 ekW	
Gen set power rating with fan @ 0.8 power factor	2500 kVA		2500 kVA		2281 kVA		2050 kVA	
Emissions	Low Fuel		Low Fuel		Low Fuel		Low Fuel	
Performance number	EM2631-00		EM2634-00		DM7920-02		DM7923-01	
Aftercooler (separate circuit) – °C (°F)	60	(140)	60	(140)	60	(140)	60	(140)
Fuel Consumption								
100% load with fan – L/hr (gal/hr)	518.2	(136.9)	518.2	(136.9)	472.7	(124.9)	425.9	(112.5)
75% load with fan – L/hr (gal/hr)	390.1	(103.0)	390.1	(103.0)	356.7	(94.2)	323.8	(85.6)
50% load with fan – L/hr (gal/hr)	272.1	(71.9)	272.1	(71.9)	252.0	(66.6)	231.3	(61.1)
25% load with fan – L/hr (gal/hr)	162.2	(42.8)	162.2	(42.8)	152.1	(40.2)	141.5	(37.4)
Cooling System								
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)
Radiator air flow – m^3/min (cfm)	2348	(82918)	2348	(82918)	2348	(82918)	2348	(82918)
Engine coolant capacity – L (gal)	250.2	(66.1)	250.2	(66.1)	250.2	(66.1)	250.2	(66.1)
Radiator coolant capacity – L (gal)	128.7	(34.0)	128.7	(34.0)	128.7	(34.0)	128.7	(34.0)
Total coolant capacity – L (gal)	378.9	(100.1)	378.9	(100.1)	378.9	(100.1)	378.9	(100.1)
Inlet Air								
Combustion air inlet flow rate – m^3/min (cfm)	167.2	(5904.0)	167.2	(5904.0)	159.9	(5646.2)	150.9	(5328.3)
Exhaust System								
Exhaust stack gas temperature – °C (°F)	476.4	(889.5)	476.4	(889.5)	455.6	(852.1)	437.9	(820.2)
Exhaust gas flow rate – m^3/min (cfm)	438.1	(15469.9)	438.1	(15469.9)	406.6	(14357.3)	374.0	(13206.1)
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)
Heat Rejection								
Heat rejection to jacket water – kW (Btu/min)	768	(43676)	768	(43676)	719	(40889)	667	(37931)
Heat rejection to exhaust (total) – kW (Btu/min)	1949	(110840)	1949	(110840)	1778	(101112)	1598	(90876)
Heat rejection to aftercooler – kW (Btu/min)	481	(27355)	481	(27355)	418	(23772)	352	(20018)
Heat rejection to atmosphere from engine – kW (Btu/min)	146	(8303)	146	(8303)	136	(7734)	128	(7279)
Heat rejection from alternator – kW (Btu/min)	96	(5464)	96	(5464)	86	(4895)	76	(4326)
Emissions* (Nominal)								
NOx mg/Nm^3 (g/hp-h)	4478.3	(9.27)	4478.3	(9.27)	4495.1	(9.27)	4356.2	(8.99)
CO mg/Nm^3 (g/hp-h)	155.9	(0.32)	155.9	(0.32)	145.7	(0.30)	126.6	(0.26)
HC mg/Nm^3 (g/hp-h)	134.2	(0.28)	134.2	(0.28)	111.5	(0.23)	97.2	(0.20)
PM mg/Nm^3 (g/hp-h)	36.7	(0.08)	36.7	(0.08)	36.6	(0.08)	36.3	(0.07)
Emissions* (Potential Site Variation)								
NOx mg/Nm^3 (g/hp-h)	5373.9	(11.12)	5373.9	(11.12)	5394.1	(11.13)	5227.5	(10.79)
CO mg/Nm^3 (g/hp-h)	280.6	(0.58)	280.6	(0.58)	262.3	(0.54)	227.9	(0.47)
HC mg/Nm^3 (g/hp-h)	178.5	(0.37)	178.5	(0.37)	148.3	(0.31)	129.3	(0.27)
PM mg/Nm^3 (g/hp-h)	51.4	(0.11)	51.4	(0.11)	51.2	(0.11)	50.8	(0.10)

**mg/Nm^3 levels are corrected to 5% O_2. Contact your local Cat dealer for further information.*

Package Performance

Low Fuel Consumption (90°C SCAC)

Performance	Standby		Mission Critical		Prime		Continuous	
Frequency	60 Hz		60 Hz		60 Hz		60 Hz	
Gen set power rating with fan	2000 ekW		2000 ekW		1825 ekW		1640 ekW	
Gen set power rating with fan @ 0.8 power factor	2500 kVA		2500 kVA		2281 kVA		2050 kVA	
Emissions	Low Fuel		Low Fuel		Low Fuel		Low Fuel	
Performance number	EM2632-00		EM2635-00		DM7921-01		DM7924-01	
Aftercooler (separate circuit) – °C (°F)	90	(194)	90	(194)	90	(194)	90	(194)
Fuel Consumption								
100% load with fan – L/hr (gal/hr)	530.8	(140.2)	530.8	(140.2)	479.9	(126.8)	429.7	(113.5)
75% load with fan – L/hr (gal/hr)	392.5	(103.7)	392.5	(103.7)	358.6	(94.7)	324.0	(85.6)
50% load with fan – L/hr (gal/hr)	269.2	(71.1)	269.2	(71.1)	248.2	(65.6)	226.1	(59.7)
25% load with fan – L/hr (gal/hr)	153.8	(40.6)	153.8	(40.6)	143.4	(37.9)	132.5	(35.0)
Cooling System								
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)
Radiator air flow – m^3/min (cfm)	2348	(82918)	2348	(82918)	2348	(82918)	2348	(82918)
Engine coolant capacity – L (gal)	250.2	(66.1)	250.2	(66.1)	250.2	(66.1)	250.2	(66.1)
Radiator coolant capacity – L (gal)	128.7	(34.0)	128.7	(34.0)	128.7	(34.0)	128.7	(34.0)
Total coolant capacity – L (gal)	378.9	(100.1)	378.9	(100.1)	378.9	(100.1)	378.9	(100.1)
Inlet Air								
Combustion air inlet flow rate – m^3/min (cfm)	164.3	(5801.6)	164.3	(5801.6)	156.7	(5533.2)	147.0	(5190.6)
Exhaust System								
Exhaust stack gas temperature – °C (°F)	514.4	(957.9)	514.4	(957.9)	486.3	(907.3)	464.2	(867.6)
Exhaust gas flow rate – m^3/min (cfm)	453.9	(16027.8)	453.9	(16027.8)	416.4	(14703.4)	378.8	(13375.5)
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)
Heat Rejection								
Heat rejection to jacket water – kW (Btu/min)	818	(46520)	818	(46520)	762	(43335)	704	(40035)
Heat rejection to exhaust (total) – kW (Btu/min)	2088	(118745)	2088	(118745)	1868	(106230)	1661	(94458)
Heat rejection to aftercooler – kW (Btu/min)	414	(23545)	414	(23545)	351	(19961)	287	(16321)
Heat rejection to atmosphere from engine – kW (Btu/min)	160	(9099)	160	(9099)	148	(8417)	138	(7848)
Heat rejection from alternator – kW (Btu/min)	96	(5464)	96	(5464)	86	(4895)	76	(4326)
Emissions* (Nominal)								
NOx mg/Nm^3 (g/hp-h)	4374.5	(9.28)	4374.5	(9.28)	4406.7	(9.25)	4406.3	(9.18)
CO mg/Nm^3 (g/hp-h)	232.3	(0.49)	232.3	(0.49)	175.1	(0.37)	150.9	(0.31)
HC mg/Nm^3 (g/hp-h)	75.8	(0.16)	75.8	(0.16)	93.5	(0.20)	94.0	(0.20)
PM mg/Nm^3 (g/hp-h)	35.1	(0.07)	35.1	(0.07)	34.0	(0.07)	32.6	(0.07)
Emissions* (Potential Site Variation)								
NOx mg/Nm^3 (g/hp-h)	5249.4	(11.13)	5249.4	(11.13)	5288.0	(11.10)	5287.6	(11.02)
CO mg/Nm^3 (g/hp-h)	418.2	(0.89)	418.2	(0.89)	315.2	(0.66)	271.6	(0.57)
HC mg/Nm^3 (g/hp-h)	100.8	(0.21)	100.8	(0.21)	124.4	(0.26)	125.0	(0.26)
PM mg/Nm^3 (g/hp-h)	49.1	(0.10)	49.1	(0.10)	47.6	(0.10)	45.6	(0.10)

**mg/Nm^3 levels are corrected to 5% O_2. Contact your local Cat dealer for further information.*

Package Performance

Low Emissions (30°C SCAC)

Performance	Standby		Mission Critical		Prime		Continuous	
Frequency	60 Hz		60 Hz		60 Hz		60 Hz	
Gen set power rating with fan	2000 ekW		2000 ekW		1825 ekW		1640 ekW	
Gen set power rating with fan @ 0.8 power factor	2500 kVA		2500 kVA		2281 kVA		2050 kVA	
Emissions	Low Emissions		Low Emissions		Low Emissions		Low Emissions	
Performance number	EM2636-00		EM2639-00		DM7928-02		DM7931-02	
Aftercooler (separate circuit) – °C (°F)	30	(86)	30	(86)	30	(86)	30	(86)
Fuel Consumption								
100% load with fan – L/hr (gal/hr)	558.3	(147.5)	558.3	(147.5)	503.9	(133.1)	450.7	(119.1)
75% load with fan – L/hr (gal/hr)	411.6	(108.7)	411.6	(108.7)	376.2	(99.4)	339.7	(98.7)
50% load with fan – L/hr (gal/hr)	282.4	(74.6)	282.4	(74.6)	260.4	(68.8)	237.3	(62.7)
25% load with fan – L/hr (gal/hr)	162.1	(42.8)	162.1	(42.8)	151.5	(40.0)	140.4	(37.1)
Cooling System								
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)
Radiator air flow – m^3/min (cfm)	2348	(82918)	2348	(82918)	2348	(82918)	2348	(82918)
Engine coolant capacity – L (gal)	250.2	(66.1)	250.2	(66.1)	250.2	(66.1)	250.2	(66.1)
Radiator coolant capacity – L (gal)	128.7	(34.0)	128.7	(34.0)	128.7	(34.0)	128.7	(34.0)
Total coolant capacity – L (gal)	378.9	(100.1)	378.9	(100.1)	378.9	(100.1)	378.9	(100.1)
Inlet Air								
Combustion air inlet flow rate – m^3/min (cfm)	179.6	(6341.8)	179.6	(6341.8)	174.4	(6158.2)	166.4	(5875.7)
Exhaust System								
Exhaust stack gas temperature – °C (°F)	504.3	(939.8)	504.3	(939.8)	465.0	(869.0)	434.5	(814.1)
Exhaust gas flow rate – m^3/min (cfm)	486.4	(17175.5)	486.4	(17175.5)	447.3	(15794.5)	408.3	(14417.2)
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)
Heat Rejection								
Heat rejection to jacket water – kW (Btu/min)	779	(44302)	779	(44302)	723	(41116)	667	(37931)
Heat rejection to exhaust (total) – kW (Btu/min)	2211	(125741)	2211	(125741)	1960	(111463)	1728	(98268)
Heat rejection to aftercooler – kW (Btu/min)	635	(36113)	635	(36113)	567	(32245)	494	(28093)
Heat rejection to atmosphere from engine – kW (Btu/min)	153	(8701)	153	(8701)	139	(7905)	128	(7279)
Heat rejection from alternator – kW (Btu/min)	96	(5464)	96	(5464)	86	(4895)	76	(4326)
Emissions* (Nominal)								
NOx mg/Nm^3 (g/hp-h)	2101.4	(4.68)	2101.4	(4.68)	2112.6	(4.65)	2095.2	(4.57)
CO mg/Nm^3 (g/hp-h)	207.9	(0.46)	207.9	(0.46)	236.8	(0.52)	233.5	(0.51)
HC mg/Nm^3 (g/hp-h)	115.3	(0.26)	115.3	(0.26)	118.5	(0.26)	121.1	(0.26)
PM mg/Nm^3 (g/hp-h)	55.9	(0.12)	55.9	(0.12)	56.8	(0.13)	59.7	(0.13)
Emissions* (Potential Site Variation)								
NOx mg/Nm^3 (g/hp-h)	2521.7	(5.62)	2521.7	(5.62)	2535.1	(5.58)	2514.2	(5.49)
CO mg/Nm^3 (g/hp-h)	374.2	(0.83)	374.2	(0.83)	426.2	(0.94)	2420.3	(0.92)
HC mg/Nm^3 (g/hp-h)	153.3	(0.34)	153.3	(0.34)	157.6	(0.35)	161.1	(0.35)
PM mg/Nm^3 (g/hp-h)	78.3	(0.17)	78.3	(0.17)	79.5	(0.18)	83.6	(0.18)

**mg/Nm^3 levels are corrected to 5% O_2. Contact your local Cat dealer for further information.*

Package Performance

Low Emissions (60°C SCAC)

Performance	Standby		Mission Critical		Prime		Continuous	
Frequency	60 Hz		60 Hz		60 Hz		60 Hz	
Gen set power rating with fan	2000 ekW		2000 ekW		1825 ekW		1640 ekW	
Gen set power rating with fan @ 0.8 power factor	2500 kVA		2500 kVA		2281 kVA		2050 kVA	
Emissions	Low Emissions		Low Emissions		Low Emissions		Low Emissions	
Performance number	EM2637-00		EM2640-00		DM7929-01		DM7932-01	
Aftercooler (separate circuit) – °C (°F)	60	(140)	60	(140)	60	(140)	60	(140)
Fuel Consumption								
100% load with fan – L/hr (gal/hr)	558.5	(147.5)	558.5	(147.5)	505.5	(133.5)	451.5	(119.3)
75% load with fan – L/hr (gal/hr)	411.7	(108.8)	411.7	(108.8)	375.7	(99.2)	340.0	(89.8)
50% load with fan – L/hr (gal/hr)	283.6	(74.9)	283.6	(74.9)	262.0	(69.2)	239.2	(63.2)
25% load with fan – L/hr (gal/hr)	164.7	(43.5)	164.7	(43.5)	154.1	(40.7)	142.9	(37.7)
Cooling System								
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)
Radiator air flow – m^3/min (cfm)	2348	(82918)	2348	(82918)	2348	(82918)	2348	(82918)
Engine coolant capacity – L (gal)	250.2	(66.1)	250.2	(66.1)	250.2	(66.1)	250.2	(66.1)
Radiator coolant capacity – L (gal)	128.7	(34.0)	128.7	(34.0)	128.7	(34.0)	128.7	(34.0)
Total coolant capacity – L (gal)	378.9	(100.1)	378.9	(100.1)	378.9	(100.1)	378.9	(100.1)
Inlet Air								
Combustion air inlet flow rate – m^3/min (cfm)	175.6	(6200.6)	175.6	(6200.6)	169.7	(5992.2)	161.2	(5692.1)
Exhaust System								
Exhaust stack gas temperature – °C (°F)	522.9	(973.2)	522.9	(973.2)	487.2	(909.0)	457.3	(855.1)
Exhaust gas flow rate – m^3/min (cfm)	488.8	(17260.2)	488.8	(17260.2)	450.3	(15900.4)	410.2	(14484.3)
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)
Heat Rejection								
Heat rejection to jacket water – kW (Btu/min)	811	(46121)	811	(46121)	754	(42879)	696	(39580)
Heat rejection to exhaust (total) – kW (Btu/min)	2255	(128243)	2255	(128243)	2007	(114136)	1774	(100884)
Heat rejection to aftercooler – kW (Btu/min)	551	(31336)	551	(31336)	487	(27694)	418	(23771)
Heat rejection to atmosphere from engine – kW (Btu/min)	162	(9213)	162	(9213)	147	(8361)	135	(7677)
Heat rejection from alternator – kW (Btu/min)	96	(5464)	96	(5464)	86	(4895)	76	(4326)
Emissions* (Nominal)								
NOx mg/Nm^3 (g/hp-h)	2284.7	(5.09)	2284.7	(5.09)	2567.5	(5.67)	2576.8	(5.64)
CO mg/Nm^3 (g/hp-h)	292.0	(0.65)	292.0	(0.65)	160.0	(0.35)	163.0	(0.36)
HC mg/Nm^3 (g/hp-h)	38.3	(0.09)	38.3	(0.09)	105.9	(0.23)	117.4	(0.26)
PM mg/Nm^3 (g/hp-h)	57.2	(0.13)	57.2	(0.13)	49.5	(0.11)	46.6	(0.10)
Emissions* (Potential Site Variation)								
NOx mg/Nm^3 (g/hp-h)	2741.6	(6.11)	2741.6	(6.11)	3081.0	(6.80)	3092.2	(6.76)
CO mg/Nm^3 (g/hp-h)	525.6	(1.17)	525.6	(1.17)	288.0	(0.64)	29*3.4	(0.64)
HC mg/Nm^3 (g/hp-h)	50.9	(0.11)	50.9	(0.11)	140.8	(0.31)	156.1	(0.34)
PM mg/Nm^3 (g/hp-h)	80.1	(0.18)	80.1	(0.18)	69.3	(0.15)	65.2	(0.14)

**mg/Nm^3 levels are corrected to 5% O_2. Contact your local Cat dealer for further information.*

Package Performance

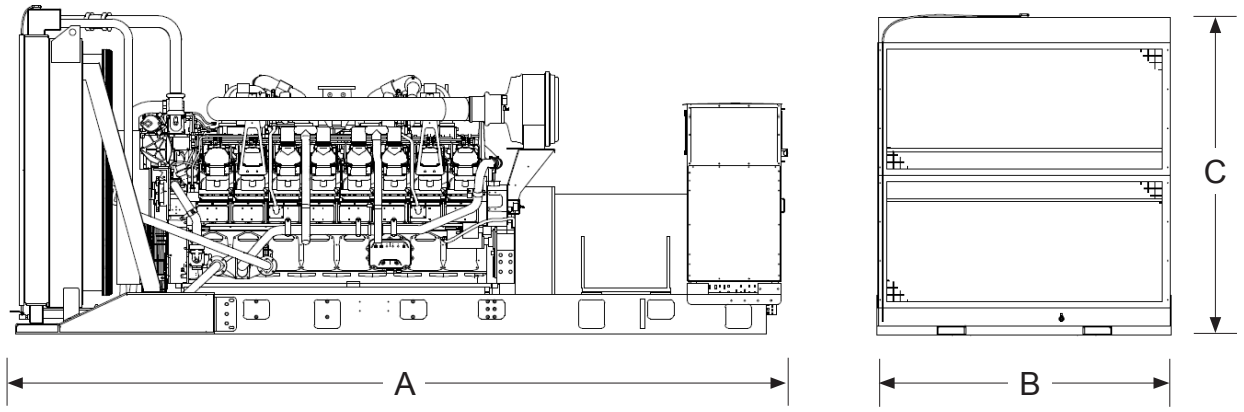
Low Emissions (90°C SCAC)

Performance	Standby		Mission Critical		Prime		Continuous	
Frequency	60 Hz		60 Hz		60 Hz		60 Hz	
Gen set power rating with fan	2000 ekW		2000 ekW		1825 ekW		1640 ekW	
Gen set power rating with fan @ 0.8 power factor	2500 kVA		2500 kVA		2281 kVA		2050 kVA	
Emissions	Low Emissions		Low Emissions		Low Emissions		Low Emissions	
Performance number	EM2638-00		EM2641-00		DM7930-01		DM7933-01	
Aftercooler (separate circuit) – °C (°F)	90	(194)	90	(194)	90	(194)	90	(194)
Fuel Consumption								
100% load with fan – L/hr (gal/hr)	544.9	(144.0)	544.9	(144.0)	496.6	(68.7)	446.0	(117.8)
75% load with fan – L/hr (gal/hr)	408.3	(107.9)	408.3	(107.9)	373.6	(98.7)	338.7	(89.5)
50% load with fan – L/hr (gal/hr)	282.2	(74.6)	282.2	(74.6)	260.2	(68.7)	236.5	(62.5)
25% load with fan – L/hr (gal/hr)	156.5	(41.3)	156.5	(41.3)	144.8	(38.2)	132.3	(35.0)
Cooling System								
Radiator air flow restriction (system) – kPa (in. water)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)	0.12	(0.48)
Radiator air flow – m^3/min (cfm)	2348	(82918)	2348	(82918)	2348	(82918)	2348	(82918)
Engine coolant capacity – L (gal)	250.2	(66.1)	250.2	(66.1)	250.2	(66.1)	250.2	(66.1)
Radiator coolant capacity – L (gal)	128.7	(34.0)	128.7	(34.0)	128.7	(34.0)	128.7	(34.0)
Total coolant capacity – L (gal)	378.9	(100.1)	378.9	(100.1)	378.9	(100.1)	378.9	(100.1)
Inlet Air								
Combustion air inlet flow rate – m^3/min (cfm)	168.1	(5935.8)	168.1	(5935.8)	161.6	(5706.2)	153.1	(5406.0)
Exhaust System								
Exhaust stack gas temperature – °C (°F)	525.7	(978.3)	525.7	(978.3)	498.9	(930.0)	474.5	(886.1)
Exhaust gas flow rate – m^3/min (cfm)	470.5	(16614.0)	470.5	(16614.0)	436.7	(15420.2)	399.9	(14120.6)
Exhaust system backpressure (maximum allowable) – kPa (in. water)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)	6.7	(27.0)
Heat Rejection								
Heat rejection to jacket water – kW (Btu/min)	834	(47429)	834	(47429)	779	(44302)	723	(41116)
Heat rejection to exhaust (total) – kW (Btu/min)	2186	(124318)	2186	(124318)	1973	(112203)	1769	(100600)
Heat rejection to aftercooler – kW (Btu/min)	449	(25535)	449	(25535)	392	(22293)	330	(18766)
Heat rejection to atmosphere from engine – kW (Btu/min)	168	(9554)	168	(9554)	155	(8816)	144	(8189)
Heat rejection from alternator – kW (Btu/min)	96	(5464)	96	(5464)	86	(4895)	76	(4326)
Emissions* (Nominal)								
NOx mg/Nm^3 (g/hp-h)	2544.0	(5.54)	2544.0	(5.54)	3596.2	(7.07)	3609.2	(7.09)
CO mg/Nm^3 (g/hp-h)	258.9	(0.56)	258.9	(0.56)	171.0	(0.57)	156.7	(0.34)
HC mg/Nm^3 (g/hp-h)	47.7	(0.10)	47.7	(0.10)	62.8	(0.10)	103.3	(0.22)
PM mg/Nm^3 (g/hp-h)	51.1	(0.11)	51.1	(0.11)	41.4	(0.11)	41.8	(0.09)
Emissions* (Potential Site Variation)								
NOx mg/Nm^3 (g/hp-h)	3052.8	(6.65)	3052.8	(6.65)	4315.4	(8.48)	4331.0	(8.51)
CO mg/Nm^3 (g/hp-h)	466.0	(1.02)	466.0	(1.02)	307.8	(1.03)	282.1	(0.61)
HC mg/Nm^3 (g/hp-h)	63.4	(0.14)	63.4	(0.14)	83.5	(0.14)	137.4	(0.30)
PM mg/Nm^3 (g/hp-h)	71.5	(0.16)	71.5	(0.16)	58.0	(0.16)	58.5	(0.13)

**mg/Nm^3 levels are corrected to 5% O_2. Contact your local Cat dealer for further information.*

3516B Diesel Generator Sets
Electric Power

Weights and Dimensions



Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
5923 (233.2)	2286 (90.0)	2494 (98.2)	14 180 (31,270)

Note: *For reference only. Do not use for installation design. Contact your local Cat dealer for precise weights and dimensions.*

Ratings Definitions

Standby
Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Mission Critical
Output available with varying load for the duration of the interruption of the normal source power. Average power output is 85% of the mission critical power rating. Typical peak demand up to 100% of rated power for up to 5% of the operating time. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Prime
Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated ekW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year.

Continuous
Output available with non-varying load for an unlimited time. Average power output is 70-100% of the continuous power rating. Typical peak demand is 100% of continuous rated kW for 100% of the operating hours.

Applicable Codes and Standards
AS1359, CSA C22.2 No100-04, UL142, UL489, UL869, UL2200, NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC60034-1, ISO3046, ISO8528, NEMA MG1-22, NEMA MG1-33, 2014/35/EU, 2006/42/EC, 2014/30/EU.

Note: Codes may not be available in all model configurations. Please consult your local Cat dealer for availability.

Data Center Applications
Tier III/Tier IV compliant per Uptime Institute requirements. ANSI/TIA-942 compliant for Rated-1 through Rated-4 data centers.

Fuel Rates
Fuel rates are based on fuel oil of 35º API [16°C (60ºF)] gravity having an LHV of 42,780 kJ/kg (18,390 Btu/lb) when used at 29ºC (85ºF) and weighing 838.9 g/liter (7.001 lbs/U.S. gal.)

www.cat.com/electricpower

3516 PGFL
LEHE1374-02 (04/19)

End of Application