Pinyon Environmental, Inc.
3222 South Vance Street, Suite 200 • Lakewood, CO 80227
303.980.5200 • www.pinyon-env.com

August 15, 2024

Texas Commission on Environmental Quality (TCEQ)
Air Permits Initial Review Team (APIRT)
Mail Code 161
P.O. Box 13087
Austin, TX 78753-3087

Subject: Air Quality Standard Permit for Electric Generating Units
Abilene DC 1, LLC
Longhorn Data Center
Taylor County, Texas

On behalf of Abilene DC 1, LLC (Abilene DC), please find enclosed the initial application for a standard permit for electric generating units for the Longhorn Data Center in Abilene within Taylor County, Texas, pursuant to the terms and conditions of 30 Texas Administrative Code (TAC)§116.610 through 30 TAC §116.615. The application is being submitted through STEERS, providing access to Region 3, and the fee will be paid online.

Should you have any questions or comments about the application, please contact Kaitlin Meszaros by email at meszaros@pinyon-env.com or by phone at 631-245-0308. Thank you for your assistance in this matter.

Sincerely,

PINYON ENVIRONMENTAL, INC.,

Kaitlin Meszaros
Air Quality & Noise Specialist

cc: Laura Pritchard, Crusoe Energy Systems, LLC
Michael Duplantis, Crusoe Energy Systems, LLC

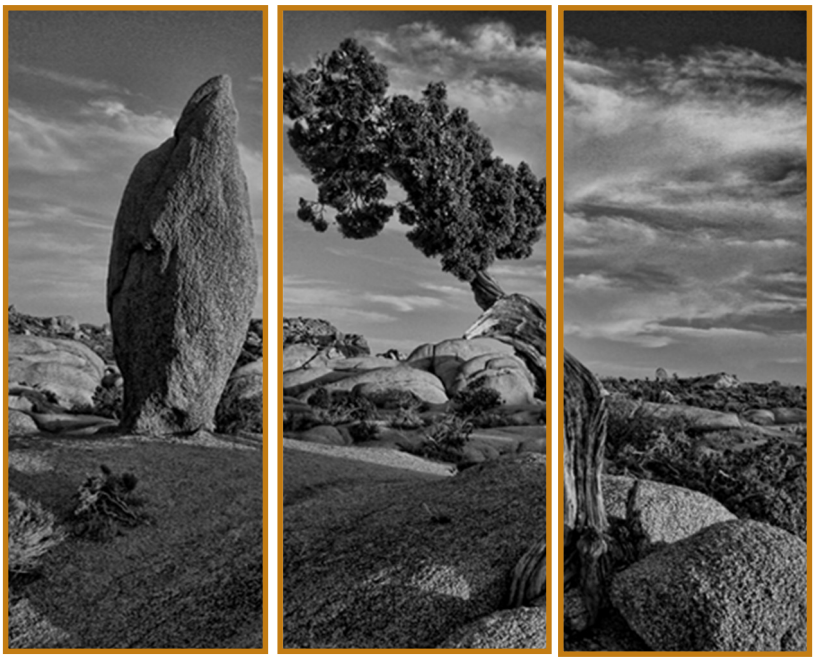
Pinyon Environmental, Inc.
Corporate Headquarters
3222 South Vance Street, Suite 200, Lakewood, CO 80227
T: 303.980.5200 F: 303.980.0089
www.pinyon-env.com

August 15, 2024

Initial Application - Air Quality Standard Permit for Electric Generating Units

Abilene DC 1, LLC
Longhorn Data Center
Taylor County, Texas

Pinyon Project No.:
1/19-1347-01



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Initial Application - Air Quality Standard Permit for Electric Generating Units

Abilene DC 1, LLC
Longhorn Data Center
Taylor County, Texas

Pinyon Project No.:
I19-1347-01

Prepared by:

Kaitlin Meszaros

Reviewed by:

Dustin Collins

Table of Contents

TCEQ Application Forms

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) 08/01/2024

☒ 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:*

Abilene DC 1, 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)*
0805587707	32095486604	99-3520463	

11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

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:	255 Fillmore Street						
	City	Denver	**State**	CO	**ZIP**	80206	**ZIP + 4**

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	mduplantis@crusoe.ai

18. Telephone Number	**19. Extension or Code**	**20. Fax Number** *(if applicable)*

(832) 754-3833		( ) -

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.)*

Longhorn Data Center

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

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

25. Description to Physical Location:	From Abilene, Texas, travel north on Treadway Boulevard and travel for 2.2 miles. Continue onto Pine Street and continue for 0.9 miles. Turn left onto I-20 Frontage Road and travel for 1 mile. Turn right onto Old Anson Road and continue for 2.2 miles. Turn left onto facility entrance road.

26. Nearest City	**State**	**Nearest ZIP Code**
Abilene	TX	79601

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:	32.50792		**28. Longitude (W) In Decimal:**	-99.77722	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
32	30	28.51	-99	46	37.99

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)
7374	N/A	518210	N/A

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

Electricity generation for data center

34. Mailing Address:	**255 Fillmore Street**						
	City	**Denver**	**State**	**CO**	**ZIP**	**80206**	**ZIP + 4**
35. E-Mail Address:	**mduplantis@crusoe.ai**						

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(832) 754-3833		( ) -

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:	Kaitlin Meszaros	**41. Title:**	Air Quality & Noise Specialist

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(631 **)** 245-0308		**( )** -	meszaros@pinyon-env.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:	Abilene DC 1, LLC dba Crusoe Energy Systems, LLC	**Job Title:**	Environmental Specialist
Name *(In Print):*	Laura Pritchard	**Phone:**	**(** 970 **)** 749- **8615**
Signature:		**Date:**	

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:
Abilene DC 1, LLC dba Crusoe Energy Systems, LLC
B. Company Official Contact Information (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Other:)_____
Name: Michael Duplantis
Title: Sr EHS Director
Mailing Address: 255 Fillmore Street
City: Denver
State: Colorado
ZIP Code: 80206
Telephone No.: 832-754-3833
Fax No.: N/A
Email Address: mduplantis@crusoe.ai
All permit correspondence will be sent via email. Yes
C. Technical Contact Information (☐ Mr. ☐ Mrs. ☒ Ms. ☐ Other:)_____
Name: Laura Pritchard
Title: Environmental Specialist
Company Name: Crusoe Energy Systems, LLC
Mailing Address: 255 Fillmore Street
City: Denver
State: Colorado
ZIP Code: 80206
Telephone No.: 970-749-8615
Fax No.: N/A
Email Address: lpritchard@crusoe.ai
II. Facility and Site Information
A. Name and Type of Facility
Facility Name: Longhorn Data Center
Type of Facility: ☒ Permanent ☐ Temporary

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

II. Facility and Site Information *(continued)*
For portable units, please provide the serial number of the equipment being authorized below.
Serial No(s): N/A
B. Facility Location Information
Street Address: N/A
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 Abilene, TX, travel north on Treadway Boulevard and travel for 2.2 miles. Continue onto Pine Street and continue
for 0.9 miles. Turn left onto I-20 Frontage Road and travel for 1 mile. Turn right onto Old Anson Road and continue for
2.2 miles. Turn left onto facility entrance road.
City: Abilene
County: Taylor
ZIP Code: 79601
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):
Regulated Entity Number (RN):
D. TCEQ Account Identification Number (if known):
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: 6005
G. Previous Standard Exemption or PBR Registration Number:
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.

Form PI-1S
Registrations for Air Standard Permit
(Page 3)
Texas Commission on Environmental Quality

II. Facility and Site Information *(continued)*
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), and Standard Permit registration number(s), and associated effective date in the spaces provided below.
Standard Exemption, PBR Registration, and Standard Permit Registration Number(s) and Effective Date(s)
PBR 106.472 and PBR 106.511 - TBD
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 ☐ GOP ☐ GOP application/revision (submitted or under APD review) ☒ N/A
☐ SOP application/revision (submitted or under APD review)

Form PI-1S
Registrations for Air Standard Permit
(Page 4)
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:	
IV. Public Notice *(if applicable)*	
A. Responsible Person (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Other:)_____	
Name: Michael Duplantis	
Title: Sr EHS Director	
Company: Crusoe Energy Systems, LLC	
Mailing Address: 255 Fillmore Street	
City: Denver	
State: Colorado	
ZIP Code: 80206	
Telephone No.: 832-754-3833	
Fax No.: N/A	
Email Address: mduplantis@crusoe.ai	
B. Technical Contact (☐ Mr. ☐ Mrs. ☒ Ms. ☐ Other):_____	
Name: Laura Pritchard	
Title: Environmental Specialist	
Company: Crusoe Energy Systems, LLC	
Mailing Address: 255 Fillmore Street	
City: Denver	
State: Colorado	
ZIP Code: 80206	
Telephone No.: 970-749-8615	
Fax No.: N/A	
Email Address: lpritchard@crusoe.ai	
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

IV.	**Public Notice *(continued)*** *(if applicable) (continued)*	
If "Yes," list which language(s) are required by the bilingual program below?		
Spanish		
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
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 shutdown 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.		

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

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 Sections 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): 10/14/2024	
Projected Start of Operation (provide date): 07/01/2025	
Length of Time at the Site: >1 year	
VII. Delinquent Fees and Penalties	
This form **will not be processed** until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the 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.	

Form PI-1S
Registrations for Air Standard Permit
(Page 7)
Texas Commission on Environmental Quality

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, 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): Michael Duplantis
Signature (original signature required):
Date:
IX. Copies of the Registration
The 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/.

Texas Commission on Environmental Quality
Air Quality Standard Permits
General Requirements Checklist
Title 30 Texas Administrative Code §§116.610-116.615

Check the most appropriate answer and include any additional information in the spaces provided. If additional space is needed, please include an extra page and reference the rule number. The SP forms, tables, checklists, and guidance documents are available from the TCEQ, Air Permits Division web site at: www.tceq.texas.gov/permitting/air/nav/standard.html.

Most Standard Permits require registration with the commission's Office of Permitting, Remediation, and Registration in Austin. The facilities and/or changes to facilities can be registered by completing a Form PI-1S, "Registration for Air Standard Permit." This checklist should accompany the registration form to expedite any registration review.

CHECK THE MOST APPROPRIATE ANSWERS AND FILL IN THE REQUESTED INFORMATION		
Rule	**Questions/Description**	**Response**
116.610(a)(1)	Are there net emissions increases associated with this registration?	☐ YES ☒ NO
	If "YES," will net emission increases of air contaminants from the project, other than those for which a National Ambient Air Quality Standard (NAAQS) has been established, meet the emission limits of § 106.261 or § 106.262?	☐ YES ☐ NO
	If "NO," does the specific standard permit exempt emissions from this limit?	☒ YES ☐ NO
Attach emissions summary and calculations:		
116.610(a)(3)	Do any of the Title 40 Code of Federal Regulations Part (CFR) 60, New Source Performance Standards apply to this registration?	☒ YES ☐ NO
If "YES," list subparts: **KKKK**		
116.610 (a)(4)	Do any Hazardous Air Pollutant requirements apply to this registration?	☐ YES ☒ NO
If "YES," list subparts		
116.610 (a)(5)	Do any maximum achievable control technology (MACT) standards as listed under 40 CFR Part 63 or Chapter 113, Subchapter C (National Emissions Standard for Hazardous Air for Source Categories) apply to this registration?	☐ YES ☒ NO
If "YES," list subparts:		
116.610(a)(6)	Will additional emission allowances under Chapter 101, Subchapter H, Division 3, Emissions Banking and Trading, need to be obtained following this registration?	☐ YES ☒ NO
116.611(a)(1-6)	Is the following documentation included with this registration:	☒ YES ☐ NO
	Emissions calculations including the basis of the calculations?	☒ YES ☐ NO
	Quantification of all emission increases and/or decreases associated with this project?	☒ YES ☐ NO
	Sufficient information demonstrating that this project does not trigger PSD or NNSR review?	☒ YES ☐ NO
	Description of efforts to minimize collateral emissions increases associated with this project?	☒ YES ☐ NO
	Process descriptions including related processes?	☒ YES ☐ NO
	Description of any equipment being installed?	☒ YES ☐ NO

Texas Commission on Environmental Quality
Air Quality Standard Permits
General Requirements Checklist
Title 30 Texas Administrative Code §§116.610-116.615

Rule	Question/Description	Response
116.614	Are the required fee and a copy of the check or money order provided with the application?	☒ YES ☐ NO
116.615(1)	Will emissions from the facility 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?	☒ YES ☐ NO
116.615(2)	Do you understand that all representations with regard to construction plans, operating procedures, and maximum emission rates in this registration become conditions upon which the facility will be constructed and operated?	☒ YES ☐ NO
116.615(3)	Do you understand that all changes authorized by this registration need to be incorporated into the facility's permit if the facility is currently permitted under §116.110 (relating to Applicability)?	☒ YES ☐ NO
List all related permit numbers:		
116.615(9)617(e)(1)	Will all air pollution emission capture and abatement equipment be maintained in good working order?	☒ YES ☐ NO
116.615(10)	Will the facility comply with all applicable rules and regulations of the TCEQ, the Texas Health and Safety Code, Chapter 382, and the Texas Clean Air Act?	☒ YES ☐ NO

Save Form Reset Form

Table 1(a) Emission Point Summary
Air Contaminant Data (Page 1)
Texas Commission on Environmental Quality

Date:	Permit No.:	Regulated Entity No.:	Area Name:	Customer Reference No.:
8/9/2024	TBD	TBD	Longhorn Data Center	TBD

Review of application and issuance of permits will be expedited by supplying all necessary information requested on the Table.

eEPN	FIN	Name	Component or Air Contaminant Name	Air Contaminant Emission Rate lb/hr	Air Contaminant Emission Rate TPY
TURBINE-1 through	TURBINE-1	Titan 350 natural gas-fired turbine	NO_X	3.15	13.80
TURBINE-6	through		CO	3.83	16.79
(emissions per unit)	TURBINE-6		VOC	4.83	21.15
			NH_3	5.29	23.19
			$PM_{10}/PM_{2.5}$	1.96	8.60
			SO_2	1.01	4.43
			HAPs	0.31	1.34
TURBINE-7 through	TURBINE-7	GE LM2500 natural gas-fired turbine	NO_X	3.15	9.26
TURBINE-12	through		CO	3.83	11.27
(emissions per unit)	TURBINE-12		VOC	5.55	16.33
			NH_3	5.29	15.57
			$PM_{10}/PM_{2.5}$	2.04	5.99
			SO_2	1.05	3.09
			HAPs	0.32	0.93
FUG	FUG	Fugitive leaks	VOC	0.0022	0.010
			NH_3	2.89	12.64

EPN = Emission Point
FIN = Facility Identification Number

Table 1(a) Emission Point Summary
Air Contaminant Data (Page 2)
Texas Commission on Environmental Quality

Date:	Permit No.:	Regulated Entity No.:	Area Name:	Customer Reference No.:
8/9/2024	TBD	TBD	Longhorn Data Center	TBD

Review of application and issuance of permits will be expedited by supplying all necessary information requested on the Table.

EPN = Emission Point
FIN = Facility Identification Number

Table 1F
Air Quality Application Supplement
Texas Commission on Environmental Quality

Permit Number:	TBD
Application Submittal Date:	08/09/2024
Company:	Abilene DC 1, LLC dba Crusoe Energy Systems, LLC
Regulated Entity Number:	**RN:** TBD
Named Source (Y/N):	☒ Yes ☐ No
City:	Abilene
County:	Taylor
Permit Activity:	☒ New Source ☐ Modification

Complete for all Pollutants with a Project Emission Increase.

Questions	Ozone VOC	Ozone NO_x	CO	PM_{10}	$PM_{2.5}$	NO_x	SO_2	Other[1]
Is nonattainment potentially applicable? (Y/N)	No	No	No	No	No	No	No	No
Is PSD potentially applicable? (Y/N)	No	No	No	No	No	No	No	No
Existing site PTE (tpy)?	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total project emissions increase (tpy from Table 2F)?	224.9	138.4	168.3	87.5	87.5	138.4	45.1	1,553,387
Is the existing site a major source? (Y/N)	No	No	No	No	No	No	No	No
If not, is the project a major source by itself? (Y/N)	No	No	No	No	No	No	No	No
If site is major source, is the project increase significant? (Y/N)	No	No	No	No	No	No	No	No
Net contemporaneous change, including proposed project, from Table 3F. (tpy)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Major NSR Applicable? (Y/N)	No	No	No	No	No	No	No	No

[1] Other pollutants. [Pb, H_2S, TRS, H_2SO_4, Fluoride excluding HF, Greenhouse Gases as CO_2e, etc.].

Table 1F
Air Quality Application Supplement
Texas Commission on Environmental Quality

If netting required, estimated start of construction date (MM/DD/YR):	
Beginning of Contemporaneous Period, 5 years prior to start of construction (MM/DD/YR):	
End of Contemporaneous Period, the start of operation date (MM/DD/YR):	

Table 2F
Project Emissions Increase Supplement
Texas Commission on Environmental Quality

Pollutant[1]:	NOx
Permit Number:	TBD
Baseline Period (Month and Year):	
To Baseline Period (Month and Year):	

[1] Individual Table 2F's should be used to summarize the project emissions increase for each criteria pollutant using the EPA's "substantially related" test to determine the scope of the project.

Table 2F
Project Emissions Increase Supplement
Texas Commission on Environmental Quality

New, Affected, or Modified Facilities[2]

Item Number	FIN	EPN	Permit Number	Actual Emissions[3]	A Baseline Emissions[4]	B Proposed Potential to Emit Emissions[5]	C Projected Actual Emissions[6]	Difference, (B-A) or (C-A)[7]	Correction[8]	Project Emissions Increases[9]
1.	TURBINE-1-6	TURBINE-1-6	TBD	0.0	0.0	82.8		82.8		82.8
2.	TURBINE-7-12	TURBINE-7-1	TBD	0.0	0.0	55.6		55.6		55.6
3.										
4.										
5.										
6.										
7.										
8.										
9.										
						Total	**Project**	**Emissions**	**Increase**	138.4

[2] Facility Identification Number (FIN) and Emission Point Number (EPN) as designated in NSR permit application or emission inventory.
[3] All records and calculations for these values must be available upon request.
[4] Correct actual emissions for currently applicable rule or permit requirements, and periods of non-compliance. These corrections, as well as any MSS previously demonstrated under 30 TAC 101, should be explained in the Table 2F supplement.
[5] Potential to Emit emissions are the current or proposed allowable emission rate. If Projected Actual Emissions are used for the source, they must be noted in the next column.
[6] Projected Actual Emissions are subject to 30 TAC 116.127 requirements and the basis for the projection identified in the Table 2F supplement.
[7] Proposed Potential to Emit (column B) or Projected Actual Emissions (Column C) minus Baseline Emissions (column A). New units must use Proposed Potential to Emit Emissions.
[8] Correction to be made to the Project Emission Increase for baseline actual emissions that could have accommodated or product demand growth during the baseline period, in accordance with 40 CFR 52.21(b)(41)(ii). Note, the could have accommodated or product demand growth correction may only be used with Projected Actual Emissions. The justification and basis for this estimate must be provided in the Table 2F supplement.
[9] Project Emissions Increase is obtained by subtracting the Correction column from the Difference column value. The number for each source may be positive or negative.

Table 2F
Project Emissions Increase Supplement
Texas Commission on Environmental Quality

Pollutant[1]:	CO
Permit Number:	TBD
Baseline Period (Month and Year):	
To Baseline Period (Month and Year):	

[1] Individual Table 2F's should be used to summarize the project emissions increase for each criteria pollutant using the EPA's "substantially related" test to determine the scope of the project.

Table 2F
Project Emissions Increase Supplement
Texas Commission on Environmental Quality

New, Affected, or Modified Facilities[2]

Item Number	FIN	EPN	Permit Number	Actual Emissions[3]	A Baseline Emissions[4]	B Proposed Potential to Emit Emissions[5]	C Projected Actual Emissions[6]	Difference, (B-A) or (C-A)[7]	Correction[8]	Project Emissions Increases[9]
1.	TURBINE-1-6	TURBINE-1-6	TBD	0.0	0.0	100.7		100.7		100.7
2.	TURBINE-7-12	TURBINE-7-1	TBD	0.0	0.0	67.6		67.6		67.6
3.										
4.										
5.										
6.										
7.										
8.										
9.										
						Total	**Project**	**Emissions**	**Increase**	168.3

[2] Facility Identification Number (FIN) and Emission Point Number (EPN) as designated in NSR permit application or emission inventory.
[3] All records and calculations for these values must be available upon request.
[4] Correct actual emissions for currently applicable rule or permit requirements, and periods of non-compliance. These corrections, as well as any MSS previously demonstrated under 30 TAC 101, should be explained in the Table 2F supplement.
[5] Potential to Emit emissions are the current or proposed allowable emission rate. If Projected Actual Emissions are used for the source, they must be noted in the next column.
[6] Projected Actual Emissions are subject to 30 TAC 116.127 requirements and the basis for the projection identified in the Table 2F supplement.
[7] Proposed Potential to Emit (column B) or Projected Actual Emissions (Column C) minus Baseline Emissions (column A). New units must use Proposed Potential to Emit Emissions.
[8] Correction to be made to the Project Emission Increase for baseline actual emissions that could have accommodated or product demand growth during the baseline period, in accordance with 40 CFR 52.21(b)(41)(ii). Note, the could have accommodated or product demand growth correction may only be used with Projected Actual Emissions. The justification and basis for this estimate must be provided in the Table 2F supplement.
[9] Project Emissions Increase is obtained by subtracting the Correction column from the Difference column value. The number for each source may be positive or negative.

Table 2F
Project Emissions Increase Supplement
Texas Commission on Environmental Quality

Pollutant[1]:	VOC
Permit Number:	TBD
Baseline Period (Month and Year):	
To Baseline Period (Month and Year):	

[1] Individual Table 2F's should be used to summarize the project emissions increase for each criteria pollutant using the EPA's "substantially related" test to determine the scope of the project.

Table 2F
Project Emissions Increase Supplement
Texas Commission on Environmental Quality

New, Affected, or Modified Facilities[2]

Item Number	FIN	EPN	Permit Number	Actual Emissions[3]	A Baseline Emissions[4]	B Proposed Potential to Emit Emissions[5]	C Projected Actual Emissions[6]	Difference, (B-A) or (C-A)[7]	Correction[8]	Project Emissions Increases[9]
1.	TURBINE-1-6	TURBINE-1-6	TBD	0.0	0.0	126.9		126.9		126.9
2.	TURBINE-7-12	TURBINE-7-1	TBD	0.0	0.0	98.0		98.0		98.0
3.	FUG	FUG	TBD	0.0	0.0	0.01		0.01		0.01
4.										
5.										
6.										
7.										
8.										
9.										
						Total	**Project**	**Emissions**	**Increase**	224.9

[2] Facility Identification Number (FIN) and Emission Point Number (EPN) as designated in NSR permit application or emission inventory.
[3] All records and calculations for these values must be available upon request.
[4] Correct actual emissions for currently applicable rule or permit requirements, and periods of non-compliance. These corrections, as well as any MSS previously demonstrated under 30 TAC 101, should be explained in the Table 2F supplement.
[5] Potential to Emit emissions are the current or proposed allowable emission rate. If Projected Actual Emissions are used for the source, they must be noted in the next column.
[6] Projected Actual Emissions are subject to 30 TAC 116.127 requirements and the basis for the projection identified in the Table 2F supplement.
[7] Proposed Potential to Emit (column B) or Projected Actual Emissions (Column C) minus Baseline Emissions (column A). New units must use Proposed Potential to Emit Emissions.
[8] Correction to be made to the Project Emission Increase for baseline actual emissions that could have accommodated or product demand growth during the baseline period, in accordance with 40 CFR 52.21(b)(41)(ii). Note, the could have accommodated or product demand growth correction may only be used with Projected Actual Emissions. The justification and basis for this estimate must be provided in the Table 2F supplement.
[9] Project Emissions Increase is obtained by subtracting the Correction column from the Difference column value. The number for each source may be positive or negative.

Table 2F
Project Emissions Increase Supplement
Texas Commission on Environmental Quality

Pollutant[1]:	PM10/PM2.5
Permit Number:	TBD
Baseline Period (Month and Year):	
To Baseline Period (Month and Year):	

[1] Individual Table 2F's should be used to summarize the project emissions increase for each criteria pollutant using the EPA's "substantially related" test to determine the scope of the project.

Table 2F
Project Emissions Increase Supplement
Texas Commission on Environmental Quality

New, Affected, or Modified Facilities[2]

Item Number	FIN	EPN	Permit Number	Actual Emissions[3]	A Baseline Emissions[4]	B Proposed Potential to Emit Emissions[5]	C Projected Actual Emissions[6]	Difference, (B-A) or (C-A)[7]	Correction[8]	Project Emissions Increases[9]
1.	TURBINE-1-6	TURBINE-1-6	TBD	0.0	0.0	51.6		51.6		51.5
2.	TURBINE-7-12	TURBINE-7-1	TBD	0.0	0.0	36.0		36.0		36.0
3.										
4.										
5.										
6.										
7.										
8.										
9.										
						Total	**Project**	**Emissions**	**Increase**	87.5

[2] Facility Identification Number (FIN) and Emission Point Number (EPN) as designated in NSR permit application or emission inventory.
[3] All records and calculations for these values must be available upon request.
[4] Correct actual emissions for currently applicable rule or permit requirements, and periods of non-compliance. These corrections, as well as any MSS previously demonstrated under 30 TAC 101, should be explained in the Table 2F supplement.
[5] Potential to Emit emissions are the current or proposed allowable emission rate. If Projected Actual Emissions are used for the source, they must be noted in the next column.
[6] Projected Actual Emissions are subject to 30 TAC 116.127 requirements and the basis for the projection identified in the Table 2F supplement.
[7] Proposed Potential to Emit (column B) or Projected Actual Emissions (Column C) minus Baseline Emissions (column A). New units must use Proposed Potential to Emit Emissions.
[8] Correction to be made to the Project Emission Increase for baseline actual emissions that could have accommodated or product demand growth during the baseline period, in accordance with 40 CFR 52.21(b)(41)(ii). Note, the could have accommodated or product demand growth correction may only be used with Projected Actual Emissions. The justification and basis for this estimate must be provided in the Table 2F supplement.
[9] Project Emissions Increase is obtained by subtracting the Correction column from the Difference column value. The number for each source may be positive or negative.

Table 2F
Project Emissions Increase Supplement
Texas Commission on Environmental Quality

Pollutant[1]:	SO2
Permit Number:	TBD
Baseline Period (Month and Year):	
To Baseline Period (Month and Year):	

[1] Individual Table 2F's should be used to summarize the project emissions increase for each criteria pollutant using the EPA's "substantially related" test to determine the scope of the project.

Table 2F
Project Emissions Increase Supplement
Texas Commission on Environmental Quality

New, Affected, or Modified Facilities[2]

Item Number	FIN	EPN	Permit Number	Actual Emissions[3]	A Baseline Emissions[4]	B Proposed Potential to Emit Emissions[5]	C Projected Actual Emissions[6]	Difference, (B-A) or (C-A)[7]	Correction[8]	Project Emissions Increases[9]
1.	TURBINE-1-6	TURBINE-1-6	TBD	0.0	0.0	26.6		26.6		26.6
2.	TURBINE-7-12	TURBINE-7-1	TBD	0.0	0.0	18.5		18.5		18.5
3.										
4.										
5.										
6.										
7.										
8.										
9.										
						Total	**Project**	**Emissions**	**Increase**	45.1

[2] Facility Identification Number (FIN) and Emission Point Number (EPN) as designated in NSR permit application or emission inventory.
[3] All records and calculations for these values must be available upon request.
[4] Correct actual emissions for currently applicable rule or permit requirements, and periods of non-compliance. These corrections, as well as any MSS previously demonstrated under 30 TAC 101, should be explained in the Table 2F supplement.
[5] Potential to Emit emissions are the current or proposed allowable emission rate. If Projected Actual Emissions are used for the source, they must be noted in the next column.
[6] Projected Actual Emissions are subject to 30 TAC 116.127 requirements and the basis for the projection identified in the Table 2F supplement.
[7] Proposed Potential to Emit (column B) or Projected Actual Emissions (Column C) minus Baseline Emissions (column A). New units must use Proposed Potential to Emit Emissions.
[8] Correction to be made to the Project Emission Increase for baseline actual emissions that could have accommodated or product demand growth during the baseline period, in accordance with 40 CFR 52.21(b)(41)(ii). Note, the could have accommodated or product demand growth correction may only be used with Projected Actual Emissions. The justification and basis for this estimate must be provided in the Table 2F supplement.
[9] Project Emissions Increase is obtained by subtracting the Correction column from the Difference column value. The number for each source may be positive or negative.

Process Description

Abilene DC 1, LLC (Abilene DC) dba Crusoe Energy Systems, LLC (Crusoe) plans to install and operate equipment at the Longhorn Data Center in Abilene within Taylor County, Texas. The purpose of the equipment is to generate power for onsite use only for data centers and computing. The emissions units proposing coverage under the Standard Permit for Electric Generating Units are:

- Six (6) 35 MW Titan 350 natural gas simple-cycle turbines each fitted with a selective catalyst reduction (SCR) device expected to run 8,760 hours per rolling 12-month period each

- Six (6) 35 MW GE LM2500 natural gas simple-cycle turbines each fitted with a selective catalyst reduction (SCR) device expected to run no more than 5,880 hours per rolling 12-month period each

The simple-cycle turbines will be fueled by pipeline quality natural gas. The SCR systems will utilize aqueous ammonia to reduce exhaust emissions. The aqueous ammonia will be stored in pressurized tanks and only fugitive emissions are expected to occur.

Sources of emissions include:

- Natural Gas Simple-Cycle Turbines: NOx, CO, SO_2, PM, VOC, NH_3, HAPs, CO_2e

- Fugitive Leaks: VOC, NH_3, CO_2e

Natural gas turbine emissions were calculated using manufacturer control emissions rates for NOx, CO, VOC, and NH_3, AP-42 Section 3.1 for PM, SO_2, and HAPs, and 40 Code of Federal Regulations (CFR) Part 98 Subpart C Table C-1 and Table C-2 for natural gas with global warming potentials in Subpart A Table A-1 published in early 2024. The NOx controlled emissions rate is estimated to be 0.09 lb/MWh.

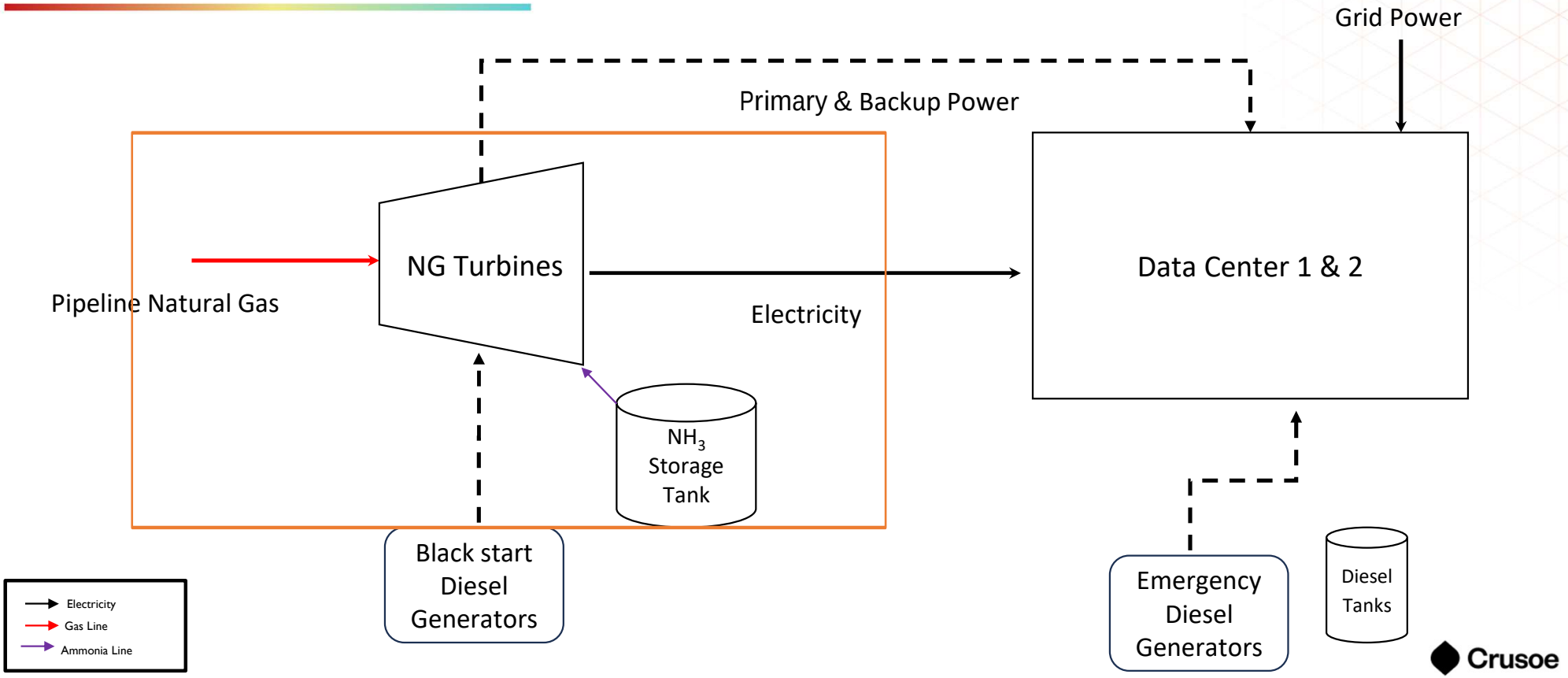
Fugitive leaks were calculated using emissions factors published in the EPA Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017). Table 2-8 total hydrocarbon (THC) emissions factors for leaks less than 10,000 ppm were used to estimate VOC as well as CO_2e emissions where global warming potentials in 40 CFR Part 98 Subpart A Table A-1 were used. NH_3 emissions were calculated using Table 2-5 emissions factors for leaks less than 10,000 ppm.

There will also be diesel backup generators and belly tanks at the location to be used onsite for emergency purposes. These emissions units will be permitted under Permit By Rule (30 TAC 106.511 and 30 TAC 106.472, respectively). Emissions calculations are provided for the emissions units covered under Permit By Rule for a complete review of facility-wide potential to emit.

Process Flow Diagram

Longhorn Simplified Process Flow

Equipment within Orange Box will be Permitted under Standard Permit for EGUs



Area Map

N

Legend

1/4 Mile Buffer

Facility Boundary

0 500 1,000 Feet

Pinyon Environmental, Inc.

SITE LOCATION

Crusoe Energy Systems, LLC
Longhorn Data Center
Abilene, Texas

Site Location: Taylor County, Texas	Drawn By: AMS	Figure 1
Pinyon Project Number: 1/19-1347-01	Reviewed By: KM	Date: 7/30/2024

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Emissions Calculations

Facility-Wide Controlled Potential Annual Emissions

Permit by Rule Emissions Sources															
Emission Source Classification	**Power (MW)**	**Count**	**Total Power**	**Engine Make/Model**	**Emission Levels**	**Rotational Hours**	**NOx**	**CO**	**VOC**	**PM**	**SO_2**	**NH_3**	**HCHO**	**HAPs**	**CO_2e**
Emergency Backup Generator	3	5	15	Cat C175	Tier II	200	23.40	12.68	1.46	0.73	0.022	--	0.0011	0.020	2,375
Emergency Backup Generator	2	7	14	Cat 3516	Tier IV	200	2.27	11.80	0.64	0.100	0.020	--	0.0010	0.018	2,164
Emergency Backup Generator	1-2.25	212	470	Baudouin Tier IV	Tier IV	200	69.35	10.81	20.70	2.24	0.95	--	0.050	0.86	102,830
Diesel Belly Tanks	--	224	--	--	--	8760	--	--	0.41	--	--	--	--	--	--
						Totals	**95.02**	**35.28**	**23.21**	**3.07**	**0.99**	**0.00**	**0.052**	**0.89**	**107,369**

Standard Permit for EGU Emissions Sources															
Location	**Power (MW)**	**Count**	**Total Power**	**Engine Make/Model**	**Emission Levels**	**Rotational Hours**	**NOx**	**CO**	**VOC**	**PM**	**SO_2**	**NH_3**	**HCHO**	**HAPs**	**CO_2e**
Gas Only Turbines	35	6	210	Titan 350	SCR System	8760	82.78	100.7	126.9	51.57	26.57	139.1	5.55	8.03	915,121
Dual Fuel Turbines	35	6	210	GE LM2500	SCR System	5880	55.57	67.60	97.96	35.97	18.53	93.40	3.87	5.60	638,266
						Totals	**138.4**	**168.3**	**224.9**	**87.54**	**45.10**	**232.5**	**9.42**	**13.63**	**1,553,387**

Fugitives															
Location	**Power (MW)**	**Count**	**Total Power**	**Engine Make/Model**	**Emission Levels**	**Rotational Hours**	**NOx**	**CO**	**VOC**	**PM**	**SO_2**	**NH_3**	**HCHO**	**HAPs**	**CO_2e**
Fugitive Leaks	--	--	--	--	--	8760	--	--	0.010	--	--	12.64	--	--	4.84

						Facility-Wide Totals	**233.4**	**203.6**	**248.1**	**90.6**	**46.1**	**245.2**	**9.5**	**14.5**	**1,660,760**

Facility-Wide Controlled Potential Hourly Emissions

Permit by Rule Emissions Sources															
Emission Source Classification	**Power (MW)**	**Count**	**Total Power**	**Engine Make/Model**	**Emission Levels**	**Rotational Hours**	**NOx**	**CO**	**VOC**	**PM**	**SO_2**	**NH_3**	**HCHO**	**HAPs**	**CO_2e**
Emergency Backup Generator	3	5	15	Cat C175	Tier II	200	234.0	126.8	14.63	7.31	0.22	--	0.011	0.20	23,752
Emergency Backup Generator	2	7	14	Cat 3516	Tier IV	200	22.69	118.0	6.35	1.00	0.20	--	0.010	0.18	21,640
Emergency Backup Generator	1-2.25	212	470	Baudouin Tier IV	Tier IV	200	693.5	108.1	207.0	22.36	9.52	--	0.50	8.56	1,028,299
Diesel Belly Tanks	--	224	--	--	--	8760	--	--	0.093	--	--	--	--	--	--
						Totals	**950.2**	**352.8**	**228.1**	**30.67**	**9.94**	**0.00**	**0.52**	**8.94**	**1,073,691**

Standard Permit for EGU Emissions Sources															
Location	**Power (MW)**	**Count**	**Total Power**	**Engine Make/Model**	**Emission Levels**	**Rotational Hours**	**NOx**	**CO**	**VOC**	**PM**	**SO_2**	**NH_3**	**HCHO**	**HAPs**	**CO_2e**
Gas Only Turbines	35	6	210	Titan 350	SCR System	8760	18.90	22.99	28.97	11.77	6.07	31.77	1.27	1.83	208,932
Dual Fuel Turbines	35	6	210	GE LM2500	SCR System	5880	18.90	22.99	33.32	12.23	6.30	31.77	1.32	1.90	217,097
						Totals	**37.80**	**45.99**	**62.29**	**24.01**	**12.37**	**63.53**	**2.58**	**3.74**	**426,029**

Fugitives															
Location	**Power (MW)**	**Count**	**Total Power**	**Engine Make/Model**	**Emission Levels**	**Rotational Hours**	**NOx**	**CO**	**VOC**	**PM**	**SO_2**	**NH_3**	**HCHO**	**HAPs**	**CO_2e**
Fugitive Leaks	--	--	--	--	--	8760	--	--	0.002	--	--	2.89	--	--	1.11

Turbine Emissions

Source Information

Emission Unit ID:	TURBINE-1 through TURBINE-6	
Engine Make/Model	Titan 350 Turbine	
Service	Power Generation	
Controls - Y or N / Type	Y	SCR
Number of Operational Units	6	turbine
Nominal Power Rating[1]	35,000	kW
Fuel Consumption (BSFC)[1]	8,495	Btu/(kW-hr)
Heat Rating[2]	297.3	MMBtu/hr
Fuel Consumption[2]	2,553	MMscf/yr
Fuel Consumption[2]	0.29	MMscf/hr
Fuel Heating Value[3]	1,020	Btu/scf
Operating Hours	8,760	hrs/yr

Pollutant	Emission Factor		Annual Emissions per Turbine		Source of Emissions Factors
	lb/MMBtu	g/hp-hr	lb/hr	ton/yr	
NOx	-	0.030	3.15	13.80	Controlled manufacturer rate
CO	-	0.037	3.83	16.79	Controlled manufacturer rate
VOC	-	0.047	4.83	21.15	Controlled manufacturer rate
NH_3	-	-	5.29	23.19	10 ppmvd limit[4]
SO_2	3.40E-03	-	1.01	4.43	AP-42, Chapter 3.1, Table 3.1-2a; footnote h
PM_{10}	6.60E-03	-	1.96	8.60	AP-42, Chapter 3.1, Table 3.1-2a
$PM_{2.5}$	6.60E-03	-	1.96	8.60	AP-42, Chapter 3.1, Table 3.1-2a
1,3-Butadiene	4.30E-07	-	1.28E-04	5.60E-04	AP-42, Chapter 3.1, Table 3.1-3
Acetaldehyde	4.00E-05	-	1.19E-02	5.21E-02	AP-42, Chapter 3.1, Table 3.1-3
Acrolein	6.40E-06	-	1.90E-03	8.33E-03	AP-42, Chapter 3.1, Table 3.1-3
Benzene	1.20E-05	-	3.57E-03	1.56E-02	AP-42, Chapter 3.1, Table 3.1-3
Ethylbenzene	3.20E-05	-	9.51E-03	4.17E-02	AP-42, Chapter 3.1, Table 3.1-3
Formaldehyde	7.10E-04	-	2.11E-01	9.25E-01	AP-42, Chapter 3.1, Table 3.1-3
Naphthalene	1.30E-06	-	3.87E-04	1.69E-03	AP-42, Chapter 3.1, Table 3.1-3
PAH	2.20E-06	-	6.54E-04	2.87E-03	AP-42, Chapter 3.1, Table 3.1-3
Propylene Oxide	2.90E-05	-	8.62E-03	3.78E-02	AP-42, Chapter 3.1, Table 3.1-3
Toluene	1.30E-04	-	3.87E-02	1.69E-01	AP-42, Chapter 3.1, Table 3.1-3
Xylenes	6.40E-05	-	1.90E-02	8.33E-02	AP-42, Chapter 3.1, Table 3.1-3
Total HAPS	1.03E-03		0.31	1.34	
Pollutant	**Emission Factor**		**Annual Emissions per Turbine**		**Source of Emissions Factors**
	kg/MMBtu	**g/hp-hr**	**lb/hr**	**ton/yr**	
CO_2	53.06	-	34,786	152,364	40 CFR Part 98 Subpart C Table C-1
CH_4	0.001	-	0.66	2.87	40 CFR Part 98 Subpart C Table C-2
N_2O	0.0001	-	0.066	0.29	40 CFR Part 98 Subpart C Table C-2
CO_2e	-	-	34,822	152,520	Global warming potentials of 40 CFR Part 98 Table A-1

Notes:

1. Manufactuer specifications,

2. Calculated values.

3. Pipeline quality natural gas heating value estimate (AP-42)

4. Hourly emissions = 10 parts/1,000,000 * 250,000 ft3/min * 60 min/hr / 379.5 ft3/lbmol * 17 lb NH3/lbmol

Turbine Emissions

Source Information

Emission Unit ID:	TURBINE-7 through TURBINE-12	
Engine Make/Model	GE LM 2500	
Service	Power Generation	
Controls - Y or N / Type	Y	SCF
Number of Operational Units	6	turbine
Nominal Power Rating[1]	35,000	kW
Fuel Consumption (BSFC)[1]	8,827	Btu/(kW-hr)
Heat Rating[2]	308.9	MMBtu/hr
Fuel Consumption[2]	1,781	MMscf/yr
Fuel Consumption[2]	0.30	MMscf/hr
Fuel Heating Value[3]	1,020	Btu/scf
Operating Hours	5,880	hrs/yr

Pollutant	Emission Factor		Annual Emissions per Turbine		Source of Emissions Factors
	lb/MMBtu	g/hp-hr	lb/hr	ton/yr	
NOx	-	0.030	3.15	9.26	Controlled manufacturer rate
CO	-	0.037	3.83	11.27	Controlled manufacturer rate
VOC	-	0.054	5.55	16.33	Controlled manufacturer rate
NH_3	-	-	5.29	15.57	10 ppmvd limit[4]
SO_2	3.40E-03	-	1.05	3.09	AP-42, Chapter 3.1, Table 3.1-2a; footnote h
PM_{10}	6.60E-03	-	2.04	5.99	AP-42, Chapter 3.1, Table 3.1-2a
$PM_{2.5}$	6.60E-03	-	2.04	5.99	AP-42, Chapter 3.1, Table 3.1-2a
1,3-Butadiene	4.30E-07	-	1.33E-04	3.91E-04	AP-42, Chapter 3.1, Table 3.1-3
Acetaldehyde	4.00E-05	-	1.24E-02	3.63E-02	AP-42, Chapter 3.1, Table 3.1-3
Acrolein	6.40E-06	-	1.98E-03	5.81E-03	AP-42, Chapter 3.1, Table 3.1-3
Benzene	1.20E-05	-	3.71E-03	1.09E-02	AP-42, Chapter 3.1, Table 3.1-3
Ethylbenzene	3.20E-05	-	9.89E-03	2.91E-02	AP-42, Chapter 3.1, Table 3.1-3
Formaldehyde	7.10E-04	-	2.19E-01	6.45E-01	AP-42, Chapter 3.1, Table 3.1-3
Naphthalene	1.30E-06	-	4.02E-04	1.18E-03	AP-42, Chapter 3.1, Table 3.1-3
PAH	2.20E-06	-	6.80E-04	2.00E-03	AP-42, Chapter 3.1, Table 3.1-3
Propylene Oxide	2.90E-05	-	8.96E-03	2.63E-02	AP-42, Chapter 3.1, Table 3.1-3
Toluene	1.30E-04	-	4.02E-02	1.18E-01	AP-42, Chapter 3.1, Table 3.1-3
Xylenes	6.40E-05	-	1.98E-02	5.81E-02	AP-42, Chapter 3.1, Table 3.1-3
Total HAPS	1.03E-03		0.32	0.93	
Pollutant	**Emission Factor**		**Annual Emissions per Turbine**		**Source of Emissions Factors**
	kg/MMBtu	**g/hp-hr**	**lb/hr**	**ton/yr**	
CO_2	53.06	-	36,146	106,268	40 CFR Part 98 Subpart C Table C-1
CH_4	0.001	-	0.68	2.00	40 CFR Part 98 Subpart C Table C-2
N_2O	0.0001	-	0.07	0.20	40 CFR Part 98 Subpart C Table C-2
CO_2e	-	-	36,183	106,378	Global warming potentials of 40 CFR Part 98 Table A-1

Notes:

1. Manufactuer specifications,

2. Calculated values.

3. Pipeline quality natural gas heating value estimate (AP-42)

4. Hourly emissions = 10 parts/1,000,000 * 250,000 ft3/min * 60 min/hr / 379.5 ft3/lbmol * 17 lb NH3/lbmol

Diesel Generator Emission Calculations

Source Information

Engine Make/Model	Baudouin Tier IV - 2,250 kW	
Power Rating	2,250	kW
Fuel Consumption[1]	219.8	gal/hr (estimate)
Heating Value[1]	30.12	MMBtu/hr
Density of Fuel	7.10	lb/gal
Fuel Heating Value	19,300	Btu/lb
Operating Hours[2]	200	hrs/yr

Pollutant	Emission Factor		Annual Emissions per Generator		Source of Emissions Factors
	lb/MMBtu	g/kW-hr	lb/hr	ton/yr	
NOx	---	0.67	3.32	0.33	Manufacturer specifications
CO	---	0.10	0.52	0.052	Manufacturer specifications w/ 20% safety factor
VOC	---	0.20	0.99	0.099	Manufacturer specifications w/ 20% safety factor
SO_2	1.52E-03	---	0.046	0.0046	AP-42, Chapter 3.4, Table 3.4-1; 15 ppm sulfur
PM_{10}	---	0.022	0.11	0.011	Manufacturer specifications w/ 20% safety factor
$PM_{2.5}$	---	0.022	0.11	0.011	Manufacturer specifications w/ 20% safety factor
Acetaldehyde	2.52E-05	---	7.59E-04	7.59E-05	AP-42, Chapter 3.4, Table 3.4-3
Acrolein	7.88E-06	---	2.37E-04	2.37E-05	AP-42, Chapter 3.4, Table 3.4-3
Benzene	7.76E-04	---	2.34E-02	2.34E-03	AP-42, Chapter 3.4, Table 3.4-3
Formaldehyde	7.89E-05	---	2.38E-03	2.38E-04	AP-42, Chapter 3.4, Table 3.4-3
Toluene	2.81E-04	---	8.46E-03	8.46E-04	AP-42, Chapter 3.4, Table 3.4-3
Xylenes	1.93E-04	---	5.81E-03	5.81E-04	AP-42, Chapter 3.4, Table 3.4-3
Total HAPS			0.041	0.0041	

Pollutant	Emission Factor		Annual Emissions per Generator		Source of Emissions Factors
	kg/MMBtu	g/kW-hr	lb/hr	ton/yr	
CO_2	73.96	---	4,912	491.2	40 CFR Part 98, Subpart C, Table C-1
CH_4	0.003	---	0.20	0.020	40 CFR Part 98, Subpart C, Table C-2
N_2O	0.0006	---	0.040	0.0040	40 CFR Part 98, Subpart C, Table C-2
CO_2e	---		4,928	492.8	Global warming potentials of 40 CFR Part 98 Table A-1

Notes:

1. Calculated

Diesel Generator Emission Calculations

Source Information

Engine Make/Model	Baudouin Tier IV - 2,000 kW	
Power Rating	2,000	kW
Fuel Consumption[1]	183.4	gal/hr (estimate)
Heating Value[1]	25.14	MMBtu/hr
Density of Fuel	7.10	lb/gal
Fuel Heating Value	19,300	Btu/lb
Operating Hours[2]	200	hrs/yr

Pollutant	Emission Factor		Annual Emissions per Generator		Source of Emissions Factors
	lb/MMBtu	g/kW-hr	lb/hr	ton/yr	
NOx	---	0.67	2.95	0.30	Manufacturer specifications
CO	---	0.10	0.46	0.046	Manufacturer specifications w/ 20% safety factor
VOC	---	0.20	0.88	0.088	Manufacturer specifications w/ 20% safety factor
SO_2	1.52E-03	---	0.038	0.0038	AP-42, Chapter 3.4, Table 3.4-1; 15 ppm sulfur
PM_{10}	---	0.022	0.10	0.010	Manufacturer specifications w/ 20% safety factor
$PM_{2.5}$	---	0.022	0.10	0.010	Manufacturer specifications w/ 20% safety factor
Acetaldehyde	2.52E-05	---	6.33E-04	6.33E-05	AP-42, Chapter 3.4, Table 3.4-3
Acrolein	7.88E-06	---	1.98E-04	1.98E-05	AP-42, Chapter 3.4, Table 3.4-3
Benzene	7.76E-04	---	1.95E-02	1.95E-03	AP-42, Chapter 3.4, Table 3.4-3
Formaldehyde	7.89E-05	---	1.98E-03	1.98E-04	AP-42, Chapter 3.4, Table 3.4-3
Toluene	2.81E-04	---	7.06E-03	7.06E-04	AP-42, Chapter 3.4, Table 3.4-3
Xylenes	1.93E-04	---	4.85E-03	4.85E-04	AP-42, Chapter 3.4, Table 3.4-3
Total HAPS			0.034	0.0034	

Pollutant	Emission Factor		Annual Emissions per Generator		Source of Emissions Factors
	kg/MMBtu	g/kW-hr	lb/hr	ton/yr	
CO_2	73.96	---	4,099	409.9	40 CFR Part 98, Subpart C, Table C-1
CH_4	0.003	---	0.17	0.017	40 CFR Part 98, Subpart C, Table C-2
N_2O	0.0006	---	0.033	0.0033	40 CFR Part 98, Subpart C, Table C-2
CO_2e	---		4,113	411.3	Global warming potentials of 40 CFR Part 98 Table A-1

Notes:

1. Calculated

Diesel Generator Emission Calculations

Source Information

Engine Make/Model	Baudouin Tier IV - 1,000 kW	
Power Rating	1,000	kW
Fuel Consumption[1]	100.1	gal/hr (estimate)
Heating Value[1]	13.71	MMBtu/hr
Density of Fuel	7.10	lb/gal
Fuel Heating Value	19,300	Btu/lb
Operating Hours[2]	200	hrs/yr

Pollutant	Emission Factor		Annual Emissions per Generator		Source of Emissions Factors
	lb/MMBtu	g/kW-hr	lb/hr	ton/yr	
NOx	---	0.67	1.48	0.15	Manufacturer specifications
CO	---	0.10	0.23	0.023	Manufacturer specifications w/ 20% safety factor
VOC	---	0.20	0.44	0.044	Manufacturer specifications w/ 20% safety factor
SO_2	1.52E-03	---	0.021	0.0021	AP-42, Chapter 3.4, Table 3.4-1; 15 ppm sulfur
PM_{10}	---	0.022	0.048	0.0048	Manufacturer specifications w/ 20% safety factor
$PM_{2.5}$	---	0.022	0.048	0.0048	Manufacturer specifications w/ 20% safety factor
Acetaldehyde	2.52E-05	---	3.46E-04	3.46E-05	AP-42, Chapter 3.4, Table 3.4-3
Acrolein	7.88E-06	---	1.08E-04	1.08E-05	AP-42, Chapter 3.4, Table 3.4-3
Benzene	7.76E-04	---	1.06E-02	1.06E-03	AP-42, Chapter 3.4, Table 3.4-3
Formaldehyde	7.89E-05	---	1.08E-03	1.08E-04	AP-42, Chapter 3.4, Table 3.4-3
Toluene	2.81E-04	---	3.85E-03	3.85E-04	AP-42, Chapter 3.4, Table 3.4-3
Xylenes	1.93E-04	---	2.65E-03	2.65E-04	AP-42, Chapter 3.4, Table 3.4-3
Total HAPS			0.019	0.0019	

Pollutant	Emission Factor		Annual Emissions per Generator		Source of Emissions Factors
	kg/MMBtu	g/kW-hr	lb/hr	ton/yr	
CO_2	73.96	---	2,236	223.6	40 CFR Part 98, Subpart C, Table C-1
CH_4	0.003	---	0.091	0.0091	40 CFR Part 98, Subpart C, Table C-2
N_2O	0.0006	---	0.018	0.0018	40 CFR Part 98, Subpart C, Table C-2
CO_2e	---		2,244	224.4	Global warming potentials of 40 CFR Part 98 Table A-1

Notes:

1. Calculated

Diesel Generator Emission Calculations

Source Information

Engine Make/Model	Cat C175	
Horsepower at Rated kW	4,423	bhp
Fuel Consumption[1]	211.4	gal/hr
Heating Value[1]	28.97	MMBtu/hr
Density of Fuel	7.10	lb/gal
Fuel Heating Value	19,300	Btu/lb
Operating Hours[2]	200	hrs/yr

Pollutant	Emission Factor		Annual Emissions per Generator		Source of Emissions Factors
	lb/MMBtu	g/bhp-hr	lb/hr	ton/yr	
NOx	---	4.80	46.81	4.68	Tier 2 emissions standard
CO	---	2.60	25.35	2.54	Tier 2 emissions standard
VOC	---	0.30	2.93	0.29	Manufacturer specifications
SO_2	1.52E-03	---	0.044	0.0044	AP-42, Chapter 3.4, Table 3.4-1; 15 ppm sulfur
PM_{10}	---	0.15	1.46	0.146	Tier 2 emissions standard
$PM_{2.5}$	---	0.15	1.46	0.146	Tier 2 emissions standard
Acetaldehyde	2.52E-05	---	7.30E-04	7.30E-05	AP-42, Chapter 3.4, Table 3.4-3
Acrolein	7.88E-06	---	2.28E-04	2.28E-05	AP-42, Chapter 3.4, Table 3.4-3
Benzene	7.76E-04	---	2.25E-02	2.25E-03	AP-42, Chapter 3.4, Table 3.4-3
Formaldehyde	7.89E-05	---	2.29E-03	2.29E-04	AP-42, Chapter 3.4, Table 3.4-3
Toluene	2.81E-04	---	8.14E-03	8.14E-04	AP-42, Chapter 3.4, Table 3.4-3
Xylenes	1.93E-04	---	5.59E-03	5.59E-04	AP-42, Chapter 3.4, Table 3.4-3
Total HAPS			0.039	0.0039	

Pollutant	Emission Factor		Annual Emissions per Generator		Source of Emissions Factors
	kg/MMBtu	g/bhp-hr	lb/hr	ton/yr	
CO_2	73.96	---	4,735	473.5	40 CFR Part 98, Subpart C, Table C-1
CH_4	0.003	---	0.19	0.019	40 CFR Part 98, Subpart C, Table C-2
N_2O	0.0006	---	0.038	0.0038	40 CFR Part 98, Subpart C, Table C-2
CO_2e	---		4,750	475.0	Global warming potentials of 40 CFR Part 98 Table A-1

Notes:

1. Calculated

Diesel Generator Emission Calculations

Source Information

Engine Make/Model	CAT 3516	
Horsepower at Rated kW	2,941	bhp
Fuel Consumption[1]	137.6	gal/hr
Heating Value[1]	18.85	MMBtu/hr
Density of Fuel	7.10	lb/gal
Fuel Heating Value	19,300	Btu/lb
Operating Hours[2]	200	hrs/yr

Pollutant	Emission Factor		Annual Emissions per Generator		Source of Emissions Factors
	lb/MMBtu	g/bhp-hr	lb/hr	ton/yr	
NOx	---	0.50	3.24	0.32	Tier IV emissions standard
CO	---	2.60	16.86	1.69	Tier IV emissions standard
VOC	---	0.14	0.91	0.091	Tier IV emissions standard
SO_2	1.52E-03	---	0.029	0.0029	AP-42, Chapter 3.4, Table 3.4-1; 15 ppm sulfur
PM_{10}	---	0.022	0.14	0.0143	Tier IV emissions standard
$PM_{2.5}$	---	0.022	0.14	0.0143	Tier IV emissions standard
Acetaldehyde	2.52E-05	---	4.75E-04	4.75E-05	AP-42, Chapter 3.4, Table 3.4-3
Acrolein	7.88E-06	---	1.49E-04	1.49E-05	AP-42, Chapter 3.4, Table 3.4-3
Benzene	7.76E-04	---	1.46E-02	1.46E-03	AP-42, Chapter 3.4, Table 3.4-3
Formaldehyde	7.89E-05	---	1.49E-03	1.49E-04	AP-42, Chapter 3.4, Table 3.4-3
Toluene	2.81E-04	---	5.30E-03	5.30E-04	AP-42, Chapter 3.4, Table 3.4-3
Xylenes	1.93E-04	---	3.64E-03	3.64E-04	AP-42, Chapter 3.4, Table 3.4-3
Total HAPS			0.026	0.0026	

Pollutant	Emission Factor		Annual Emissions per Generator		Source of Emissions Factors
	kg/MMBtu	g/bhp-hr	lb/hr	ton/yr	
CO_2	73.96	---	3,081	308.1	40 CFR Part 98, Subpart C, Table C-1
CH_4	0.003	---	0.12	0.0125	40 CFR Part 98, Subpart C, Table C-2
N_2O	0.0006	---	0.025	0.0025	40 CFR Part 98, Subpart C, Table C-2
CO_2e	---		3,091	309.1	Global warming potentials of 40 CFR Part 98 Table A-1

Notes:

1. Calculated

Diesel Storage Tanks Emissions

Source Information

Fuel Type	Diesel	
Roof Type	Cone	
Annual Throughput	40,000	gal/yr-tank
Operating Hours	8,760	hrs/yr

	Uncontrolled	
VOC Emissions - Per Tank	0.0018	ton/yr

Physical Properties - Per Tank

Shell Height	H_S	12.50	ft
Shell Diameter	D	8.50	ft
Shell Radius	R_S	4.25	ft
Maximum Liquid Height	H_{LX}	11.50	ft
Average Liquid Height	H_L	6.25	ft
Working Volume		5,000	gallons
Turnovers Per Year	N	8.0	dimensionless
Shell Color/Shade		Black	
Shell Condition		Good	
Paint Solar Absorptance	α	0.97	dimensionless
Roof Height	H_R	0.03	ft
Dome Roof Radius	R_R	--	ft
Vacuum Setting	P_{BV}	-0.03	psig
Pressure Setting	P_{BP}	0.03	psig

Meteorological Information

Nearest Major City		Abilene, TX		
Average Annual Maximum Temperature	T_{AX}	75.60	°F	AP-42, Chapter 7: Table 7.1-7
Average Annual Minimum Temperature	T_{AN}	53.60	°F	AP-42, Chapter 7: Table 7.1-7
Atmospheric Pressure	P_A	13.79	psia	AP-42, Chapter 7: Table 7.1-7
Solar Insolation	I	1,603	Btu/scfd	AP-42, Chapter 7: Table 7.1-7

Calculation Methodology - Per Tank

Total losses (VOC Emissions)	L_T	4	lb/yr	AP-42, Chapter 7: Eq. 1-1
Standing Storage Losses	L_S	2.4	lb/yr	AP-42, Chapter 7: Eq. 1-2
Working Losses	L_W	1	lb/yr	AP-42, Chapter 7: Eq. 1-35, 1-39
Annual Net Throughput	Q	952	bbl/yr	
Working Loss Turnover Factor	K_N	1.00	dimensionless	
Stock Vapor Density	W_V	0.000	lb/ft^3	AP-42, Chapter 7: Eq. 1-22
Vapor Molecular Weight at 60 °F	M_V	130.00	lb/lb-mole	AP-42, Chapter 7: Table 7.1-2
Vapor Pressure at 60 °F	P_{VA}	0.01	psia	AP-42, Chapter 7: Eq. 1-25
Vapor Space Volume	V_V	355	ft^3	AP-42, Chapter 7: Equation 1-3
Vapor Space Roof Outage	H_{RO}	0.01	ft	AP-42, Chapter 7: Equation 1-19
Vapor Space Tank Outage	H_{VO}	6.26	ft	AP-42, Chapter 7: Equation 1-16
Vapor Space Expansion Factor	K_E	0.08		AP-42, Chapter 7: Equation 1-5
Vented Vapor Saturation Factor	K_S	1.00	dimensionless	AP-42, Chapter 7: Equation 1-21
Working Loss Product Factor	K_P	1.00	dimensionless	
Ideal Gas Constant	R	10.73	psia*scf/lb-mole*°R	AP-42, Chapter 7: Equation 1-22
Average Vapor Temperature	T_V	539.7	°R	AP-42, Chapter 7: Equation 1-33
Daily Average Liquid Surface Temperature	T_{LA}	534.9	°R	AP-42, Chapter 7: Equation 1-28
Daily Vapor Temperature Range	ΔT_V	46.50	°R	AP-42, Chapter 7: Equation 1-7
Daily Ambient Temperature Range	ΔT_A	22.00	°R	AP-42, Chapter 7: Equation 1-11
Daily Maximum Ambient Temperature	T_{AX}	535.3	°R	AP-42, Chapter 7: Table 7-1-7
Daily Minimum Ambient Temperature	T_{AN}	513.3	°R	AP-42, Chapter 7: Table 7-1-7
Daily Average Ambient Temperature	T_{AA}	524.3	°R	AP-42, Chapter 7: Equation 1-30
Liquid Bulk Temperature	T_B	529.0	°R	AP-42, Chapter 7: Equation 1-31
Daily Vapor Pressure Range	ΔP_V	0.01	psia	AP-42, Chapter 7: Equation 1-9
Breather Vent Pressure Setting Range	ΔP_B	0.060	psi	AP-42, Chapter 7: Equation 1-10
Vapor Pressure Equation Constant	A	12.10	dimensionless	AP-42, Chapter 7: Table 7.1-2
Vapor Pressure Equation Constant	B	8,933	°R	AP-42, Chapter 7: Table 7.1-2
Vapor Pressure at T_{LX}	P_{VX}	0.01	psia	AP-42, Chapter 7: Equation 1-25
Vapor Pressure at T_{LN}	P_{VN}	0.01	psia	AP-42, Chapter 7: Equation 1-25
Maximum T_{LA}	T_{LX}	546.5	°R	AP-42, Chapter 7: Figure 7.1-17
Minimum T_{LA}	T_{LN}	523.2	°R	AP-42, Chapter 7: Figure 7.1-17

Component Fugitive Emissions

VOC Fugitive Emissions							
Unit Type	Service	Number of Units [1]	Hours of Operation hr/yr	THC Emission Factor [2a,2b] kg/hr-unit	VOC Weight Fraction [3]	THC Emissions tons/yr	VOC Emissions tons/yr
Flanges	Gas	1,000	8,760	5.70E-06	0.05	0.055	0.0028
Valves	Gas	500	8,760	2.50E-05	0.05	0.12	0.0060
Connectors	Gas	20	8,760	1.00E-05	0.05	0.0019	0.00010
Open-Ended Lines	Gas	20	8,760	1.50E-05	0.05	0.0029	0.00014
Other	Gas	10	8,760	1.20E-04	0.05	0.012	0.00058
					Total Emissions (tons/yr)	0.19	0.010

Ammonia Fugitive Emissions							
Unit Type	Service	Number of Units [1]	Hours of Operation hr/yr	SOCMI Emission Factor [2a,2b] kg/hr-unit	Ammonia Weight Fraction [3]	THC Emissions tons/yr	VOC Emissions tons/yr
Flanges	Gas	500	8,760	1.50E-03	1.00	7.243	7.24
Valves	Gas	250	8,760	1.31E-04	1.00	0.316	0.32
Connectors	Gas	50	8,760	8.10E-05	1.00	0.039	0.039
Open-Ended Lines	Gas	50	8,760	1.50E-03	1.00	0.724	0.72
Other	Gas	10	8,760	4.47E-02	1.00	4.317	4.32
					Total Emissions (tons/yr)	12.64	12.64

GHG Fugitive Emissions							
Unit Type	Service	Number of Units [1]	Hours of Operation hr/yr	THC Emission Factor [2a,2b] kg/hr-unit	Methane Weight Fraction [3]	THC Emissions tons/yr	CO_2e Emissions tons/yr [4]
Flanges	Gas	1,000	8,760	5.70E-06	0.90	0.050	1.39
Valves	Gas	500	8,760	2.50E-05	0.90	0.11	3.04
Connectors	Gas	20	8,760	1.00E-05	0.90	0.0017	0.049
Open-Ended Lines	Gas	20	8,760	1.50E-05	0.90	0.0026	0.073
Other	Gas	10	8,760	1.20E-04	0.90	0.010	0.29
					Total Emissions (tons/yr)	0.17	4.84

1. Estimated component counts

2a. Emissions factors retrieved from EPA's Equipment Leaks Protocol Table 2-8 with a leak rate less than 10,000 ppmv.

2b. Emissions factors retrieved from EPA's Equipment Leaks Protocol Table 2-5 with a leak rate less than 10,000 ppmv. Flanges use the open-ended lines EF and Other use the PRV EF.

3. Gas weight fractions based on expected pipeline quality natural gas specification and ammonia slip concentration.

4. CO_2e emissions calculated using the Global Warming Potential of methane as published in Table A-1 of 40 CFR Part 98.

Regulatory Discussion

State Regulations

30 TAC §116.610 – Standard Permits: Applicability

> (a) Under the Texas Clean Air Act (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.

Section 3(A) of the Standard Permit for Electric Generating Units (EGUs), units that meet the conditions of the Standard Permit are not required 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 currently no pending revision to this subchapter.

> (3) The proposed project must comply with the applicable provisions of the Federal Clean Air Act, §111 (concerning New Source Performance Standards) as listed under 40 CFR Part 60, promulgated by the Environmental Protection Agency (EPA).

The natural gas simple-cycle turbines will be subject to NSPS Subpart KKKK (Standards of Performance for Stationary Combustion Turbines). The Federal Regulations discussion in this section details applicable compliance measures that will be taken by Abilene DC.

> (4) The proposed project must comply with the applicable provisions of the Federal Clean Air Act, §112 (concerning Hazardous Air Pollutants) as listed under 40 CFR Part 61, promulgated by the EPA.

No subparts under 40 CFR Part 61 are applicable to the proposed project covered under the Standard Permit for EGUs.

> (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 the Federal Clean Air Act, §112 or as listed under Chapter 113, Subpart C of this title (relating to National Emissions Standards for Hazardous Air Pollutants for Source Categories.

No subparts under 40 CFR Part 63 are applicable to the proposed project covered under the Standard Permit for EGUs.

> (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 located in the Houston-Galveston-Brazoria ozone nonattainment area. Therefore, this is not applicable.

(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 proposed project covered under the Standard Permit for EGUs is not a major source or major modification relating to Nonattainment and Prevention of Significant Deterioration programs. Tables 1F and 2F are provided in this application to demonstrate the site is not a major source under Nonattainment nor Prevention of Significant Deterioration.

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

Abilene DC 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 [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 proposed project covered under the Standard Permit for EGUs does not have any affected sources subject to Subchapter E.

30 TAC §116.611 – Standard Permits: Registration to Use a Standard Permit

(a) If required, registration to use a standard permit shall be submitted using the electronic method designated by the executive director for the applicable standard permit. If a designated electronic method is not available, the registration shall be sent by certified mail, return receipt requested, or hand delivered to the executive director, the appropriate commission regional office, and any local air pollution program with jurisdiction before a standard permit can be used. The registration must be submitted using the required form and must document compliance with the requirements of this section, including, but not limited to:

The registration will be submitted using STEERS.

(1) the basis of emission estimates.

See Process Description and Emission Calculations sections of this application for sources and calculation methods

(2) quantification of all emission increases and decreases associated with the project being registered.

See Emission Calculations and Table 1(a) of this application for quantification of emission estimates.

(3) sufficient information as may be necessary to demonstrate that the project will comply with §116.610(b) of this title (relating to Applicability).

See discussion above on compliance demonstrations and applicability of §116.610(b).

(4) information that describes efforts to be taken to minimize any collateral emissions increases that will result from the project.

The emissions units within the proposed project covered under the Standard Permit for EGUs will be maintained and operated in good working order to minimize emissions. Fuel will be pipeline quality natural gas for the simple-cycle turbines. The duration of startup emissions will be minimal.

(5) a description of the project and related process.

See Process Description section of this application for a description of the project and related processes.

(6) a description of any equipment being installed.

See Process Description section of this application for a list and description of the proposed project covered under the Standard Permit for EGUs.

(b) Construction may begin any time after receipt of written notification from the executive director that there are no objections or 45 days after receipt by the executive director of the registration, whichever occurs first, except where a different time period is specified for a particular standard permit or the source obtains a prevention of significant deterioration permit for greenhouse gases as provided in §116.164(a) of this title (relating to Prevention of Significant Deterioration Applicability for Greenhouse Gases Sources).

Construction will not commence until written notification is received by the director that there are no objections or 45 days after receipt by the executive director of the registration, whichever comes first.

(c) In order to avoid applicability of Chapter 122 of this title (relating to Federal Operating Permits), a certified registration shall be submitted.

The Facility will be applicable to Chapter 122 relating to Federal Operating Permits. A Federal Operating Permit application will be submitted 12 months following startup of the Facility. No certified registration to avoid applicability to the Federal Operating Permits program will be submitted.

30 TAC §116.614 – Standard Permits: Standard Permit Fees

Any person who registers to use a standard permit or an amended standard permit, or to renew a registration to use a standard permit shall remit, at the time of registration, a flat fee of $900 for each standard permit being registered, unless otherwise specified in a particular standard permit. No fee is required if a registration is automatically renewed by the commission. All standard permit fees will be remitted in the form of a check, certified check, electronic funds transfer, or money order made payable to the Texas Commission on Environmental Quality (TCEQ) and delivered with the permit registration to the TCEQ, P.O. Box 13088, MC 214, Austin, Texas 78711-3087. No fees will be refunded.

Abilene DC will pay a fee of $900 to register the Facility using a standard permit for electric generating units.

30 TAC §116.615 – Standard Permits: General Conditions

> (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.

The emissions from the Facility will comply with applicable rules and regulations.

> (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 requirements A through D in the rule.

Abilene DC understands representations within this standard permit application become conditions of use for the standard permit.

> (3) Standard permit in lieu of permit amendment. All changes authorized by standard permit to a facility previously permitted under §116.610 of this title shall be administratively incorporated into that facility's permit at such time as the permit is amendment or renewed.

Abilene DC understands this condition.

> (4) Construction progress. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office no later than 15 working days after occurrence of the event, except where a different time period is specified for a particular standard permit.

Abilene DC will submit a notification of start of construction, construction interruptions, if applicable, and completion of construction to the TCEQ regional office within 15 working days after the event.

> (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.

Abilene DC will submit a notification prior to the commencement of operations for each stage of phased construction so that a representative of the executive director may be present.

> (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.

Abilene DC will adhere to these requirements.

(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.

Abilene DC will apply for the use of alternative compliance methods, if needed, to demonstrate compliance with the 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.

Abilene DC will follow the recordkeeping requirements of the standard permit.

(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 are 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).

Abilene DC will maintain emission control devices and equipment in good working order. Notifications of emissions events and scheduled maintenance will follow the appropriate 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.

Abilene DC understands and agrees to these requirements.

(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…

The standard permit for electric generating units does not include distance limitations, setbacks, nor buffer zone requirements.

Federal Regulations

40 CFR Part 60 - Standards of Performance for New Stationary Sources

Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

Subpart Db applies to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)). Applicability condition §60.40b(i) states affected facilities that meet the applicability requirements of Subpart KKKK are not subject to this subpart. The natural gas simple-cycle turbines at the Facility are subject to Subpart KKKK and will meet the applicable requirements. Therefore, the emission units are not subject to Subpart Db.

Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Subpart Dc applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989, and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). The natural gas simple-cycle turbines at the Facility are greater than 100 MMBtu/hr. Therefore, the emission units are not subject to Subpart Dc.

Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

Subpart KKKK applies to stationary combustion turbines greater than 10 MMBtu/hr. There will be natural gas simple-cycle turbines greater than 10 MMBtu/hr at the Facility. A selective catalyst reduction (SCR) device using ammonia to reduce NOx emissions will be used on each turbine. Pipeline quality natural gas will be used to fuel the combustion turbines to meet the SO_2 standard. Therefore, Subpart KKKK will apply to the Facility.

Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units

Subpart TTTT applies to stationary combustion turbines that have a base load greater than 250 MMBtu/hr combusting fossil fuels, is capable of selling greater than 25 MW to a utility power distribution system, and commenced construction after January 8, 2014 and on or before May 23, 2023. The Facility's stationary combustion turbines are not capable of selling electricity to a utility power distribution system and will commence construction after May 23, 2023. Therefore, Subpart TTTT will not apply to the Facility.

Subpart TTTTa - Standards of Performance for Greenhouse Gas Emissions for Modified Coal-Fired Steam Electric Generating Units and New Construction and Reconstruction Stationary Combustion Turbine Electric Generating Units

Subpart TTTTa applies to stationary combustion turbines that have a base load greater than 250 MMBtu/hr combusting fossil fuels, is capable of selling greater than 25 MW to a utility power distribution system, and commenced construction after May 23, 2023. The Facility's stationary combustion turbines are not capable of selling electricity to a utility power distribution system. Therefore, Subpart TTTTa will not apply to the Facility.

40 CFR Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories

Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

Subpart YYYY applies to stationary combustion turbines at a major source of HAP emissions (§63.6080). There will be natural gas simple-cycle turbines located at the Facility, however the Facility is an area source of hazardous air pollutants (HAPs). Therefore, Subpart YYYY will not apply.

Standard Permit for Electric Generating Units

(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 the electric generating units detailed in the Process Description and Emission Calculation sections that meet the requirements of the 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 units that will be authorized by the Standard Permit are not 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.

Based on these definitions, the Facility is located in the West Texas Region. The electric generating units at the Facility are not fueled by renewable 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 Form PI-1S is included in this 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 registration fee of $900 will be submitted to TCEQ.

(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.

Abilene DC will not begin construction until after receiving written approval from TCEQ.

(D) Records shall be maintained and provided upon request to the 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).

Abilene DC will maintain the applicable records.

(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 natural gas simple-cycle 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.

Abilene DC will comply with the applicable requirements of 30 TAC Chapters 114 and 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.

Emissions certification will be displayed on the units and test results will be provided to TCEQ, as required. The natural gas simple-cycle turbines will be fueled by pipeline quality natural gas.

(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 Btus 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.

The electric generating units will not use combined heat and power.

(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 simple-cycle turbines will be fueled by pipeline quality natural gas. These fuels will meet the specifications above.

(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:

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.

There are no electric generating units requesting coverage under this standard permit that are 10 MW or less.

(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 natural gas simple-cycle turbines will operate more than 300 hours per year and will meet 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 condition does not apply as the electric generating units requesting coverage under this standard permit will fire 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.

NOx emissions will be recertified every 16,000 hours of operation or every three years, whichever comes first. The recertification will follow appropriate testing methods approved by TCEQ.

(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.

Abilene DC acknowledges that the hourly NOx emission limit will not apply when the local ambient temperature 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.

Abilene DC will maintain the appropriate records should they choose to demonstrate compliance with the alternative NOx emission standard.