

### **ELECTRIC GENERATING UNIT STANDARD PERMIT**

#### **FOR**

# Pecos Power Plant LLC Pecos Power Plant City of Pecos, Reeves County, Texas

PROJECT: 24-0909.006

CUSTOMER REFERENCE NUMBER:

REGULATED ENTITY NUMBER

DOC NO.: REP-24-0909-006 Rev 0

PREPARED FOR:

Pecos Power Plant LLC 4200 S. Tolivar Street City of Pecos, Texas 79772

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'	Dialt	11/25/2024	Amanda Marcks		×	⊠



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#### **ABBREVIATIONS**

CFR Code of Federal Regulations

EPN Emission Point Number

EPA Environmental Protection Agency

LB/HR Pounds per Hour

PBR Permit By Rule

TAC Texas Administrative Code

TCEQ Texas Commission on Environmental Quality

TPY Tons per year



iv

s Power Plant LLC Document: REP-24-0909-006 Rev 0

#### 1 INTRODUCTION

#### 1.1 Introduction

Pecos Power Plant LLC proposes to construct and operate the Pecos Power Plant. The Pecos Power Plant is a natural gas-fired electric generating site new to the City of Pecos, Reeves County Texas. The site will consist of twelve (12) electric generating engines and auxiliary equipment.

#### 1.2 Regulatory Background

Pursuant to 30 TAC §116.611 Requirements Pecos Power Plant is requesting an Electric Generating Unit Standard Permit to authorize emissions for the Pecos Power Plant.

#### 1.3 General Facility Information

Pecos Power Plant proposes to construct a new electric generating peaking facility, which will consist of twelve (12) Wartsila 18V50SG-D natural gas-fired engines to support the electric grid. The 12-engine sitewide total will have the capacity to generate 225.6 megawatts (MW). The engines will be fired exclusively with pipeline quality natural gas.

#### 2 PROCESS DESCRIPTION

The Pecos Power Plant will consist of twelve (12) Wartsila 18V50SG-D, four-stroke, spark-ignited, lean-burn gas engines (EPN: IC-1 through IC-12) and other mechanical and electrical auxiliary systems. The engine exhausts will be fitted with selective catalytic reduction (SCR) systems for control of nitrogen oxides (NOx) and oxidation catalysts for control of carbon monoxide (CO) and volatile organic compounds (VOC).

Natural gas will be delivered to the site via pipeline and then piped to the reciprocating engines. Fugitive emissions of natural gas are designated as EPNs: NG-FUG1. Urea will be delivered to the site via tank truck, piped to and stored in a storage tank, and routed to the SCR system where it will be converted into ammonia. The Pecos Power Plant will operate as a peaking facility with up to 4,500 hours per year.



#### 3 FACILITIES AUTHORIZED UNDER PERMIT BY RULE

#### 3.1 Emergency Engines

The project may have a diesel emergency generator. The emergency generator will be authorized separately by claiming Permit by Rule 30 TAC §106.511.

#### 3.2 Storage Tanks

The project will have two lube oil tanks, that will be authorized by claiming Permit by Rule 30 TAC §106.472. Additionally, the site may require other various fuel and chemical storage tanks that will be authorized separately by claiming the appropriate Permit by Rule.

### 3.3 Routine Maintenance, Startup and Shutdown of Facilities, and Temporary Maintenance Facilities

The project will require routine MSS which will be authorized by claiming Permit by Rule 30 TAC §106.263 and the MSS emissions represented in this standard permit registration.

#### 3.4 Process Heaters

Process heaters will have a heat input less than 40 MMBtu/hr and will be fired on sweet natural gas and authorized by claiming PBR 106.183 (registration not required).

#### 4 FEDERAL APPLICABILITY

The Pecos Power Plant will be located in Reeves County, which is classified as an attainment/unclassified county for criteria pollutants. Therefore, nonattainment new source review (NNSR) is not applicable. In addition, the proposed facility is an unnamed source and will not exceed prevention of significant deterioration (PSD) major source thresholds (250 tons per year) for criteria pollutants. The stationary natural gas-fired reciprocating internal combustion engines (RICE) will be subject to 40 CFR Part 60, New Source Performance Standards Subpart JJJJ and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants Subpart ZZZZ. The Pecos Power Plant will be a new major source requiring a Title V Permit.



#### 5 BASIS FOR EMISSION CALCULATIONS

#### 5.1 Nitrogen Oxide Emissions

Hourly and annual emissions are based on vendor provided information. NOx emissions will be controlled by SCR, except during maintenance, startup, and shutdown (MSS) operations such as startup, when the SCRs will be engaged after the engines reach the required operating temperature.

#### 5.2 Carbon Monoxide and Volatile Organic Compound Emissions

Carbon monoxide (CO) and volatile organic compounds (VOC) will be controlled by catalytic oxidation. Hourly and annual emissions are based on vendor provided information after controls.

#### 5.3 Particulate Matter Emissions

Hourly and annual particulate matter (PM/PM10/PM2.5) emissions are based on vendor provided information.

#### 5.4 Ammonia Emissions

Ammonia (NH3) emissions occur due to slip of excess ammonia from the SCR systems. Hourly and annual ammonia emissions are based on vendor provided information.

#### 5.5 Process Fugitives

Fugitive emissions of VOC will originate from the natural gas fuel lines. Fugitive emission rates were estimated using the methods outlined in the TCEQ's Air Permit Technical Guidance for Chemical Sources: Air Permit Technical Guidance for Chemical Sources, Fugitive Guidance, (APDG 6422, June 2018).

Detailed emission calculations are included in **Appendix A**.

Pecos Power Plant meets all the requirements listed in Title 30 TAC Chapter 116 and Electric Generating Unit Standard Permit. Compliance demonstrations are located in *Appendix B*.

Information related to data sheets and equipment involved are detailed in Appendix C.



#### **6 AGENCY FORMS**

**Table 6-1** outlines the forms that have been completed for this PBR application. Agency forms are included in **Appendix B**.

**Table 6-1: Application Documents** 

Х	Core Data Form
х	Form PI-S, Registration for Air Standard Permit
Х	30 TAC §116 Applicability Checklist
Х	EGU Standard Permit Compliance Demonstration
Х	Table 29 Reciprocating Engines
Х	Table 1a Emission Summary



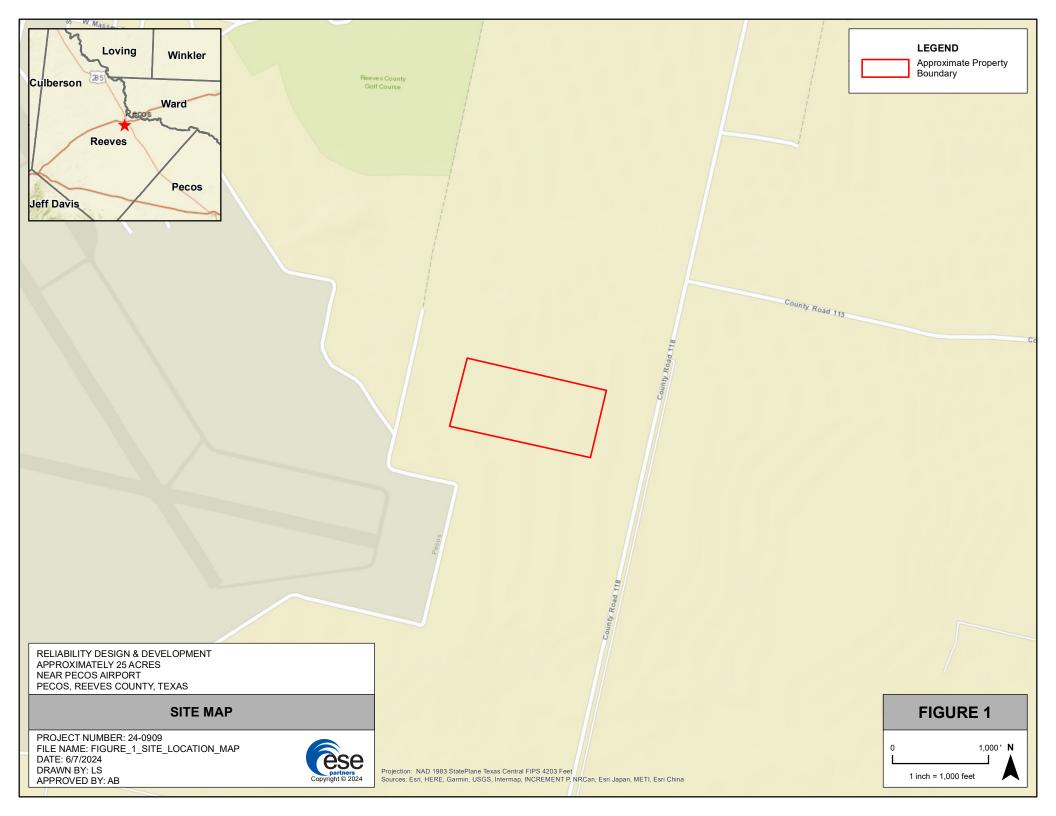
lard Permit Date: November 25, 2024
Document: REP-24-0909-006 Rev 0

#### **FIGURES**



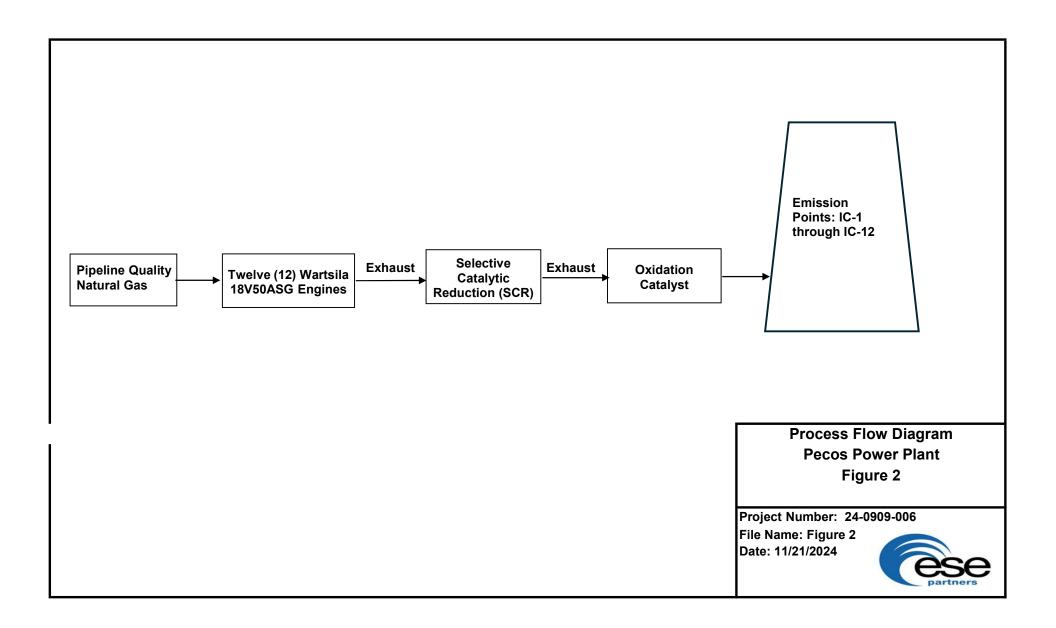
### FIGURE 1 SITE LOCATION MAP





### Figure 2 Process Flow Diagram





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#### **APPENDICES**



### APPENDIX A EMISSION CALCULATIONS



Fuel Data

NOx 0.13 lb/MWh

Ho	urs of Opera	tion per Year	4,500																																			
									L		Emissi	on Factor befo	re contro	l (g/hp-hr)						Emiss	sion Factor a	fter contr	ol (g/hp-h	r)		L			Emiss	sions (lb/hr)						Emission	is (tpy)	
						Fu		Hours of									Efficiency				- 1																/    /	
				ing Emissions				Operation									of Control				- 1																/    /	
EPN	Engine Ma	ake Engine Mode	el (HP)	Control ly	pe Engine Ty		IU/hp-hr)	per Year	voc	NOx	co	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	Formaldehyde	Benzene	Device (%)	voc	NOx	co	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	Formaldehyde	Benzene	voc	NOx	co	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub> Form	maldehyde Benzer	ne VOC	NOx	CO F	PM <sub>10</sub>	PM <sub>2.5</sub> SO <sub>2</sub> F	Formaldehyde Benzene
IC-1	Wartsila	18V50SG	25,3	05 SCR Catal		urn	8,054	4,500						0.00215		0.00161	90%	0.09	0.04	0.09	0.06	0.04	0.00215	0.004	0.00161	4.95	2.46	4.99	3.19	2.06	0.12	0.25 0.0896	71 11.1375	5.535 11.	275 7.1	1775	4.635 0.26962	0.5625 0.20176
IC-2	Wartsila	18V50SG	25,3	05 SCR Catal		urn	8,054	4,500						0.00215		0.00161	90%	0.09	0.04	0.09	0.06	0.04	0.00215	0.004	0.00161	4.95	2.46	4.99	3.19	2.06	0.12	0.25 0.0896	71 11.1375	5.535 11.	275 7.1	1775	4.635 0.26962	0.5625 0.20176
IC-3	Wartsila	18V50SG	25,3	05 SCR Catal		urn	8,054	4,500						0.00215		0.00161	90%	0.09	0.04	0.09	0.06	0.04	0.00215	0.004	0.00161	4.95	2.46	4.99	3.19	2.06	0.12	0.25 0.0896	71 11.1375	5.535 11.	275 7.1	1775	4.635 0.26962	0.5625 0.20176
IC-4	Wartsila	18V50SG	25,3	05 SCR Catal		urn	8,054	4,500						0.00215		0.00161	90%	0.09	0.04	0.09	0.06	0.04	0.00215	0.004	0.00161	4.95	2.46	4.99	3.19	2.06	0.12	0.25 0.0896	71 11.1375	5.535 11.	275 7.1	1775	4.635 0.26962	0.5625 0.20176
IC-5	Wartsila	18V50SG	25,3	05 SCR Catal		urn	8,054	4,500						0.00215		0.00161	90%	0.09	0.04	0.09	0.06	0.04	0.00215	0.004	0.00161	4.95	2.46	4.99	3.19	2.06	0.12	0.25 0.0896	71 11.1375	5.535 11.	275 7.1	1775	4.635 0.26962	0.5625 0.20176
IC-6	Wartsila	18V50SG	25,3	05 SCR Catal		urn	8,054	4,500						0.00215		0.00161	90%	0.09	0.04	0.09	0.06	0.04	0.00215	0.004	0.00161	4.95	2.46	4.99	3.19	2.06	0.12	0.25 0.0896	71 11.1375	5.535 11.	275 7.1	1775	4.635 0.26962	0.5625 0.20176
IC-7	Wartsila	18V50SG	25,3	05 SCR Catal		urn	8,054	4,500						0.00215		0.00161	90%	0.09	0.04	0.09	0.06	0.04	0.00215	0.004	0.00161	4.95	2.46	4.99	3.19	2.06	0.12	0.25 0.0896	71 11.1375	5.535 11.	275 7.1	1775	4.635 0.26962	0.5625 0.20176
IC-8	Wartsila	18V50SG	25,3	05 SCR Catal		urn	8,054	4,500						0.00215		0.00161	90%	0.09	0.04	0.09	0.06	0.04	0.00215	0.004	0.00161	4.95	2.46	4.99	3.19	2.06	0.12	0.25 0.0896	71 11.1375	5.535 11.	275 7.1	1775	4.635 0.26962	0.5625 0.20176
IC-9	Wartsila	18V50SG	25,3	05 SCR Catal		urn	8,054	4,500						0.00215		0.00161	90%	0.09	0.04	0.09	0.06	0.04	0.00215	0.004	0.00161	4.95	2.46	4.99	3.19	2.06	0.12	0.25 0.0896	71 11.1375	5.535 11.	275 7.1	1775	4.635 0.26962	0.5625 0.20176
IC-10	Wartsila	18V50SG	25,3	05 SCR Catal	4 Stroi Lean-B 5 Stroi	urn	8,054	4,500						0.00215		0.00161	90%	0.09	0.04	0.09	0.06	0.04	0.00215	0.004	0.00161	4.95	2.46	4.99	3.19	2.06	0.12	0.25 0.0896	71 11.1375	5.535 11.	275 7.1	1775	4.635 0.26962	0.5625 0.20176
IC-11	Wartsila	18V50SG	25,3	05 SCR Catal		urn	8,054	4,500						0.00215		0.00161	190%	0.09	0.04	0.09	0.06	0.04	0.00215	0.004	0.00161	4.95	2.46	4.99	3.19	2.06	0.12	0.25 0.0896	71 11.1375	5.535 11.	275 7.1	1775	4.635 0.26962	0.5625 0.20176
IC-12	Wartsila	18V50SG	25,3	05 SCR Catal			8,054	4,500						0.00215		0.00161	290%	0.09	0.04	0.09	0.06	0.04	0.00215	0.004	0.00161	4.95	2.46	4.99	3.19	2.06	0.12	0.25 0.0896	_				4.635 0.26962	0.5625 0.20176
																										59.4	29.52	59.88	38.28	24.72	1.44	3.00 1.	133.65	66.42 13	73 8	16.13	55.62 3.24	6.75 2.42

1 - SO2 and Benzene emissions fractors from AP-42
2 - VOC, NOx, CO, PM and Formaldehyde emissions factors are from the manufacturer, after control

#### **Pecos Power Plant**

Start up and Shutdown Emissions

EPNs: IC-1 through IC-12

Make	Wartsila
Engine Name	18V50SG-D
Engine Type	RICE
Engine Ignition	SI
Burn	LB
Engine Size (MW)	18.80

Fuel

#### **Project Details**

Number of Engines	12	Cold	Warm	Hot
Number of Starts per unit	300	150	100	50

Type of Start		Cold	Warm	Hot
Typical standby time before engine start		> 2 days	12 hours	6 hours
NOx	lb/30 min	10.2	5.7	3.5
СО	lb/30 min	15.2	13.7	11.4
VOC	lb/30 min	3.3	3.1	2.8
PM10	lb/30 min	3.0	3.0	3.0
NH3	lb/30 min			

#### Shut Down Emissions\*

NOx	lb/1 min	0.044
СО	lb/1 min	0.081
VOC	lb/1 min	0.081
PM10	lb/1 min	
NH3	lb/1 min	

<sup>\*</sup>Since the duration of SD is 1 minute, all emissions are considered normal ops.

SU/SD emissions provided by Wartsila.

Startup Emissions
NOx
CO
VOC
PM <sub>10</sub>
NH <sub>3</sub> *
SO <sub>2</sub> *

lb/ first 30	lb/ first 30 min		lb/second 30				
min (cold)	(warm)	lb/ first 30	min (normal		SU lb/hr	SU lb/hr	Sitewide
per engine	per engine	min (hot)	ops)	SU lb/hr (cold)	(warm)	(hot)	Startup (TPY)
10.20	5.70	3.50	1.32	11.52	7.02	4.82	16.02
15.20	13.70	11.40	2.45	17.65	16.15	13.85	29.72
3.30	2.70	2.50	2.94	6.24	5.64	5.44	10.62
3.00	3.00	3.00	1.92	4.92	4.92	4.92	8.85
				2.48			4.47
				0.09			0.16

<sup>\*</sup>Startup emissions are no higher than normal operation emissions.

#### **Pecos Power Plant Natural Gas Fugitive Emissions**

**EPNs: NG-FUG1** 

	Source		Estimated	Emission Factor	voc	To	tal	VC	С
EPN	Туре	Service	Count	lb/hr	(wt%)	(lb/hr)	(tpy)	(lb/hr)	(tpy)
	Valves	Gas/Vapor	250	0.00992		2.48	10.86	0.01	0.05
NG-FUG1	Flanges	Gas/Vapor	0	0.00086	0.44%	0.00	0.00	0.00	0.00
NG-FOGI	Relief Valves	Gas/Vapor	12	0.22930	0.44%	2.75	12.05	0.01	0.05
	Compressors	Gas/Vapor	0	0.0194		0.0	0.0	0.0	0.0
					Totals:	5.23	22.91	0.02	0.10

#### **Calculation Procedure**

Short-Term Emission Rate = Count \* Emission Factor

Annual Emission Rate = Count \* Emission Factor \* hours/year / 2,000 lbs/ton

#### Note

Based on "gas" factors for Oil & Gas Production Operations in TCEQ

Guidance APDG 6422, June 2018

Emissions were estimated based on a non-methane, non-ethane weight fraction of natural gas of 0.44%

### APPENDIX B AGENCY FORMS





### **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.)

Renewal (C	ore Data	Form should be subm	itted with the ren	ewal form)			Other			
2. Customer Re	eference	Number (if issued)	_	or CN or RN	ink to search I numbers in egistry**	3. Re	gulated Entity Re	Number (if	issued)	
ECTION	II:	Customer	Inform	<u>ation</u>	Ĺ					
4. General Cus	tomer In	formation	5. Effective D	ate for Cu	istomer Info	rmation	<b>Updates</b> (mm/dd	/уууу)		
New Custom	er		Jpdate to Custom	er Informa	tion	Cha	nge in Regulated Er	ntity Owne	ership	
☐Change in Leg	al Name	(Verifiable with the Te	xas Secretary of S	State or Tex	as Comptrolle	r of Publi	c Accounts)			
(SOS) or Texas	Comptro	ubmitted here may coller of Public Account	unts (CPA).			what is o	current and active			
	<b>0</b>			9 , -			in the state of th	remer pre		
Pecos Power Plai	nt LLC									
7. TX SOS/CPA	Filing N	umber	8. TX State Ta	<b>ax ID</b> (11 d	igits)		9. Federal Tax (9 digits)	ID	10. DUNS applicable)	Number (if
11. Type of Cus	stomer:	Corpora	tion			☐ Indivi	dual	Partne	rship: 🔲 Ger	neral 🔀 Limited
Government:	City 🔲 (	County 🗌 Federal 🗌	Local State	Other		☐ Sole F	roprietorship	Otl	her:	
12. Number of	Employ	ees					13. Independe	ntly Ow	ned and Op	erated?
□ 0-20    □ 21	-100	] 101-250   251	-500 🔲 501 ar	nd higher			<b>⊠</b> Yes	□No		
14. Customer F	Role (Pro	posed or Actual) – as	it relates to the R	egulated Er	ntity listed on	this form.	Please check one o	f the follo	wing	
Owner Occupational	Licensee	Operator Responsible Pa		er & Opera CP/BSA App			☐ Other	:		
	20 Green	way Plaza								
15. Mailing										
Address:	City	Houston		State	TX	ZIP	77046		ZIP + 4	
		formation (if outside					ddress (if applicab			

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( ) -						( ) -		
ECTION III:	Regula	ated Ent	ity Inforr	nation				
21. General Regulated E	ntity Informa	tion (If 'New Reg	gulated Entity" is sele	cted, a new pe	ermit applica	tion is also required.)		
New Regulated Entity	Update to	Regulated Entity	Name 🔲 Update	to Regulated E	Entity Inform	ation		
The Regulated Entity Na as Inc, LP, or LLC).	ıme submitte	d may be upda	ted, in order to me	eet TCEQ Core	e Data Star	ndards (removal of o	rganization	al endings such
22. Regulated Entity Na	<b>me</b> (Enter nam	e of the site wher	e the regulated actio	on is taking pla	ce.)			
Pecos Power Plant								
23. Street Address of								
the Regulated Entity:								
(No PO Boxes)	City	Pecos	State	ТХ	ZIP	79772	ZIP + 4	
24. County	Reeves	1			L		L	
		If no Stree	et Address is provi	ded, fields 2	5-28 are re	quired.		
25. Description to	From the Int	tersection of US F	lighway 285 and Inte	rstate Highway	/ 20, drive w	est on IH 20 for 1.3 mile	s and exit fro	ontage road. from
Physical Location:						t on Tolivar Street and f		=
6. Nearest City						State	Nea	rest ZIP Code
atitude/Longitude are used to supply coordina 27. Latitude (N) In Decin	tes where no	-	-	accuracy).		rds. (Geocoding of th	ne Physical	Address may be
Degrees	Minutes		Seconds	Degre	es	Minutes		Seconds
31		22	56		103	28		40
29. Primary SIC Code		Secondary SIC				22 5000	ndary NAI	
4 digits)		igits)	coue	31. Primar (5 or 6 digit	<b>y NAICS Co</b> s)	de 32. 3ecc	•	.s coue
911	3622	1						
33. What is the Primary	Business of t	his entity? (Do	o not repeat the SIC o	 or NAICS descri	iption.)			
Electric Generation								
34. Mailing								
-								
Address:	City		State		ZIP		ZIP + 4	
35. E-Mail Address:		l				1		<u> </u>
36. Telephone Number			37. Extension or	Code	38. F	ax Number (if applicat	ble)	
( ) -					(	) -		
•					1,	•		

19. Extension or Code

20. Fax Number (if applicable)

18. Telephone Number

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Dam Safety	1	Districts	Edwards Aquifer		Emissions Inventory Air	Industrial Hazardous Was
☐ Municipal Solid Waste			Edwards Aquiler		Emissions inventory Air	Industrial nazardous was
		New Source Review Air  □ OSSF		Petroleum Storage Tank		☐ PWS
Sludge		Storm Water	☐ Title V Air		Tires	Used Oil
☐ Voluntary Cleanu	up	☐ Wastewater	☐ Wastewater Agricul	lture	Water Rights	Other:
	in Whitenight	t 43. Ext./Code	44. Fax Number	41. Title:	Environmental Consultan	t
281 ) 501-6100			( ) -		Desepartners.com	
		L				
By my signature be	low, I certify,					
By my signature be submit this form on b	low, I certify,	to the best of my kno entity specified in Sec	wledge, that the information			
By my signature be	low, I certify, behalf of the	to the best of my kno entity specified in Sec rs LLC	wledge, that the information	quired for the up	dates to the ID numbers id	entified in field 39.

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### Form PI-1S Registrations for Air Standard Permit (Page 1)

I. Registrant Information
A. Company or Other Legal Customer Name: Pecos Power Plant LLC
B. Company Official Contact Information (⊠ Mr. ☐ Mrs. ☐ Ms. ☐ Other:)
Name: Edward Torres
Title: Senior Manager
Mailing Address: 20 Greenway Plaza Suite 650
City: Houston
State: Texas
ZIP Code: 77046
Telephone No.:
Fax No.:
Email Address: etorres@p-r-energy.com
All permit correspondence will be sent via email.
C. Technical Contact Information ( Mr. Mrs. Ms. Other:)
Name: Amanda Marcks
Title: Compliance Business Unit Leader
Company Name: ESE Partners LLC
Mailing Address: 400 E. Royal Lane, Building 3, Suite 3
City: Dallas
State: Texas
ZIP Code: 75039
Telephone No.: 469-983-8600
Fax No.:
Email Address: amarcks@esepartners.com
II. Facility and Site Information
A. Name and Type of Facility
Facility Name: Pecos Power Plant
Type of Facility: ⊠ Permanent ☐ Temporary

#### Form PI-1S Registrations for Air Standard Permit (Page 2)

II. Facility and Site Information <i>(continued)</i>
For portable units, please provide the serial number of the equipment being authorized below.
Serial No(s):
B. Facility Location Information
Street Address:
If there is no street address, provide written driving directions to the site and provide the closest city or town, county, and ZIP code for the site (attach description if additional space is needed).
From the Intersection of US Highway 285 and Interstate Highway 20, drive west on IH 20 for 1.3 miles and exit frontage road. from frontage road, turn left on Country Club Road and dive for 2.2 miles. Turn left on Tolivar Street and follow to the plant
City: Town of Pecos
County: Reeves
ZIP Code: 79772
C. Core Data Form ( <b>required</b> for Standard Permits 6006, 6007, and 6013).
Is the Core Data Form (TCEQ Form 10400) attached?
Customer Reference Number (CN): TBD
Regulated Entity Number (RN): TBD
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:
G. Previous Standard Exemption or PBR Registration Number:
Is this authorization for a change to an existing facility previously authorized $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
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)

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							
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 106.478 – Storage Tanks							
PBR 106.263 – Maintenance Start up and Shut Down							
PBR 106.511 – Portable and Emergency Engines							
PBR 106.183 – Fuel Heater							
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 ☒ N							
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 ☐ Yes ☐ No ☒ To Be Determined FOP pursuant to 30 TAC Chapter 122?							
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)

III. Fee Information (go to www.tceq.texas.gov/epay to pay online)	
A. Fee Amount: 900.00	
B. Voucher number from ePay: NA	
IV. Public Notice (if applicable)	
A. Responsible Person ( Mr. Mrs. Ms. Other:)	
Name:	
Title:	
Company:	
Mailing Address:	
City:	
State:	
ZIP Code:	
Telephone No.:	
Fax No.:	
Email Address:	
B. Technical Contact ( Mr. Mrs. Ms. Other):	
Name:	
Title:	
Company:	
Mailing Address:	
City:	
State:	
ZIP Code:	
Telephone No.:	
Fax No.:	
Email Address:	
C. Bilingual Notice	
Is a bilingual program required by the Texas Education Code in the School District?	No
Are the children who attend either the elementary school or the middle school closest	Vo

#### Form PI-1S Registrations for Air Standard Permit (Page 5)

IV.	Public Notice (continued) (if applicable) (continued)	
If "Y€	es," list which language(s) are required by the bilingual program below?	
D.	Small Business Classification and Alternate Public Notice	
	s this company (including parent companies and subsidiary companies) fewer than 100 employees or less than \$6 million in annual gross receipts?	☐ Yes ☐ No
Is the	e site a major source under 30 TAC Chapter 122, Federal Operating Permit Program?	☐ Yes ☐ No
	he site emissions of any individual regulated air contaminant equal to or ter than 50 tpy?	☐ Yes ☐ No
	he site emissions of all regulated air contaminant combined equal to eater 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
certit	: If answers to all of the questions in Section V. Renewal Certification Option are "No," use fication option and skip to Section VII. of this form. If the answers to any of the questions is ewal Certification Option are "Yes," the certification option <b>cannot</b> be used.	
	otice is applicable and comments are received in response to the public notice, the applicative fy for the renewal certification option.	ation does not

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

VI.	Technical Information Including State and Federal Regulatory Requirements						
Note the s	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 che	cklists.)					
	ou demonstrate that the general requirements in 30 TAC ons 116.610 and 116.615 are met?	⊠ Yes □ No					
Did y	ou demonstrate that the individual requirements of the specific standard permit are met?	⊠ Yes ☐ No					
В.	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					
Proje	ected Start of Construction (provide date):						
Proje	ected Start of Operation (provide date):						
Leng	th of Time at the Site:						
VII.	Delinquent Fees and Penalties						
the A	form <b>will not be processed</b> until all delinquent fees and/or penalties owed to the TCEQ of attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and ocol. For more information regarding Delinquent Fees and Penalties, go to the TCEQ webstace.texas.gov/agency/financial/fees/delin/index.html.	nd Penalty					

### 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):

Signature (original signature required):

#### 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: <a href="https://www.tceq.texas.gov/permitting/air/nav/standard.html">www.tceq.texas.gov/permitting/air/nav/standard.html</a>.

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?	X 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?	X YES NO					
Attach emissions s	ummary 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?	X YES NO					
If "YES," list subp	varts: A, and JJJJ	•					
116.610 (a)(4)	Do any Hazardous Air Pollutant requirements apply to this registration?	☐ YES 🔀 NO					
If "YES," list subp	arts:						
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?	X YES NO					
If "YES," list subp	arts: A, ZZZZ, and DDDDD						
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:	X YES NO					
	Emissions calculations including the basis of the calculations?	X 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?	X YES NO					
	Description of efforts to minimize collateral emissions increases associated with this project?	X YES NO					
	Process descriptions including related processes?	X YES NO					
	Description of any equipment being installed?	X 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?	ĭ 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?						
116.615(2)	⊠ 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)	ĭX 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					

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#### **EGU Standard Permit Applicability Summary**

#### (1) Applicability.

Pecos Power Plant LLC is installing reciprocating internal combustion engines (RICE) engines after the effective date of the standard permit. The standard permit is applicable. Boilers are not being installed.

#### (2) Definitions

Reeves County falls under the definition of the West Texas Region.

#### (3) Administrative Requirements

- (A) Pecos Power Plant is registering the application using a PI-1S.
- (B) Pecos Power Plant LLC will comply with the emission fee in 30 TAC §116.614.
- (C) Pecos Power Plant LLC will not start construction until approval has been given.
- (D) Pecos Power Plant LLC will maintain all records required (hours of operation, maintenance and stack testing records, and fuel limits information) by the standard permit.
- (E) Rice engines are not subject to NSPS Subpart GG or KKKK.
- (F) The facility is not subject to Chapter 114 and 117. 30 TAC §114.427(b)(3) exempts the engines from any standards in Chapter 114. The site is in Reeves County which has no requirements for Chapter 117.

#### (4) General Requirements

- (A) NOx emission from the electric generating unit shall be certified by the manufacturer or by own or operator in pounds per megawatt hour (lb/MWh). Certification will be displayed on the name plate of the unit of on the label attached to the unit.
- (B) The site will not use combined heat and power.
- (C) The engines will combust natural gas which contains no more than 10 grains per 100 dry standard cubic feet.
- (D) The engines are over 10 MW and therefore (4)(D) does not apply.
- (E) The engines may operate over 300 hours a year and will meet 0.14 lb NOx/MWh with an actual emission rate at 0.13 lb Nox/MWh.
- (F) The electric generating engines will only operate on sweet natural gas.
- (G) Pecos Power Plant LLC will recertify the engines every 16,000 hour or every 3 years.
- (H) Pecos Power Plant LLC will maintain records to comply with the alternative emission standard if operating below 80% load.

#### Texas Commission on Environmental Quality Table 29 Reciprocating Engines

I. Engine Data											
Manufacturer:			Model N				Serial No. Manufacture Da			ture Date:	
Wartsila			W18V509	SG		TBD					
Rebuilds Date: No. of Cylinders:			ylinders:		1			EPN:			
18				11.5:1 IC-1 through IC-12							
	Application:       ☐ Gas Compression       ▼ Electric Generation       ☐ Refrigeration       ☐ Emergency/Stand by										
▼ 4 Stroke Cycle  2 Stroke Cycle  Carbureted  Spark Ignited  Dual Fuel  Fuel Injected											
☐ Diesel ☐ Naturally Aspirated ☐ Blower / Pump Scavenged ☐ Turbo Charged and I.C. ☒ Turbo Charged											
☐ Intercooled ☐ I.C. Water Temperature ☐ Lean Burn ☐ Rich Burn											
Ignition/Injection Timing: Fixed: Variable:											
Manufact	ure Horse	epower Rat	ing: 25,3	05 HP		Proposed	Horsepo	wer Rating:	18.8 M	<b>N</b>	
						Parameter					
	Height (			Diameter (	(Feet)		emperat	ure (°F)	Exit	Velocity (1	FPS)
67			5.33			698			22.4		
	l Data										
Type of F		Field Gas		andfill Gas			Natural		Digester G		
		(BTU/bhp-				lue: 8053		Lowe	r Heating	y Value: 732	21
Sulfur Co	ntent (gra	ains/100 sc	f - weight	%): Less t	han 10 (g	gr/100dscf)					
III. Em	ission Fa	ctors (Bef	ore Cont	rol)							
NO	X	CO	)	SO	2	VO	C	Formalo	lehyde	PM	10
g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv
		n Factors:	•	ıfacturer Da	ata 🔀 A	AP-42 🔲	Other (sp	ecify):			
		ctors (Pos									
NO		CC	)	SO	2	VO	C	Formalo	lehyde	PM	10
g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv	g/hp-hr	ppmv
See Ma											
						an Operatio					
	ied Charg			C Catalyst	-	her (Specify					
					ntrol info	ormation the	at demons	strates cont	rol efficie		N.T.
		ncluded in t			_					× Yes □	No
				(Check all		• ,	445 T	•			
× NSPS		MACT ZZ		NSPS IIII	Title	e 30 Chapte	r 117 - L	ist County:			
		l Informat									
						or general ratent and hea				nrovide mo	de.
	nt of cons		unai y 515, 1	meraamig st	arrur COIII	om and nea	ang varu	c. I of gasco	, as 1ucis,	provide inc	,10
			fuel ratio	control sys	tem (man	ufacturer in	nformatio	n is accepta	ıble).		

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#### **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.:
11/22/2024	TBD	TBD	Pecos Power Plant	TBD

EPN	FIN	Name	Component or Air Contaminant Name	Air Contaminant Emission Rate lb/hr	Air Contaminant Emission Rate TPY
IC-1 through IC-12	IC-1 through IC-12	Individual Emission Limits for the Wartsila 18V50SG engines.	VOC	4.95	
			VOC (MSS)	6.24	
			NOx	2.46	
			NOx (MSS)	11.52	
			СО	4.99	
			CO (MSS)	17.65	
			SO2	0.12	
			PM10	3.09	
			PM10 (MSS)	4.92	
			PM2.5	2.06	
			PM2.5 (MSS)	4.92	
			NH3	2.02	
IC-1 through IC-12	IC-1 through IC-12	Emission Cap for IC-1 through IC-12	VOC		144.27
			VOC MSS		
			NOx		82.44
			NOx (MSS)		
			СО		164.45
			CO (MSS)		
			SO2		3.24
			PM10		94.98
			PM10 (MSS)		
			PM2.5		55.62
			NH3		45.40
NGFUG	NGFUG	Natural Gas Fugitives	VOC	0.02	0.05

TCEQ - 10153 (APD-ID264v1.0, revised 12/23 Table 1(a)
This form is for use by sources subject to air quality permit requirements and may be revised periodically.

Page	of

# APPENDIX C DATA AND EQUIPMENT SHEETS LOCATED IN CONFIDENTIAL APPLICATION

