Acronyms (add to list as needed for your project)

bbl	barrel
CO2e	Carbon dioxide equivalents
CO	Carbon monoxide
CTG	Combustion turbine generator
dscf	Dry standard cubic feet
EPN	Emission point number
EFR	External floating roof
gr	Grain
GHG	Greenhouse gases
hr	Hour
H2S	Hydrogen sulfide
IFR	Internal floating roof
Pb	lead
MSS	Maintenance, startup, shutdown

MW	Megawatt
MWh	Megawatt hour
MMBtu	Million British thermal units
NOx	Nitrogen oxides
O2	Oxygen
PM/PM10/PM2.5	Particulate matter, including PM equal to or less than 10 or 2.5 microns in diameter
ppm	Parts per million
lb	Pound
SCR	Selective catalytic reduction
SO2	Sulfur dioxide
H2SO4	Sulfuric acid
tpy	Tons per year
VOC	Volatile organic compounds

Facility Information

Company Name	NRG CEDAR BAYOU 5 LLC
Facility Name	Cedar Bayou Electric Generating Unit 5
Project Description (only address units requiring federal review)	
Facility County	Chambers
Facility Contact (Name, Phone Number)	Mr. Craig Eckberg, (713) 537-2776
Your Contact Info (Name, Phone, Email)	Ms. Ruth Alvirez, (512) 239-5220, Ruth.Alvirez@tceq.texas.gov
Permit Numbers (this list should match your CND header)	160538, PSDTX1528, and GHGPSDTX204
Title V Permit Number (or not yet available)	
Permit Type (All Major & Minor permits)	Add New Process to Existing Facility
Projected Second Public Notice Issuance Date	
Projected Final Issuance Date	
SIC Code	4911
NAICS Industry Code	221112
Facility Registry System Number (or not found)	
Nearest Class I Area	Caney Creek, AR
Distance from Facility to Nearest Class I Area	Greater than 250 km

Pollutants triggering major NSR permitting with this action

VOC	* BACT * LAER * MACT
CO	* BACT * LAER * MACT
PM	* BACT * LAER * MACT
PM10	* BACT * LAER * MACT
PM2.5	* BACT * LAER * MACT
H2SO4	* BACT * LAER * MACT
CO2e	* BACT * LAER * MACT

Please copy this page for each source type with pollutants triggering federal review

Source of emissions	**Turbine – Combined Cycle**
Process code for emission source listed above	**15.210**
Primary fuel fired (if applicable)	**Natural gas**
Throughput with units (leave blank if confidential)	
Source notes (optional)	**MSS emission rates are included in annual tpy. Work practices to control are duration limitation on startup and shutdown.**
Other applicable requirements -Can select multiple -List all applicable subchapters and subparts -Specify pollutants, if needed	* NSPS KKKK, TTTT * NESHAP Click here to enter subpart. * MACT YYYY * Ch. 115 or 117 Click here to enter subchapter.

Pollutant (delete rows as necessary)	**Test Method Blank = unspecified**	**Control Method (select more than one as needed)**	**Control Method Description**	**Other factors considered (health effects, etc.) Blank = none**	**Numeric Limit with units (required)**
VOC		*Pollution Prevention *Add On Control *No control	Oxidation catalyst		1.0 ppmvd on a 3-hr rolling average
CO		*Pollution Prevention *Add On Control *No control	Oxidation catalyst		4.0 ppmvd on a 3-hr rolling average
PM		*Pollution Prevention *Add On Control *No control	Low sulfur fuel		95.99 tpy
PM_{10}		*Pollution Prevention *Add On Control *No control	Low sulfur fuel		95.99 tpy
$PM_{2.5}$		*Pollution Prevention *Add On Control *No control	Low sulfur fuel		95.99 tpy
H_2SO_4		*Pollution Prevention *Add On Control *No control	Low sulfur fuel		16.23 tpy
CO_{2e}		*Pollution Prevention *Add On Control *No control	Work practices		827 lb CO_2/MWh

Source of emissions		**Turbine – Simple Cycle**			
Process code for emission source listed above		**16.110**			
Primary fuel fired (if applicable)		**Natural gas**			
Throughput with units (leave blank if confidential)		**14,552,539 MMBtu/yr**			
Source notes (optional)		**MSS emission rates are included in annual tpy. Work practices to control are duration limitation on startup and shutdown.**			
Other applicable requirements -Can select multiple -List all applicable subchapters and subparts -Specify pollutants, if needed		* NSPS KKKK, TTTT * NESHAP Click here to enter subpart. * MACT YYYY * Ch. 115 or 117 Click here to enter subchapter.			
Pollutant (delete rows as necessary)	**Test Method Blank = unspecified**	**Control Method (select more than one as needed)**	**Control Method Description**	**Other factors considered (health effects, etc.) Blank = none**	**Numeric Limit with units (required)**
VOC		*Pollution Prevention *Add On Control *No control	Oxidation catalyst		1.5 ppmvd on a 3-hr rolling average
CO		*Pollution Prevention *Add On Control *No control	Oxidation catalyst		3.5 ppmvd on a 3-hr rolling average
PM		*Pollution Prevention *Add On Control *No control	Low sulfur fuel		27.49 tpy
PM_{10}		*Pollution Prevention *Add On Control *No control	Low sulfur fuel		27.49 tpy
$PM_{2.5}$		*Pollution Prevention *Add On Control *No control	Low sulfur fuel		27.49 tpy
H_2SO_4		*Pollution Prevention *Add On Control *No control	Low sulfur fuel		6.69 tpy
CO_{2e}		*Pollution Prevention *Add On Control *No control	Work practices		1,194 lb CO_2/MWh

Source of emissions	**Turbine – Auxiliary Boiler**
Process code for emission source listed above	**16.110**
Primary fuel fired (if applicable)	**Natural gas**
Throughput with units (leave blank if confidential)	**178,200 MMBtu/yr**
Source notes (optional)	**MSS emission rates are included in hour and annual emission rates. Work practices to control are duration limitation on startup and shutdown.**
Other applicable requirements -Can select multiple -List all applicable subchapters and subparts -Specify pollutants, if needed	* NSPS Dc * NESHAP Click here to enter subpart. * MACT DDDDD * Ch. 115 or 117 Click here to enter subchapter.

Pollutant (delete rows as necessary)	**Test Method Blank = unspecified**	**Control Method (select more than one as needed)**	**Control Method Description**	**Other factors considered (health effects, etc.) Blank = none**	**Numeric Limit with units (required)**
VOC		*Pollution Prevention *Add On Control *No control	Use of natural gas		0.0054 lb/MMBtu
CO		*Pollution Prevention *Add On Control *No control	Low sulfur fuel		0.037 lb/MMBtu
PM		*Pollution Prevention *Add On Control *No control	Low sulfur fuel		7.6 lb/MMscf
PM_{10}		*Pollution Prevention *Add On Control *No control	Low sulfur fuel		7.6 lb/MMscf
$PM_{2.5}$		*Pollution Prevention *Add On Control *No control	Low sulfur fuel		7.6 lb/MMscf
CO_{2e}		*Pollution Prevention *Add On Control *No control	Work practices		10,426 tpy

Source of emissions	**Diesel Generator**
Process code for emission source listed above	**17.110**
Primary fuel fired (if applicable)	**Diesel**
Throughput with units (leave blank if confidential)	**500 hr/yr operational limitation**
Source notes (optional)	**Engines to be used if Combined Cycle Turbine Option is choses. MSS emission rates are included in hour and annual emission rates.**
Other applicable requirements -Can select multiple -List all applicable subchapters and subparts -Specify pollutants, if needed	* NSPS IIII * NESHAP Click here to enter subpart. * MACT ZZZZ * Ch. 115 or 117 Click here to enter subchapter.

Pollutant (delete rows as necessary)	**Test Method Blank = unspecified**	**Control Method (select more than one as needed)**	**Control Method Description**	**Other factors considered (health effects, etc.) Blank = none**	**Numeric Limit with units (required)**
VOC		*Pollution Prevention *Add On Control *No control	Limited hours of operation		0.04 g/hp-hr
CO		*Pollution Prevention *Add On Control *No control	Limited hours of operation		2.61 g/hp-hr
PM		*Pollution Prevention *Add On Control *No control	Limited hours of operation		0.022 g/hp-hr
PM_{10}		*Pollution Prevention *Add On Control *No control	Limited hours of operation		0.022 g/hp-hr
$PM_{2.5}$		*Pollution Prevention *Add On Control *No control	Limited hours of operation		0.022 g/hp-hr
CO_{2e}		*Pollution Prevention *Add On Control *No control	Limited hours of operation		592 tpy

Source of emissions		**Diesel Generator**			
Process code for emission source listed above		**17.110**			
Primary fuel fired (if applicable)		**Diesel**			
Throughput with units (leave blank if confidential)		**500 hr/yr operational limitation**			
Source notes (optional)		**Engines to be used if Simple Cycle Turbine Option is choses. MSS emission rates are included in hour and annual emission rates.**			
Other applicable requirements -Can select multiple -List all applicable subchapters and subparts -Specify pollutants, if needed		* NSPS IIII * NESHAP Click here to enter subpart. * MACT ZZZZ * Ch. 115 or 117 Click here to enter subchapter.			
Pollutant (delete rows as necessary)	**Test Method Blank = unspecified**	**Control Method (select more than one as needed)**	**Control Method Description**	**Other factors considered (health effects, etc.) Blank = none**	**Numeric Limit with units (required)**
VOC		*Pollution Prevention *Add On Control *No control	Limited hours of operation		0.50 g/hp-hr
CO		*Pollution Prevention *Add On Control *No control	Limited hours of operation		2.61 g/hp-hr
PM		*Pollution Prevention *Add On Control *No control	Limited hours of operation		0.022 g/hp-hr
PM_{10}		*Pollution Prevention *Add On Control *No control	Limited hours of operation		0.022 g/hp-hr
$PM_{2.5}$		*Pollution Prevention *Add On Control *No control	Limited hours of operation		0.022 g/hp-hr
CO_{2e}		*Pollution Prevention *Add On Control *No control	Limited hours of operation		530 tpy

Source of emissions	**Cooling Tower**
Process code for emission source listed above	**99.009**
Primary fuel fired (if applicable)	
Throughput with units (leave blank if confidential)	
Source notes (optional)	
Other applicable requirements -Can select multiple -List all applicable subchapters and subparts -Specify pollutants, if needed	* NSPS IIII * NESHAP Click here to enter subpart. * MACT ZZZZ * Ch. 115 or 117 Click here to enter subchapter.

Pollutant (delete rows as necessary)	**Test Method Blank = unspecified**	**Control Method (select more than one as needed)**	**Control Method Description**	**Other factors considered (health effects, etc.) Blank = none**	**Numeric Limit with units (required)**
PM		*Pollution Prevention *Add On Control *No control	Drift eliminators – 0.0005%		TDS - 60,000 ppm
PM_{10}		*Pollution Prevention *Add On Control *No control	Drift eliminators – 0.0005%		TDS - 60,000 ppm
$PM_{2.5}$		*Pollution Prevention *Add On Control *No control	Drift eliminators – 0.0005%		TDS - 60,000 ppm