	TIE-IN LOCATIONS
TP-01	HIGH PRESSURE FUEL GAS SUPPLY
TP-02	LOW PRESSURE FUEL GAS SUPPLY
TP-03	POTABLE WATER (CITY WATER SUPPLY)
TP-04	RAW WATER SUPPLY (INTAKE)
TP-05	WASTE WATER DISCHARGE
TP-06	COOLING TOWER BLOWDOWN
TP-07	STORM / SURFACE WATER RUNOFF
TP-08	EXISTING SWITCHYARD CONNECTION
TP-09	DATA CENTER COOLING WATER SUPPLY
TP-10	SANITARY DISCHARGE
TP-11	HIGH PRESSURE FG SUPPLY TO FT8 (W)

LEGEND:

0001 ADMINISTRATION AND CONTROL BUILDING
0002 RAW WATER TREATMENT BUILDING
0003 DEMIN WATER TREATMENT BUILDING
0004 MAINTENANCE SHOP BUILDING
0005 STORAGE BUILDING
0006 FIRE WATER PUMP ENCLOSURE
0013 GIS #1 BUILDING
0014 GIS #2 BUILDING
0018 GUARD HOUSE
0060 PARKING AREA
0063 SITE FENCE
0118 DEMIN WATER PUMPS
0119 DEMIN WATER STORAGE TANK
0123 FIRE/SERVICE WATER STORAGE TANK
0125 SERVICE WATER PUMPS
0162 SWITCHYARD
1014 STG BUILDINGS
1016 AUXILIARY BOILER BUILDINGS UNIT 1,4,6
1230 COOLING TOWER BLOWDOWN SUMP/PUMPS

HIGH VOLTAGE RIGHT OF WAY

GAS YARD
FT8 COMBUSTION TURBINES
- SCOPE BY OTHER -
TYPICAL ON 7 UNITS
SEE DWG PP-001
WATER TREATMENT AREA
SEE DWG WT-001
WASTE WATER
TREATMENT (EXISTING)
RAW WATER
INTAKE (EXISTING)
COAL ROAD
UNIT 1
UNIT 2
UNIT 3
UNIT 4
UNIT 5
UNIT 6
UNIT 7

- PRELIMINARY -
NOT FOR CONSTRUCTION

REV	DESIGN BY	CHECKED BY	DATE
A	ISSUED FOR PERMIT		
	P. STEWART	C. BREMER	4-15-25

HOMER CITY REDEVELOPMENT LLC
HOMER CITY REDEVELOPMENT

Kiewit

SITE PLAN

ENGINEER/DESIGN ORIGINATOR	A. CAMPBELL
LEAD ENG	R. LOWELL
ENG MGR	T. HINES
PROJ MGR	G. DINKEL

DRAWING NUMBER
P0059040-SP-001

SCALE IN FEET
300 0 300 600
SCALE: 1" = 300'

PLANT NORTH

4/15/2025 3:36:25 PM Andrew.J.Campbell V:\PGEN\20059040--Homer_City_Redevelopment\DES\BD\ARC\Issued For Permit\P0059040-PP-001_Base.dgn

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
CENTER FOR ENVIRONMENTAL EXCELLENCE

GENERAL INFORMATION FORM – AUTHORIZATION APPLICATION

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This form is used by the Department of Environmental Protection (DEP) to inform our programs regarding what other DEP permits or authorizations may be needed for the proposed project or activity. This version of the General Information Form (GIF) must be completed and returned with any program-specific application being submitted to the DEP.

Related ID#s (If Known)				DEP USE ONLY
Client ID#	298406	**APS ID#**		Date Received & General Notes
Site ID#	236714	**Auth ID#**		
Facility ID#	262713			

CLIENT INFORMATION

DEP Client ID#	Client Type/Code	Dun & Bradstreet ID#
298406	Partnership-Limited	

Legal Organization Name or Registered Fictitious Name	Employer ID# (EIN)	Is the EIN a SSN?
Homer City Generation, L.P.	80-0833693	☐ Yes ☒ No

State of Incorporation or Registration of Fictious Name

☐ Corporation ☒ LLC ☐ Partnership ☐ LLP ☐ LP
☐ Sole Proprietorship ☐ Association/Organization
☐ Estate/Trust ☐ Other

Individual Last Name	First Name	MI	Suffix
Levesque	Michael		

Additional Individual Last Name	First Name	MI	Suffix

Mailing Address Line 1	Mailing Address Line 2
1750 Power Plant Rd	

Address Last Line – City	State	ZIP+4	Country
Homer City	PA	15748-8009	USA

Client Contact Last Name	First Name	MI	Suffix
Wroten	Mark		

Client Contact Title	Phone	Ext	Cell Phone
Deputy Chief Operating Officer	870-559-6000		

Email Address	FAX
mwroten@homercityredevelopment.com	

SITE INFORMATION

DEP Site ID#	Site Name
236714	Homer City Generation, L.P.

EPA ID# **Estimated Number of Employees to be Present at Site**

Description of Site

Tax Parcel ID(s):

County Name(s)	Municipality(ies)	City	Boro	Twp	State
Indiana	Center	☐	☐	☒	PA
		☐	☐	☐	
		☐	☐	☐	

☐	☐	☐

Site Location Line 1	**Site Location Line 2**
1750 Power Plant Rd	

Site Location Last Line – City	**State**	**ZIP+4**
Homer City	PA	15748-8009

Detailed Written Directions to Site

From Pittsburgh, head east on I-376 and US-22. Turn right on Villa Rd. and left onto Old US Hwy 22. Merge onto US-119 N and follow for 4.6 miles. Turn left onto Power Plant Rd.

Site Contact Last Name	**First Name**	**MI**	**Suffix**
Wroten	Mark		

Site Contact Title	**Site Contact Firm**
Deputy Chief Operating Officer	

Mailing Address Line 1	**Mailing Address Line 2**
1750 Power Plant Road	

Mailing Address Last Line – City	**State**	**ZIP+4**
Homer City	PA	15748-8009

Phone	**Ext**	**FAX**	**Email Address**
870-559-6000			mwroten@homercityredevelopment.com

NAICS Codes (Two- & Three-Digit Codes – List All That Apply)	**6-Digit Code** (Optional)
22	221112

Client to Site Relationship

Deputy Chief Operating Officer

FACILITY INFORMATION

Modification of Existing Facility	**Yes**	**No**
1. Will this project modify an existing facility, system, or activity?	☒	☐
2. Will this project involve an addition to an existing facility, system, or activity?	☐	☒

If "Yes", check all relevant facility types and provide DEP facility identification numbers below.

	Facility Type	**DEP Fac ID#**		**Facility Type**	**DEP Fac ID#**
☐	Air Emission Plant		☐	Industrial Minerals Mining Operation	
☐	Beneficial Use (water)		☐	Laboratory Location	
☐	Blasting Operation		☐	Land Recycling Cleanup Location	
☐	Captive Hazardous Waste Operation		☐	Mine Drainage Treatment / Land Recycling Project Location	
☐	Coal Ash Beneficial Use Operation		☐	Municipal Waste Operation	
☐	Coal Mining Operation		☐	Oil & Gas Encroachment Location	
☐	Coal Pillar Location		☐	Oil & Gas Location	
☐	Commercial Hazardous Waste Operation		☐	Oil & Gas Water Poll Control Facility	
☐	Dam Location		☐	Public Water Supply System	
☐	Deep Mine Safety Operation -Anthracite		☐	Radiation Facility	
☐	Deep Mine Safety Operation -Bituminous		☐	Residual Waste Operation	
☐	Deep Mine Safety Operation -Ind Minerals		☐	Storage Tank Location	
☐	Encroachment Location (water, wetland)		☐	Water Pollution Control Facility	
☐	Erosion & Sediment Control Facility		☐	Water Resource	
☐	Explosive Storage Location		☐	Other:	

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
0/0	40	31	25	-79	11	**47**

Horizontal Accuracy Measure	Feet	*--or--*	Meters	
Horizontal Reference Datum Code	☐	North American Datum of 1927		
	☒	North American Datum of 1983		
	☐	World Geodetic System of 1984		
Horizontal Collection Method Code				
Reference Point Code				
Altitude	Feet	*--or--*	Meters	
Altitude Datum Name	☐	The National Geodetic Vertical Datum of 1929		
	☐	The North American Vertical Datum of 1988 (NAVD88)		
Altitude (Vertical) Location Datum Collection Method Code				
Geometric Type Code				
Data Collection Date				
Source Map Scale Number		Inch(es)	=	Feet
--or--		Centimeter(s)	=	Meters

PROJECT INFORMATION

Project Name

Homer City Generation

Project Description

Redevelopment of the former Homer City Generating Station. See, Application narrative.

Project Consultant Last Name	First Name	MI	Suffix
Connors	Jeff		

Project Consultant Title	Consulting Firm
Supervisor, Air Quality Services (East)	AECOM Technical Services, Inc.

Mailing Address Line 1	Mailing Address Line 2
250 Apollo Drive	

Address Last Line – City	State	ZIP+4
Chelmsford	MA	01824-3627

Phone	Ext	FAX	Email Address
978-905-2166			jeffrey.connors@aecom.com

Time Schedules	Project Milestone (Optional)
After Plan Approval issuance	Start of Construction
Third quarter 2029	Anticipated conclusion of construction activities
Fourth quarter 2029	Anticipated startup of all project sources

1. Is the project located in or within a 0.5**-mile radius of an Environmental Justice community as defined by DEP?** ☒ Yes ☐ No

To determine if the project is located in or within a 0.5-mile radius of an environmental justice community, please use the online PennEnviroScreen tool. To see specific EJ areas, select the appropriate year of your submittal from the themes box on the right.

2. Have you informed the surrounding community prior to submitting the application to the Department? ☒ Yes ☐ No

Method of notification: Local meetings and press release

3. **Have you addressed community concerns that were identified?** ☐ Yes ☐ No ☒ N/A

If no, please briefly describe the community concerns that have been expressed and not addressed.

4. **Is your project funded by state or federal grants?** ☐ Yes ☒ No

Note: If "Yes", specify what aspect of the project is related to the grant and provide the grant source, contact person and grant expiration date.

Aspect of Project Related to Grant

Grant Source: _____

Grant Contact Person: _____

Grant Expiration Date: _____

5. **Is this application for an authorization on Appendix A of the Land Use Policy? (For referenced list, see Appendix A of the Land Use Policy attached to GIF instructions)** ☒ Yes ☐ No

Note: If "No" to Question 5, the application is not subject to the Land Use Policy.

If "Yes" to Question 5, the application is subject to this policy and the Applicant should answer the additional questions in the **Land Use Information** section.

LAND USE INFORMATION

Note: Applicants should submit copies of local land use approvals or other evidence of compliance with local comprehensive plans and zoning ordinances.

1. **Is there an adopted county or multi-county comprehensive plan?** ☒ Yes ☐ No

2. **Is there a county stormwater management plan?** ☒ Yes ☐ No

3. **Is there an adopted municipal or multi-municipal comprehensive plan?** ☒ Yes ☐ No

4. **Is there an adopted county-wide zoning ordinance, municipal zoning ordinance or joint municipal zoning ordinance?** ☒ Yes ☐ No

Note: If the Applicant answers "No" to either Questions 1, 3 or 4, the provisions of the PA MPC are not applicable, and the Applicant does not need to respond to questions 5 and 6 below.

If the Applicant answers "Yes" to questions 1, 3 and 4, the Applicant should respond to questions 5 and 6 below.

5. **Does the proposed project meet the provisions of the zoning ordinance or does the proposed project have zoning approval?** If zoning approval has been received, attach documentation. ☒ Yes ☐ No

6. **Have you attached Municipal and County Land Use Letters for the project?** ☒ Yes ☐ No

COORDINATION INFORMATION

Note: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 at PHMC's online portal, PA-SHARE.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 through 2.5 below.

If the activity will not be a mining project, skip questions 1.0 through 2.5 and begin with question 3.0.

1.0	**Is this a coal mining project?** If "Yes", respond to 1.1-1.6. If "No", skip to Question 2.0.	☐	Yes	☒	No
1.1	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be equal to or greater than 200 tons/day?**	☐	Yes	☐	No
1.2	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be greater than 50,000 tons/year?**	☐	Yes	☐	No
1.3	**Will this coal mining project involve coal preparation/ processing activities in which thermal coal dryers or pneumatic coal cleaners will be used?**	☐	Yes	☐	No
1.4	**For this coal mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
1.5	**Will this coal mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No
1.6	**Will this coal mining project involve underground coal mining to be conducted within 500 feet of an oil or gas well?**	☐	Yes	☐	No
2.0	**Is this a non-coal (industrial minerals) mining project?** If "Yes", respond to 2.1-2.6. If "No", skip to Question 3.0.	☐	Yes	☒	No
2.1	**Will this non-coal (industrial minerals) mining project involve the crushing and screening of non-coal minerals other than sand and gravel?**	☐	Yes	☐	No
2.2	**Will this non-coal (industrial minerals) mining project involve the crushing and/or screening of sand and gravel with the exception of wet sand and gravel operations (screening only) and dry sand and gravel operations with a capacity of less than 150 tons/hour of unconsolidated materials?**	☐	Yes	☐	No
2.3	**Will this non-coal (industrial minerals) mining project involve the construction, operation and/or modification of a portable non-metallic (i.e., non-coal) minerals processing plant under the authority of the General Permit for Portable Non-metallic Mineral Processing Plants (i.e., BAQ-PGPA/GP-3)?**	☐	Yes	☐	No
2.4	**For this non-coal (industrial minerals) mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No

2.5	**Will this non-coal (industrial minerals) mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐ Yes	☐ No
3.0	**Will your project, activity, or authorization have anything to do with a well related to oil or gas production, have construction within 200 feet of, affect an oil or gas well, involve the waste from such a well, or string power lines above an oil or gas well?** If "Yes", respond to 3.1-3.3. If "No", skip to Question 4.0.	☐ Yes	☒ No
3.1	**Does the oil- or gas-related project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)?**	☐ Yes	☐ No
3.2	**Will the oil- or gas-related project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or storm water system?** If "Yes", discuss in *Project Description*.	☐ Yes	☐ No
3.3	**Will the oil- or gas-related project involve the construction and operation of industrial waste treatment facilities?**	☐ Yes	☐ No
4.0	**Will the project involve a construction activity that results in earth disturbance?** If "Yes", specify the total disturbed acreage.	☒ Yes	☐ No
	4.0.1 Total Disturbed Acreage +1 acre TBD		
	4.0.2 Will the project discharge or drain to a special protection water (EV or HQ) or an EV wetland?	☐ Yes	☒ No
	4.0.3 Will the project involve a construction activity that results in earth disturbance in the area of the earth disturbance that are contaminated at levels exceeding residential or non-residential medium-specific concentrations (MSCs) in 25 Pa. Code Chapter 250 at residential or non-residential construction sites, respectively?	☐ Yes	☐ No
5.0	**Does the project involve any of the following: water obstruction and/or encroachment, wetland impacts, or floodplain project by the Commonwealth/political subdivision or public utility?** If "Yes", respond to 5.1-5.7. If "No", skip to Question 6.0.	☐ Yes	☒ No
5.1	**Water Obstruction and Encroachment Projects – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water?**	☐ Yes	☐ No
5.2	**Wetland Impacts – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a wetland?**	☐ Yes	☐ No

5.3	**Floodplain Projects by the Commonwealth, a Political Subdivision of the Commonwealth or a Public Utility – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a floodplain?**	☐	Yes	☐	No
5.4	**Is your project an interstate transmission natural gas pipeline?**	☐	Yes	☒	No
5.5	**Does your project consist of linear construction activities which result in earth disturbance in two or more DEP regions AND three or more counties?**	☐	Yes	☒	No
5.6	**Does your project utilize Floodplain Restoration as a best management practice for Post Construction Stormwater Management?**	☐	Yes	☐	No
5.7	**Does your project utilize Class V Gravity / Injection Wells as a best management practice for Post Construction Stormwater Management?**	☐	Yes	☐	No
6.0	**Will the project involve discharge of construction related stormwater to a dry swale, surface water, ground water or separate storm water system?**	☒	Yes	☐	No
6.1	**Will the project involve discharge of industrial waste stormwater or wastewater from an industrial activity or sewage to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system?**	☐	Yes	☒	No
7.0	**Will the project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☒	No
8.0	**Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations?** If "Yes", indicate estimated proposed flow (gal/day). Also, discuss the sanitary sewer pipe sizes and the number of pumping stations/treatment facilities/name of downstream sewage facilities in the *Project Description*, where applicable. **8.0.1 Estimated Proposed Flow (gal/day)**	☐	Yes	☒	No
9.0	**Will the project involve the subdivision of land, or the generation of 800 gpd or more of sewage on an existing parcel of land or the generation of an additional 400 gpd of sewage on an already-developed parcel, or the generation of 800 gpd or more of industrial wastewater that would be discharged to an existing sanitary sewer system?**	☐	Yes	☒	No
	9.0.1 Was Act 537 sewage facilities planning submitted and approved by DEP? If "Yes" attach the approval letter. Approval required prior to 105/NPDES approval.	☐	Yes	☐	No
10.0	**Is this project for the beneficial use of biosolids for land application within Pennsylvania?** If "Yes" indicate how much (i.e. gallons or dry tons per year). **10.0.1 Gallons Per Year (residential septage)** **10.0.2 Dry Tons Per Year (biosolids)**	☐	Yes	☒	No

11.0 **Does the project involve construction, modification or removal of a dam?** If "Yes", identify the dam. ☒ Yes ☐ No

11.0.1 **Dam Name** Lake Bruce

12.0 **Will the project interfere with the flow from, or otherwise impact, a dam?** If "Yes", identify the dam. ☐ Yes ☒ No

12.0.1 **Dam Name**

13.0 **Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)?** ☒ Yes ☐ No

13.0.1 If "Yes", is the operation subject to the agricultural exemption in 35 P.S. § 4004.1? ☐ Yes ☒ No

13.0.2 If the answer to 13.0.1 is "No", identify each type of emission followed by the estimated amount of that emission.

Enter all types & amounts of emissions; separate each set with semicolons. See Emissions Calculations in Appendix C

14.0 **Does the project include the construction or modification of a drinking water supply to serve 15 or more connections or 25 or more people, at least 60 days out of the year?** If "Yes," check all proposed sub-facilities. ☐ Yes ☒ No

14.0.1 **Number of Persons Served**

14.0.2 **Number of Employee/Guests**

14.0.3 **Number of Connections**

14.0.4 **Sub-Fac: Distribution System** ☐ Yes ☐ No

14.0.5 **Sub-Fac: Water Treatment Plant** ☐ Yes ☐ No

14.0.6 **Sub-Fac: Source** ☐ Yes ☐ No

14.0.7 **Sub-Fac: Pump Station** ☐ Yes ☐ No

14.0.8 **Sub-Fac: Transmission Main** ☐ Yes ☐ No

14.0.9 **Sub-Fac: Storage Facility** ☐ Yes ☐ No

15.0 **Will your project include infiltration of storm water or waste water to ground water within one-half mile of a public water supply well, spring or infiltration gallery?** ☐ Yes ☒ No

16.0 **Is your project to be served by an existing public water supply?** If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project. ☒ Yes ☐ No

16.0.1 **Supplier's Name** Homer City Water Authority

16.0.2 **Letter of Approval from Supplier is Attached** ☐ Yes ☒ No

17.0 **Will this project be served by on-lot drinking water wells?** ☐ Yes ☒ No

18.0 **Will this project involve a new or increased drinking water withdrawal from a river, stream, spring, lake, well or other water bod(ies)?** If "Yes," reference Safe Drinking Water Program. ☐ Yes ☒ No

18.0.1 **Source Name**

19.0	**Will the construction or operation of this project involve treatment, storage, reuse, or disposal of waste?** If "Yes," indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed. **19.0.1 Type & Amount**	☐ Yes	☒ No
20.0	**Will your project involve the removal of coal, minerals, contaminated media, or solid waste as part of any earth disturbance activities?**	☐ Yes	☒ No
21.0	**Does your project involve installation of a field constructed underground storage tank?** If "Yes," list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **21.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐ Yes	☒ No
22.0	**Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility?** If "Yes," list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **22.0.1 Enter all substances & capacity of each; separate each set with semicolons.** 19% aqueous ammonia, 9 tanks 35,000 gallons each	☒ Yes	☐ No
23.0	**Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724?** If "Yes," list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **23.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐ Yes	☒ No
24.0	**Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **24.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐ Yes	☒ No
	NOTE: If the project includes the installation of a regulated storage tank system, including diesel emergency generator systems, the project may require the use of a Department Certified Tank Handler. For a full list of regulated storage tanks and substances, please go to www.dep.pa.gov search term storage tanks		
25.0	**Will the intended activity involve the use of a radiation source?**	☐ Yes	☒ No

CERTIFICATION

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

For applicants supplying an EIN number: I am applying for a permit or authorization from the Pennsylvania Department of Environmental Protection (DEP). As part of this application, I will provide DEP with an accurate EIN number for the applicant entity. By filing this application with DEP, I hereby authorize DEP to confirm the accuracy of the EIN number provided with the Pennsylvania Department of Revenue. As applicant, I further consent to the Department of Revenue discussing the same with DEP prior to issuance of the Commonwealth permit or authorization.

Type or Print Name Michael J. Levesque

Signature	Title	Date
Michael Levesque	Chief Operating Officer	4/1/25

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
CENTER FOR ENVIRONMENTAL EXCELLENCE

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

AIR QUALITY FEES FOR NEW PLAN APPROVAL

Company Information	
Federal Tax ID: 80-0833693	Firm Name: Homer City Generating, L.P.
Permit # (If any):	Facility Name: Homer City Generating
Municipality: Center Township	County: Indiana
Contact Person Name: Mark Wroten	Telephone Number: 870.559.6000
E-mail: mwroten@homercityredevelopment.com	

New Plan Approval (The following fees are cumulative.)

Line #	Check the appropriate boxes below	Type of review requested	Fee 2021 - 2025	Total Fees
1	Base Fee	Subchapter B	$2,500	$2,500
2	☒	New Source Review, Subchapter E	$7,500	7,500
3	☒	NSPS/NESHAP /MACT standard A. # of NSPS: 5 B. # of NESHAP/MACT: 4 C. Add lines A and B: 9 D. Maximum applicable standards: 3 E. Enter smaller of line C or line D: 3 Multiply line E by $2,500 and enter the amount in the "Total Fees" column.	$2,500	7,500
4	☐	Case-by-Case MACT	$9,500	
5	☒	Prevention of Significant Deterioration (PSD) requirements. Subchapter D	$32,500	32,500
6	☐	Plantwide Applicability Limit (PAL) for NSR regulated pollutants or PAL for PSD regulated pollutants or both	$7,500	
7	☐	Risk Assessment Analysis – Inhalation only	$10,000	
8	☐	Risk Assessment Analysis – Multi-pathway	$25,000	
Add Lines 1 thru 8 of Total Fees column and write it here. →				50,000

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Submit in Triplicate

COMBUSTION UNIT

Application for Plan Approval to Construct, Modify or Reactivate an Air Contamination Source and/or Install an Air Cleaning Device

This application and the General Information Form (GIF) must be included in the submittal

Before completing this form, read the instructions provided with this form.

Section A - Facility Name, Checklist And Certification

Organization Name or Registered Fictitious Name/Facility Name: Homer CIty Generation, L.P.

DEP Client ID# (If Known): _____

Type of Review required and Fees:

Source which is not subject to NSPS, NESHAPs, MACT, NSR and PSD: ..... $_____
Source requiring approval under NSPS or NESHAPS or both: ..... $ 7,500
Source requiring approval under NSR: ..... $ 7,500
Source requiring the establishment of a MACT limitation: ..... $_____
Source requiring approval under PSD: ..... $ 32,500

Applicant's Checklist

Check the following list to make sure that all the required documents are included.

- X **General Information Form (GIF)**
- X **Combustion Unit Plan Approval Application**
- X **Compliance Review Form** or provide reference of most recently submitted compliance review form for facilities submitting on a periodic basis: Submitted with February 11, 2025 Title V Modification
- X **Proof of County and Municipal Notifications**
- X **Permit Fees**
- X **Addendum A:** Source Applicable Requirements (only applicable to existing Title V facility)

Certification of Truth, Accuracy and Completeness by a Responsible Official

I, **Michael J. Levesque**, certify under penalty of law in 18 Pa. C. S. A. §4904, and 35 P.S. §4009(b) (2) that based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate and complete.

(Signature): Michael Levesque Date: 4/1/25

Name (Print): Michael J. Levesque Title: Chief Operating Officer

OFFICIAL USE ONLY

Application No. _____ Unit ID _____ Site ID _____
DEP Client ID #: _____ APS. ID _____ AUTH. ID _____
Date Received _____ Date Assigned _____ Reviewed By _____
Date of 1st Technical Deficiency _____ Date of 2nd Technical Deficiency _____
Comments: _____

Section D - Additional Information

Will the construction, modification, etc. of the sources covered by this application increase emissions from other sources at the facility? If so, describe and quantify.
The construction of the Project will involve only new sources.

If this project is subject to any one of the following, attach a demonstration to show compliance with applicable standards

a. Prevention of Significant Deterioration permit (PSD), 40 CFR Part 52? ☒ YES ☐ NO

b. New Source Review, 25 Pa. Code Chapter 127, Subchapter E? ☒ YES ☐ NO

c. New Source Performance Standards, 40 CFR Part 60? ☒ YES ☐ NO
(If Yes, which subpart) KKKK, IIII, TTTTa, Dc

d. National Emissions Standards for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 61? ☐ YES ☒ NO
If Yes, which subpart) _____

e. Maximum Achievable Control Technology (MACT), 40 CFR Part 63? ☒ YES ☐ NO
(If Yes, which subpart) YYYY, ZZZZ, DDDDD

Attach a demonstration showing that the emissions from any new source will be the minimum attainable through the use of best available technology (BAT).

See, Application Narrative Section 5.

Provide emission increases and decreases in allowable (or potential) and actual emissions within the last 5 years for applicable PSD pollutant(s) if the facility is an existing major facility (for PSD purposes)

See Application narrative Section 3.2 and 3.3

Section D - Additional Information (Continued)

Indicate emission increases and decreases in tons per year (tpy), for volatile organic compounds (VOCs) and nitrogen oxides (NOx) for NSR applicability since January 1, 1991 or other applicable dates (See other applicable date in instructions). The emissions increases include all emissions including stack, fugitive, material transfer, other emission generating activities, quantifiable emissions from the exempted source(s), etc.

Permit number (if applicable)	Date issued	Indicate ***Yes*** or ***No*** if emission increases and decreases were used previously for netting	Source I.D. or Name	**VOC**s		**NOx**	
				Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)	Emission increases in potential to emit (tpy)	Creditable emission decreases in actual emissions (tpy)
32-00055	TBD	No	Boiler No. 1, No 2, No 3		11.3		2,436.3

If the source is subject to 25 Pa. Code Chapter 127, Subchapter E, New Source Review requirements,

a. Identify Emission Reduction Credits (ERCs) for emission offsets or demonstrate ability to obtain suitable ERCs for emission offsets. Homer City is currently in the process of identifying and contacting owners of sufficient ERCs for the project

b. Provide a demonstration that the lowest achievable emission rate (LAER) control techniques will be implemented (if applicable). See application text Section 5.

c. Provide an analysis of alternate sites, sizes, production processes and environmental control techniques demonstrating that the benefits of the proposed source outweigh the environmental and social costs (if applicable). See application text Section 4.5.6.2.

Attach calculations and any additional information necessary to thoroughly evaluate compliance with all the applicable requirements of 25 Pa. Code Article III and applicable requirements of the Clean Air Act and regulations adopted there under. The Department may request additional information to evaluate the application such as a stand by plan, a plan for air pollution emergencies, air quality modeling, etc.

See Appendix C for emissions calculations.

Section G - Attachments

Number and list all attachments submitted with this application below:

Application Narrative

Section 1. Introduction
Section 2. Process Description
Section 3. PSD/NNSR Applicability Determination and Emissions Summary
Section 4. Applicable Regulations
Section 5. Control Technology Review
Section 6. Class II Area Air Quality Modeling Analysis Procedures
Section 7. Class II Area Significant Impact Level Analysis Results
Section 8. Class II Area Cumulative Impact Analysis Results
Section 9. Other PSD Requirements
Section 10. References

Appendices

Appendix A Application Forms
Appendix B Plot Plan
Appendix C Emission Calculations
Appendix D Search Results from EPA's RACT/BACT/LAER Clearinghouse
Appendix F Nearby Source Inventory
Appendix G FLM AQRV Waiver
Appendix H Acid Rain Forms

1. Combined Cycle Combustion Turbines

- Combustion Unit Form Section B – Combustion Unit Information
- Combustion Unit Form Section C – Air Cleaning Device
- Combustion Unit Form Section F – Flue and Air Contaminant Emission
- Addendum A: Source Applicable Requirements
- Addendum 1: Method of Compliance Worksheets

Section B - Combustion Unit Information

1. Combustion Units: ☐ Coal ☐ Oil ☒ Natural Gas Other: _____

Description: The combined-cycle electric generating unit consists of seven (7) natural gas-fired combustion turbines (CTs) equipped with natural gas-fired duct burners (DBs). This form includes information for the CTs only (DBs are addressed separately).

Manufacturer	Model No.	Number of units
GE Vernova	7HA.02 1x1 MS	7

Maximum heat input (Btu/hr)	Rated heat input (Btu/hr)	Typical heat input (Btu/hr)	Furnace Volume
3,515 MMBtu/hr, each turbine, 1,034.4 MMBtu/hr each DB	3,515 MMBtu/hr, each turbine, 1,034.4 MMBtu/hr each DB	3,434 MMBtu/hr, each turbine, 936.9 MMBtu/hr each DB	

Grate Area (if applicable)	Method of firing
N/A	Premix burners

Indicate how combustion air is supplied to boiler
N/A

Indicate the Steam Usage: N/A

Mark and describe soot Cleaning Method:

i. Air Blown
ii. Steam Blown
iii. Brushed and Vacuumed
iv. Other N/A
v. Frequency of Cleaning _____

Maximum Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24 (each)	7 (each)	365 (each)	8,760 (each)

Operational restrictions taken or requested, if any (e.g., bottlenecks or voluntary restrictions to limit potential to emit)

Capacity (specify units)

Per hour	Per day	Per week	Per year
4,509 MMBtu (turbine + DB)	108,215 MMBt (turbine + DB)	757,512 MMBtu (turbine + DB)	38,289,960 MMBtu (turbine + DB)

Typical Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24 (each)	7 (each)	365 (each)	8,760 (each)

Seasonal variations (Months): If variations exist, describe them.

Operating using primary fuel: _____ From _____ to _____
Operating using secondary fuel: _____ Form _____ to _____
Non-operating: From _____ to _____

2. Specify the primary, secondary and startup fuel. Furnish the details in item 3.
Natural gas will be the primary fuel.

Section B - Combustion Unit Information (Continued)

3. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	~4,419,900 SCFH	37,530 X 10^6 SCF	0.5 gr/100 SCF	0	1,020 Btu/SCF
Gas (other)	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Coal					
Other*					

***** Note: Describe and furnish information separately for other fuels in Addendum B.

4. Burner

Manufacturer	Model Number	Type of Atomization (Steam, air, press, mech., rotary cup)
GE Vernova	7HA.02	N/A

Number of Burners	Maximum fuel firing rate (all burners)	Normal fuel firing rate
N/A	4,509 MMBtu/hr per turbine + duct burner	4,370 MMBtu/hr per turbine + duct burner

If oil, temperature and viscosity.
N/A

Maximum theoretical air requirement
N/A

Percent excess air 100% rating
N/A

Turndown ratio
N/A

Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe.
N/A

Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe.
N/A

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

	Low excess air (LEA)		Flue gas recirculation	Other._____	
	Over fire air (OFA)		Burner out of service		
X	Low-NO_x burner		Reburning		
	Low NO_x burners with over fire air	**X**	Flue gas treatment (SCR / SNCR)		

Section B - Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation
N/A

Describe, in detail, the equipment provided to monitor and to record the source(s) operating conditions, which may affect emissions of air contaminants. Show that they are reasonable and adequate.

See, Addendum A Forms

Describe each proposed modification to an existing source.

N/A

Describe how emissions will be minimized especially during start up, shut down, combustion upsets and/or disruptions. Provide emission estimates for start up, shut down and upset conditions. Provide duration of start up and shut down.

Emissions during startup/shutdown will be minimized by limiting the time that the unit is in startup or shutdown mode. Startup and shutdown are defined in Section 5 of the narrative. The emissions from startup and shutdown shall be included in the 12-month rolling sum. Turbines will not have the ability to duct fire during periods of startup or shutdown. Refer to Appendix C for startup and shutdown emission calculations.

Describe in detail with a schematic diagram of the control options adopted for SO_2 (if applicable).
N/A

Anticipated milestones:

Expected commencement date of construction/reconstruction: Upon permit issuance
Expected completion date of construction/reconstruction: Anticpated third quarter 2029
Anticipated date(s) of start-up: Anticpated fourth quarter 2029

Section C - Air Cleaning Device

1. Precontrol Emissions*

Emission Rate

Pollutant	Maximum Emission Rate				Calculation/ Estimation Method
	Specify Units	Pounds/Hour	Hours/Year	Tons/Year	
PM					
PM_{10}					
SOx					
CO					
NO_x					
VOC					
Others: (e.g., HAPs)	-----	-----	-----		-----

* These emissions must be calculated based on the requested operating schedule and/or process rate, e.g., operating schedule for maximum limits or restricted hours of operation and/or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Gas Conditioning

Water quenching ☐ YES ☐ NO Water injection rate _____GPM

Radiation and convection cooling ☐ YES ☐ NO

Air dilution ☐ YES ☐ NO
If YES, _____ CFM

Forced draft ☐ YES ☐ NO

Water cooled duct work ☐ YES ☐ NO

Other _____

Inlet volume
_____ ACFM@ _____ °F

Outlet volume
_____ ACFM@ _____ °F _____ % Moisture

Describe the system in detail.

Section C - Air Cleaning Device (Continued)

8. ☒ **SELECTIVE CATALYTIC REDUCTION (SCR)**

☐ **SELECTIVE NON-CATALYTIC REDUCTION (SNCR)**

☐ **NON-SELECTIVE CATALYTIC REDUCTION (NSCR)**

Equipment specifications

Manufacturer	Type	Model No
TBD	TBD	TBD

Design inlet volume (SCFM)	Design operating temperature (°F)

Is the system equipped with process controls for proper mixing/control of the reducing agent in gas stream? If yes, give details.

Attach efficiency and other pertinent information (e.g., Ammonia, urea slip).

Operating parameters

Volume of gases handled (ACFM) _____ @ _____ (°F)

Operating temperature range for the SCR/SNCR/NSCR system (°F) From To

Reducing agent used, if any.	Oxidation catalyst used, if any.
19% aqueous ammonia	Type of oxidation catalyst TBD

State expected range of usage rate and concentration.

Service life of catalyst	Ammonia slip (ppm)
	5 ppmvd @ 15% O2

Describe fully with a sketch giving locations of equipment, controls system, important parameters and method of operation.
This information can be provided upon final design

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)
NO_X		2 ppmdv @ 15% O_2	

Section C - Air Cleaning Device (Continued)

9. Other Control Equipment: Oxidation Catalyst

Equipment specifications

Manufacturer	Type	Model No
TBD	TBD	TBD

Design inlet volume (SCFM)	Capacity

Describe pH monitoring and pH adjustment, if any.

Indicate the liquid flow rate and describe equipment provided to measure pressure drop and flow rate, if any.

Attach efficiency curve and/ or other efficiency information.

Attach any additional data including auxiliary equipment and operation details to thoroughly evaluate the control equipment.

Operating parameters

Volume of gas handled

_____ @ _____ °F _____ % Moisture

Describe, in detail, important parameters and method of operation.

The oxidation catalyst will be located prior to the HRSG to remove carbon monoxide (CO) and volatile organic compounds (VOC) from the turbine exhaust gas stream.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

Maintaining a 4-hour rolling average of the catalyst inlet temperature within the range suggested by the catalyst manufacturer.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)
CO		2 ppmdv @ 15% O_2	
VOC		1 ppmdv @ 15% O_2 without duct burners 2 ppmdv @ 15% O_2 with duct burners	

Section C - Air Cleaning Device (Continued)

10. Costs

Indicate cost associated with air cleaning device and its operating cost (attach documentation if necessary)

Device	Direct Cost	Indirect Cost	Total Cost	Operating Cost
Selective Catalytic Reduction (SCR)	TBD	TBD	TBD	TBD
Oxidation Catalyst	TBD	TBD	TBD	TBD

11 MISCELLANEOUS

Describe in detail the removal, handling and disposal of dust, effluent, etc. from the air cleaning device including proposed methods of controlling fugitive emissions.

N/A

Attach manufacturer's performance guarantees and/or warranties for each of the major components of the control system (or complete system).

See, Appendix C

Attach the maintenance schedule for the control equipment and any part of the process equipment that, if in disrepair, would increase air contaminant emissions.

Homer City will develop a formal maintenance plan and will perform maintenance and monitoring in accordance with 40 CFR Part 60, Subpart KKKK.

Section F - Flue and Air Contaminant Emission

1. Estimated Maximum Emissions*

Pollutant	Maximum emission rate: specify units	Maximum emission rate: lbs/hr	Maximum emission rate: tons/yr.	Calculation/ Estimation Method
PM	0.0054 lb/MMBtu	24.1	705.18	Vendor data
PM_{10}	0.0054 lb/MMBtu	24.1	705.18	Vendor data
SO_2	0.0014 lb/MMBtu	6.5	193.16	Vendor data
CO	2 ppmdv @ 15% O_2	20.2	774.40	Vendor data
NO_x	2 ppmdv @ 15% O_2	33.2	987.25	Vendor data
VOC	1 ppmdv @ 15% O_2 without duct burners 2 ppmdv @ 15% O_2 with duct burners	8.7	275.41	Vendor data
Others: (e.g., HAPs)	-----	-----	-----	-----
Max single HAP (formaldehyde)	91 ppbdv @ 15% O_2	6.91	29.32	Vendor data
Total HAP		12.08	51.29	AP-42

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Stack and Exhauster

Stack Designation/Number

List Source(s) or source ID exhausted to this stack:
Unit 1-7

% of flow exhausted to stack: 100

Stack height above grade (ft.) 190
Grade elevation (ft.) 1200

Stack diameter (ft) or Outlet duct area (sq. ft.)
23

Weather Cap
☐ YES ☒ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.

See, Point Source Locations Table and Appendix E

Does stack height meet Good Engineering Practice (GEP)?
No

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions. See, Application Narrative Section 6

Location of Stack** Latitude/Longitude Point of Origin	Latitude: Degrees	Latitude: Minutes	Latitude: Seconds	Longitude: Degrees	Longitude: Minutes	Longitude: Seconds
See Point Source Locations Table						

Stack Exhaust – **Based on 59ºF @ 100% Load with DB**

Volume 1,682,300 ACFM Temperature 171.6 °F Moisture 11.88 %

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____RPM.

** If the datum and collection method information and codes differ from those provided on the General Information Form - Authorization Application, provide the additional required by that form on a separate sheet.

Point Source Locations Table: Combined Cycle Turbines

	Latitude	Longitude	Distance to Property Boundary
Combined Cycle Unit 1	40° 31' 15.56"" N	079° 12' 0.36"" W	1,850 ft
Combined Cycle Unit 2	40° 31' 11.41"" N	079° 12' 0.37"" W	2,134 ft
Combined Cycle Unit 3	40° 31' 7.27"" N	079° 12' 0.36"" W	2,241 ft
Combined Cycle Unit 4	40° 31' 3.11"" N	079° 12' 0.37"" W	2,312 ft
Combined Cycle Unit 5	40° 31' 7.28"" N	079° 11' 51.03"" W	2,712 ft
Combined Cycle Unit 6	40° 31' 3.12"" N	079° 11' 51.03"" W	3,030 ft
Combined Cycle Unit 7	40° 30' 58.97"" N	079° 11' 51.02"" W	3,070 ft

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum A: Source Applicable Requirements

Describe and cite all applicable requirements pertaining to this source.
Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.

Citation Number	Citation Limitation	Limitation Used
25 Pa. Code Chapter 127.12(a)(5) – State Best Available Technology (BAT)	(Normal Operation) Combustion turbines (CTs) and heat recovery steam generators (HRSGs) with duct burners firing natural gas: 1.5 ppmvd volatile organic compounds (VOC) @15% O2 (LAER/State BAT) (average of 3-run stack test using EPA Reference Method 25A) (Normal Operation) CTs and HRSGs without duct burners firing natural gas: 1.0 ppmvd VOC @15% O2 (LAER/State BAT) (average of 3-run stack test using EPA Reference Method 25A) (Startup/Shutdown Periods) Refer to Addendum 1 for emission limits during periods of startup and shutdown.	Compliance with Nonattainment New Source Review (NNSR) lowest achievable emission rate (LAER) emissions requirements for VOC will assure compliance with State BAT requirements.
25 Pa. Code Chapter 127.205 – LAER	(Normal Operation) CTs and HRSGs with duct burners firing natural gas: 1.5 ppmvd VOC @15% O2 (LAER/State BAT) (average of 3-run stack test using EPA Reference Method 25A) (Normal Operation) CTs and HRSGs without duct burners firing natural gas: 1.0 ppmvd VOC @15% O2 (LAER/State BAT) (average of 3-run stack test using EPA Reference Method 25A) (Startup/Shutdown Periods) Refer to Addendum 1 for emission limits during periods of startup and shutdown.	See citation limitation
40 CFR Part 60, Subpart KKKK, §60.4320 – Standards of Performance for New Stationary Sources	(Normal Operation) CTs and HRSGs with duct burners firing natural gas: 15 ppmvd NOx at 15% O2 (State BAT) (1-hour block average) (Normal Operation) CTs and HRSGs without duct burners firing natural gas: 15 ppmvd NOx at 15% O2 (/State BAT) (1-hour block average) (Startup/Shutdown Periods) Refer to Addendum 1 for emission limits during periods of startup and shutdown.	Compliance with State BAT emissions requirements for NOx will assure compliance with Subpart KKKK emission limits.

25 Pa. Code §123.51 – Standards for Contaminants (Monitoring Requirements)	NOx CEMS	Compliance with Title 25, Chapter 139, Subchapter C Requirements
25 Pa. Code Chapter 127.12(a)(5) – State BAT	(Normal Operation) CTs and HRSGs with duct burners firing natural gas: 2.0 ppmvd NOx at 15% O2 (LAER/State BAT) (1-hour block average) (Normal Operation) CTs and HRSGs without duct burners firing natural gas: 2.0 ppmvd NOx at 15% O2 (LAER/State BAT) (1-hour block average) (Startup/Shutdown Periods) Refer to Addendum 1 for emission limits during periods of startup and shutdown.	Compliance with NNSR LAER emissions requirements for NOx will assure compliance with State BAT requirements.
40 CFR Part 52 – Prevention of Significant Deterioration – BACT	(Normal Operation) CTs and HRSGs with duct burners firing natural gas: 0.001 lb sulfuric acid mist (H2SO4)/hr (30 operating day rolling average) (BACT/State BAT) (Normal Operation) CTs and HRSGs without duct burners firing natural gas: 0.001 lb H2SO4/hr (30 operating day rolling average) (BACT/State BAT)	See citation limitation
25 Pa. Code Chapter 127.12(a)(5) – State BAT	(Normal Operation) CTs and HRSGs with duct burners firing natural gas: 0.001 lb H2SO4/hr (30 day rolling average) (BACT/State BAT) (Normal Operation) CTs and HRSGs without duct burners firing natural gas: 0.001 lb H2SO4/hr (30 ay rolling average) (BACT/State BAT)	Compliance with PSD BACT requirements for H2SO4 will ensure compliance with State BAT requirements.
25 Pa. Code Chapter 127.12(a)(5) – State BAT	(Normal Operation) CTs and HRSGs with duct burners firing natural gas: 1.5 ppmvd CO @15% O2 (1-hour block average)(BACT/State BAT) (Normal Operation) CTs and HRSGs without duct burners firing natural gas: 0.9 ppmvd CO @15% O2 (1-hour block average) (BACT/State BAT) (Startup/Shutdown Periods): Refer to Addendum 1 for emission limits during periods of startup and shutdown.	See citation limitation

40 CFR Part 52 – Prevention of Significant Deterioration – BACT	(Normal Operation) Each CT and HRSG with duct burner firing natural gas: 0.0054 lb particulate matter (PM)/MMBtu (average of three (3) stack test runs) (Normal Operation) Each CT and HRSG at baseload without duct burner firing natural gas: 0.0054 lb PM/MMBtu (average of three (3) stack test runs) Particulate matter comprises total particulate matter (PM), particulate matter with a diameter of less than 10 microns (PM10) including condensables, and particulate matter with a diameter of less than 2.5 microns (PM2.5) including condensables.	See citation limitation
25 Pa. Code §123.11(a)(3) – Standards for Contaminants (Combustion Units)	0.1 lb PM/MMBtu	Compliance with PSD BACT requirements for PM will ensure compliance with 25 Pa. Code §123.11 requirements.
25 Pa. Code Chapter 127.12(a)(5) – State BAT	(Normal Operation) Each CT and HRSG with duct burner firing natural gas: 0.0054 lb PM/MMBtu (average of three (3) stack test runs) (Normal Operation) Each CT and HRSG without duct burner firing natural gas: 0.0054 lb PM/MMBtu (average of three (3) stack test runs) Particulate matter comprises total particulate matter (PM), particulate matter with a diameter of less than 10 microns (PM10) including condensables, and particulate matter with a diameter of less than 2.5 microns (PM2.5) including condensables.	Compliance with PSD BACT requirements for PM/PM10/PM2.5 will ensure compliance with State BAT requirements.
40 CFR Part 52 – Prevention of Significant Deterioration – BACT	802 lb CO2e/MW-hr (gross) or 822 lb CO2e/MW-hr (net); 12-month rolling average	Compliance with NSPS Subpart TTTTa requirements will ensure compliance with BACT.
25 Pa. Code Chapter 127.12(a)(5) – State BAT	802 lb CO2e/MW-hr (gross) or 822 lb CO2e/MW-hr (net); 12-month rolling average	Compliance with NSPS Subpart TTTTa requirements will ensure compliance with State BAT.
25 Pa. Code §123.22 – Standards for Contaminants (Combustion Units)	4 lb sulfur dioxide (SO2)/MMBtu and fuel oil with no more than 500 ppmvd (0.05%) by weight	Compliance with NSPS KKKK requirements for SO2 will ensure compliance with 25 Pa. Code §123.22 requirements.

25 Pa. Code Chapter 127.12 (a)(5) – State BAT	Firing Natural Gas: 0.0014 lb SO2/MMBtu, 0.5 grains per 100 scf	See citation limitation
40 CFR Part 60, Subpart KKKK, §60.4330 – Standards of Performance for New Stationary Sources	0.90 lb SO2/MWh gross output, or 0.060 lb SO2/MMBtu heat input	Compliance with State BAT for SO2 will assure compliance with Subpart KKKK.
40 CFR 63 Subpart YYYY (§63.6095(c))	Limit the concentration of formaldehyde to 91 ppbvd or less at 15% O2.	See citation limitation
25 Pa. Code §123.41 – Standards for Contaminants (Limitations)	Limit visible emissions to 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour, and 60% at any time	Compliance with PSD BACT requirements for visible emissions will ensure compliance with 25 Pa. Code §123.41 requirements.
25 Pa. Code §127.531 and 40 CFR Parts 72-73, 75, and 77 – Acid Rain Permit	Submit a complete Acid Rain permit application to the permitting authority at least 24 months before the date on which the unit commences operation.	Same requirement
40 CFR Part 97; CSAPR NOx and SO2 Allowance Trading Programs	Comply with all applicable provisions of 40 CFR, Part 97, Subparts AAAAA and GGGGG (relating to CSAPR NOx annual trading program; and CSAPR NOx ozone season Group 3 trading program) and 40 CFR Part 97, Subpart CCCCC (as relates to CSAPR SO2 Group 1 Trading Program)	Same requirement
40 CFR Part 60, Subpart TTTTa, Table 1	For base load combustion turbines: 800 lb CO2/MWh of gross energy output; or 820 lb CO2/MWh of net energy output as determined by the procedures in 60.5525a. Based on 12-month rolling average.	See citation limitation

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Seven (7) new CTs, seven (7) new HRSGs with fired duct burners

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: VOC: 25 Pa. Code Chapter 127.12(a)(5) – State BAT and 25 Pa. Code Chapter 127.205 – LAER

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.):

2. Monitoring device location:

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

3. How will data be reported:

Section 3: Testing

1. Reference Test Method Description:	Stack testing following U.S. EPA Reference Method 18, 25A, or equivalent.
2. Reference Test Method Citation:	U.S. EPA Reference Method 18, 25A, or equivalent

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City will retain a copy of initial stack test results. Electronic storage includes the type of fuel being fired, the amount of fuel being fired, whether duct firing is occurring, and if startup or shutdown is occurring.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Results of initial stack test within 60 days of stack test completion.

1. Reporting start date:	Within 60 days of completion of initial stack test.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to meet the following emission limits:

VOC emissions will not exceed the following during normal operation:

(Normal Operation) CTs and HRSGs with duct burners firing natural gas:
1.5 ppmvd VOC @15% O2 (LAER/State BAT) (average of three (3) stack test runs)

(Normal Operation) CTs firing natural gas and HRSGs without duct burners:
0.7 ppmvd VOC @15% O2 (LAER/State BAT) (average of three (3) stack test runs)

Emissions during startup and shutdown shall be limited as follows:
105 lbs VOC/cold startup, where a hot startup is defined as occurring more than 72 hours or more after shutdown, not to exceed 70 minutes in duration;
105 lbs VOC/warm startup, where a warm startup is defined as occurring between 8 to 72 hours after shutdown, not to exceed 60 minutes in duration;
66 lbs VOC/hot startup, where a hot startup is defined as occurring less than 8 hours after shutdown, not to exceed 30 minutes in duration;
55 lbs VOC/shutdown, defined as the time that the combustion turbine drops below MECL during shutdown to termination of fuel flow to the combustion turbine, not to exceed 12 minutes in duration.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Seven (7) new CTs, seven (7) new HRSGs with fired duct burners

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: NOx: Limitations for 40 CFR Part 60, Subpart KKKK, §60.4320 – Standards of Performance for New Stationary Sources, 25 Pa. Code Chapter 127.12(a)(5) – State BAT, 25 Pa. Code §123.51 – Standards for Contaminants (Monitoring Requirements)

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. **Monitoring device type (stack test, CEM, etc.):** NOx CEM
2. **Monitoring device location:** After duct burner and add-on SCR control.

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Per 40 CFR §60.4345,

1. Each NOx diluent CEMS must be installed and certified according to Performance Specification 2 (PS 2) in 40 CFR Part 60, Appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. With state approval, Procedure 1 in 40 CFR Part 60, Appendix F is not required. Alternatively, a NOx diluent CEMS that is installed and certified according to Appendix A of Part 75 of this chapter is acceptable for use under this subpart. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb/MMBtu basis.

2. As specified in 40 CFR §60.13(e)(2), during each full unit operating hour, both the NOx monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one (1) valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two (2) valid data points (one (1) in each of two (2) quadrants) are required for each monitor to validate the NOX emission rate for the hour.

3. Each fuel flowmeter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of Appendix D to Part 75 of this chapter are acceptable for use under this subpart.

4. Each watt meter, steam flow meter, and each pressure or temperature measurement device shall be installed, calibrated, maintained, and operated according to manufacturer's instructions.

5. Homer City Generation shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in paragraphs (a), (c), and (d) of this section. For the CEMS and fuel flow meters, Homer City Generation may, with state approval, satisfy the requirements of this paragraph by implementing the QA program and plan described in Section 1 of Appendix B to Part 75 of this chapter.

3. How will data be reported:	Deviations will be reported quarterly.

Section 3: Testing

1. Reference Test Method Description:	Per 40 CFR §60.4405, complete initial performance test for NOx using CEMS RATA runs.
2. Reference Test Method Citation:	U.S. EPA Reference Method 7E, or equivalent

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Per 40 CFR §60.7(b), Homer City Generation shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

Per 40 CFR §60.7(f), Homer City Generation shall retain a file of all information required for at least two (2) years following the date of the record.

Per 40 CFR §60.4345(e), Homer City Generation shall develop and keep on-site a QA plan for the NOx CEMS

monitoring equipment.

Electronic storage includes CEM NOx minute data, the type of fuel being fired, the amount of fuel being fired, whether duct firing is occurring, and if startup or shutdown is occurring.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Per 40 CFR §60.7, Homer City Generation shall submit notification of the date of construction or reconstruction and actual start-up.

Per 40 CFR §60.4375(a), for each affected unit required to continuously monitor parameters or emissions, Homer City Generation must submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.

1. Reporting start date:	Per 40 CFR §60.7, notification of construction commencement must be postmarked no later than 30 days after such date and notification of actual start-up is due must be post marked within 15 days of that date. Quarterly CEMS reporting to U.S. EPA and PADEP..

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to meet the following emission limits:

NOX emissions will not exceed the following during normal operation:

(Normal Operation) CTs and HRSGs with duct burners firing natural gas:
2.0 ppmvd NOx at 15% O2 (State BAT) (1-hour block average)

(Normal Operation) CTs and HRSGs without duct burners firing natural gas:
2.0 ppmvd NOx at 15% O2 (State BAT) (1-hour block average)

Emissions during startup and shutdown shall be limited as follows:
200 lbs NOx/cold startup, where a hot startup is defined as occurring more than 72 hours or more after shutdown, not to exceed 70 minutes in duration;
200 lbs NOx/warm startup, where a warm startup is defined as occurring between 8 to 72 hours after shutdown, not to exceed 60 minutes in duration;
110 lbs NOx/hot startup, where a hot startup is defined as occurring less than 8 hours after shutdown, not to exceed 30 minutes in duration;
16 lbs NOx/shutdown, defined as the time that the combustion turbine drops below MECL during shutdown to termination of fuel flow to the combustion turbine, not to exceed 12 minutes in duration.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Seven (7) new CTs, seven (7) new HRSGs with fired duct burners

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: H2SO4: 40 CFR Part 52 – Prevention of Significant Deterioration and 25 Pa. Code Chapter 127.12(a)(5) – State BAT

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.): Testing of fuels for sulfur content or obtaining certified fuel sulfur content using test results from the fuel supplier.

2. Monitoring device location: N/A

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Monthly sampling of natural gas for sulfur content will be conducted or facility owner/operator will obtain fuel supplier-testing results.

3. How will data be reported: N/A

Section 3: Testing

1. Reference Test Method Description: Initial stack testing to determine emission factors.

2. Reference Test Method Citation: U.S. EPA Reference Method 8, or equivalent

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation shall retain copies of initial and/or most recent stack test results. A correlation emissions factor will be developed from fuel sampling results at the time of stack testing.

Records of monthly sulfur content samples of natural gas will be recorded for use in determining monthly H2SO4 emissions.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Results of initial stack test within 60 days of stack test completion.

1. Reporting start date: Within 60 days of completion of initial stack test.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to meet the
following emission limits:

(Normal Operation) CTs and HRSGs with duct burners firing natural gas:
0.001 lb H2SO4/MMBtu (Average of three (3) test runs) (BACT/State BAT)

(Normal Operation) CTs and HRSGs without duct burners firing natural gas:
0.001 lb H2SO4/MMBtu (Average of three (3) test runs) (BACT/State BAT)

The monthly sulfur sampling will be used to determine the 30 day rolling averages based on multiplying the most recent stack test result by the ratio of the monthly monitored sulfur content and the sulfur content during the most recent testing.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Seven (7) new CTs, seven (7) new HRSGs with fired duct burners

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: CO: 25 Pa. Code Chapter 127.12(a)(5) – State BAT

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. **Monitoring device type (stack test, CEM, etc.):** CO CEM
2. **Monitoring device location:** After duct burner and oxidation catalyst.

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

CO will be monitored continuously.

3. **How will data be reported:** Deviations will be reported quarterly.

Section 3: Testing

1. Reference Test Method Description:	Initial performance test for CO using CEMS RATA runs.
2. Reference Test Method Citation:	U.S. EPA Reference Method 10, or equivalent

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation shall retain copies of initial stack test results.

The CO CEM will record one (1) minute averages for use in determining one (1) hour block CO emission values. Electronic storage includes CEM CO minute data, the type of fuel being fired, the amount of fuel being fired, whether duct firing is occurring, and if startup or shutdown is occurring.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Results of initial stack test within 60 days of stack test completion.

Submission of Quarterly CEMS data to PADEP.

1. Reporting start date:	Within 60 days of completion of initial stack test.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to meet the following emission limits:

CO emissions will not exceed the following during normal operation:

(Normal Operation) CTs and HRSGs with duct burners firing natural gas:
1.5 ppmvd CO @15% O2 (1-hour block average)(State BAT)

(Normal Operation) CTs and HRSGs without duct burners firing natural gas:
0.9 ppmvd CO @15% O2 (1-hour block average) (State BAT)

Emissions during startup and shutdown shall be limited as follows:
830 lbs CO/cold startup, where a hot startup is defined as occurring more than 72 hours or more after shutdown, not to exceed 70 minutes in duration;
830 lbs CO/warm startup, where a warm startup is defined as occurring between 8 to 72 hours after shutdown, not to exceed 60 minutes in duration;
215 lbs CO/hot startup, where a hot startup is defined as occurring less than 8 hours after shutdown, not to exceed 30 minutes in duration;
185 lbs CO/shutdown, defined as the time that the combustion turbine drops below MECL during shutdown to termination of fuel flow to the combustion turbine, not to exceed 12 minutes in duration.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Seven (7) new CTs, seven (7) new HRSGs with duct burners

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: PM/PM10/PM2.5: 40 CFR Part 52 – Prevention of Significant Deterioration, 25 Pa. Code §123.11(a)(3) – Standards for Contaminants (Combustion Units) and 25 Pa. Code Chapter 127.12(a)(5) – State BAT

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.):

2. Monitoring device location:

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

3. How will data be reported:

Section 3: Testing

1. Reference Test Method Description:	Initial stack testing to determine filterable and condensable PM/PM10/PM2.5 emissions factors.
2. Reference Test Method Citation:	U.S. EPA Reference Methods 201/201A or equivalent and Method 202.

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation shall retain copies of initial stack test results and record the amount and type of fuel being fired.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Results of initial stack test within 60 days of stack test completion.

1. Reporting start date:	Within 60 days of completion of initial stack test.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to meet the following emission limits:

PM/PM10/PM2.5 (filterable and condensable) emissions will not exceed the following during normal operation:

(Normal Operation) Each CT and HRSG with duct burner firing natural gas:
0.0054 lb PM/PM10/PM2.5 /MMBtu (average of three (3) test runs)

(Normal Operation) Each CT and HRSG without duct burner firing natural gas:
0.0035 lb PM/PM10/PM2.5 /MMBtu (average of three (3) test runs)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Seven (7) new CTs, seven (7) new HRSGs with fired duct burners

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: CO2e: 40 CFR Part 52 – Prevention of Significant Deterioration and 25 Pa. Code Chapter 127.12(a)(5) – State BAT

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☐ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.): Monitoring of fuel usage and heat input per 40 CFR Part 75

2. Monitoring device location: Fuel monitoring will be where fuel is fed into the turbine and duct burner

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Fuel use will be monitored on a continuous basis.

3. How will data be reported: Data will be reported through EPA's ECMPS program

Section 3: Testing

1. Reference Test Method Description:

2. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation shall record the type and amount of fuel being fired, the higher heating value of the fuel, and whether duct firing is occurring.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Reporting will consist of monthly fuel usage, higher heating value of the fuel, emission factors used for CO2, CH4 and N2O, and electrical generation.

1. Reporting start date:

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to meet the following emission and efficiency limits:

802 lb CO2e/MW-hr (gross) or 822 lb CO2e/MW-hr (net); based on a 12-month rolling average

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Seven (7) new CTs, seven (7) new HRSGs with fired duct burners

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: SO2: 25 Pa. Code §123.22 – Standards for Contaminants (Combustion Units), 25 Pa. Code Chapter 127.12(a)(5) – State BAT, and 40 CFR Part 60, Subpart KKKK, §60.4330 – Standards of Performance for New Stationary Sources

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☐ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. **Monitoring device type (stack test, CEM, etc.):** Sulfur in fuel monitoring.
2. **Monitoring device location:** From fuel supplier or on-site sampling TBD.

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Per 40 CFR §60.4360 and §60.4365, Homer City Generation will demonstrate that the fuel it fires in the turbines does not exceed potential sulfur emissions of 0.060 lb SO2/MMBtu heat input by using one (1) of the following sources of information to make the required demonstration:

1. The fuel quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract for the fuel, specifying that the total sulfur content for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet, and has potential sulfur emissions of less than less than 0.060 lb SO2/MMBtu; or

2. Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 0.060 lb SO2/MMBtu heat input.

Monthly sampling of natural gas for sulfur content will be conducted.

3. How will data be reported: Deviations will be reported semi-annually.

Section 3: Testing

1. Reference Test Method Description: N/A

2. Reference Test Method Citation: N/A

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Records of monthly sulfur content samples of the natural gas will be recorded for use in determining monthly SO2 emissions.

Per 40 CFR §60.7(f) and 25 Pa. Code §123.22(g)(4)(i), Homer City Generation shall retain a file of all information required for at least two (2) years following the date of the record.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Per 40 CFR §60.7, Homer City Generation shall submit notification of the date of construction or reconstruction and actual start-
up.

Per 40 CFR §60.4375(a), for each affected unit required to periodically determine the fuel sulfur content under this subpart, Homer City Generation must submit reports of excess emissions and monitor downtime, in accordance with 40 CFR
§60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.

Per 40 CFR §60.4375(b), for each affected unit that performs annual performance tests in accordance with §60.4340(a), Homer City Generation must submit a written report of the results of each performance test before the close of
business on the 60th day following the completion of the performance test.

1. Reporting start date:	Per 40 CFR §60.7, notification of construction commencement must be postmarked no later than 30 days after such date and notification of actual start-up is due must be post marked within 15 days of that date.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will monitor the sulfur content of the fuel fired at the facility in order to meet the following emission limits:
Firing Natural Gas: 0.0014 lb SO2/MMBtu and 0.5 grains per 100 scf.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Seven (7) new CTs, seven (7) new HRSGs with fired duct burners

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 40 CFR Part 63 Subpart YYYY – National Emissions Standards for Hazardous Air Pollutants

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☐ **Work Practice Standard**

Section 2: Monitoring

1. **Monitoring device type (stack test, CEM, etc.):** Oxidation catalyst inlet temperature.
2. **Monitoring device location:** Inlet ductwork to oxidation catalyst.

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Oxidation catalyst inlet temperature will be monitored on a 4-hour rolling average basis. Measurements will be taken at least once every fifteen minutes.

3. **How will data be reported:** Data will be reported through data historian.

Section 3: Testing

1. Reference Test Method Description:	The formaldehyde concentration must be corrected to 15% O2, on a dry basis. Results of this one (1) time performance test shall consist of the average of three 1-hour runs. Test must be conducted within 10 percent of 100% load.
2. Reference Test Method Citation:	Test Method 320 of 40 CFR Part 63, Appendix A; ASTM D6348-12e1 provided that the test plan preparation and implementation provisions of Annexes A1 through A8 are followed and the %R as determined in Annex A5 is equal or greater than 70% and less than or equal to 130%; or other methods approved by the Administrator.

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Maintain source test report for a period of five (5) years.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Results of stack testing within 60 days of stack test completion and will be submitted through EPA's CDX and CEDRI online reporting systems per 40 CFR §60.6150.

Reporting of catalyst inlet temperature will be submitted semi-annually per 40 CFR §60.6150.

1. Reporting start date:	Report of stack testing within 60 days of completion of the source testing. Reports of deviations will be submitted by the first semi-annual compliance date (either January 31 or July 31).

Section 6: Work Practice Standard

Describe any work practice standards:

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Seven (7) new CTs, seven (7) new HRSGs with fired duct burners

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: Visible Emissions: 25 Pa. Code §123.41 – Standards for Contaminants (Limitations)

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☐ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. **Monitoring device type (stack test, CEM, etc.):** Visual monitoring U.S. EPA Reference Method 9, or equivalent
2. **Monitoring device location:** N/A

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Opacity, weekly visual monitoring

3. **How will data be reported:** Deviations will be reported semi-annually.

Section 3: Testing

1. Reference Test Method Description:	Visible Emissions
2. Reference Test Method Citation:	U.S. EPA Reference Method 9, or equivalent

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain copies of weekly inspection results.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Semi-annual reporting of monitoring deviations for visible emissions monitoring.

1. Reporting start date:	First compliance certification submittal.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to not exceed
the following visible emissions limitation:
20% for a period or periods aggregating more than three (3) minutes in any one (1) hour, and 60% at any time.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: 80-0833693 **Firm Name:** Homer City Redevelopment, LLC

Plant Code: **Plant Name:** Homer City Generation LP

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Seven (7) new CTs, seven (7) new HRSGs with fired duct burners

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 25 Pa. Code §127.531 and 40 CFR Parts 72-73, 75, and 77 – Acid Rain Permit

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☐ **Testing** ☒ **Reporting**

☐ **Record Keeping** ☐ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.):

2. Monitoring device location:

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

3. How will data be reported:

Section 3: Testing

1. Reference Test Method Description:

2. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Submit a complete Acid Rain permit application to the permitting authority.

1. Reporting start date: An initial Acid Rain Permit application must be submitted at least 24 months before the date on which the unit commences operation.

Section 6: Work Practice Standard

Describe any work practice standards:

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Seven (7) new CTs, seven (7) new HRSGs with fired duct burners

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 40 CFR Part 97 –CSAPR NOx (Annual and Ozone Season Group 3) and SO2 (Annual Group 1) Allowance Trading Programs

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☐ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.):
1. 40 CFR Part 75 Certified NOx CEM
2. Fuel sulfur content

2. Monitoring device location:
1. After duct burner and add-on SCR control
2. Fuel

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

1. NOx CEM (operated in accordance with 25 Pa. Code §139 40 CFR Part 75)

2. Sulfur and BTU content of fuel

3. How will data be reported: Deviations will be reported quarterly.

Section 3: Testing

1. Reference Test Method Description:

2. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain records of NOx CEMS one minute emissions data for five (5) years.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Quarterly NOx and SO2 emissions reporting to U.S. EPA and PADEP.

1. Reporting start date: Following first quarter of operation.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will comply with the allowance provisions of 40 CFR Part 97 Subparts AAAAA, CCCCC, and GGGGG.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Seven (7) new CTs, seven (7) new HRSGs with fired duct burners

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: GHG – 40 CFR Part 60, Subpart TTTTa

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☐ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.): Fuel use meter for monitoring natural gas consumption and watt meter for measuring electrical generation.

2. Monitoring device location: Fuel meter will be located between the natural gas pipeline and the turbine and duct burner fuel inlets. Watter meters will be located at the terminals of the combustion turbine and steam turbine.

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Natural gas fuel consumption and electrical generation will each be monitored on a continuous basis.

3. How will data be reported:	Data will be reported through EPA's ECMPS reporting system per 40 CFR §60.5555a(b). Reports will be submitted quarterly in accordance with 40 CFR §60.5555a(a).

Section 3: Testing

1. Reference Test Method Description:	
2. Reference Test Method Citation:	

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Per 40 CFR §60.5560a, Homer City Generation will maintain records as required by Subpart F of Part 75, calculations of 12-month rolling averages, calculations used for compliance, and records of electric sales.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Homer City Generation will meet all applicable reporting requirements and submit reports as required per 40 §60.5555a, including Subpart G of Part 75.

1. Reporting start date:	Per §60.5555a(c)(3)(i), reports described in §60.5555a(c)(1) are to begin with data recorded on and after the earlier of: The date of provisional certification, as defined in §75.20(a)(3), or 180 days after the date the CTs commences commercial operation.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to meet the following emission and efficiency limits:

800 lb CO2/MW-hr (gross) or 820 lb CO2/MW-hr (net);

2. Simple Cycle Combustion Turbines

- Section B – Combustion Unit Information
- Section C – Air Cleaning Device
- Section F – Flue and Air Contaminant Emission
- Addendum A: Source Applicable Requirements
- Addendum 1: Method of Compliance Worksheets

Section B - Combustion Unit Information

1. Combustion Units: ☐ Coal ☐ Oil ☒ Natural Gas Other: _____

Description: The group of simple-cycle electric generating units consists of ten (10) natural gas-fired combustion turbines (CTs).

Manufacturer	Model No.	Number of units
Mitsubishi Power	FT8 Mobilepac	10

Maximum heat input (Btu/hr)	Rated heat input (Btu/hr)	Typical heat input (Btu/hr)	Furnace Volume
301 MMBtu/hr (each)	301 MMBtu/hr (each)	297 MMBtu/hr (each)	N/A

Grate Area (if applicable)	Method of firing
N/A	Premix burners

Indicate how combustion air is supplied to boiler
N/A

Indicate the Steam Usage: N/A

Mark and describe soot Cleaning Method:

i. Air Blown
ii. Steam Blown
iii. Brushed and Vacuumed
iv. Other N/A
v. Frequency of Cleaning _____

Maximum Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24 (each)	7 (each)	365 (each)	8760 (each)

Operational restrictions taken or requested, if any (e.g., bottlenecks or voluntary restrictions to limit potential to emit)

Capacity (specify units)

Per hour	Per day	Per week	Per year
301 MMBtu (each)	7,224 MMBtu (each)	50,568 MMBtu (each)	2,601,720 MMBtu (each)

Typical Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24(each)	7 (each)	365 (each)	8,760 (each)

Seasonal variations (Months): If variations exist, describe them.

Operating using primary fuel: _____ From _____ to _____
Operating using secondary fuel: _____ Form _____ to _____
Non-operating: From _____ to _____

2. Specify the primary, secondary and startup fuel. Furnish the details in item 3.
Natural gas will be the primary fuel.

Section B - Combustion Unit Information (Continued)

3. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	~295,100 SCFH	2,551 MMscf/yr X 10^6 SCF	0.5 gr/100 SCF	0	1,020 Btu/SCF
Gas (other)	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Coal					
Other*					

***** Note: Describe and furnish information separately for other fuels in Addendum B.

4. Burner

Manufacturer	Model Number	Type of Atomization (Steam, air, press, mech., rotary cup)
Mitsubishi	TBD	N/A

Number of Burners	Maximum fuel firing rate (all burners)	Normal fuel firing rate
TBD	301 MMBtu/hr	297 MMBtu/hr

If oil, temperature and viscosity.
NA

Maximum theoretical air requirement
TBD

Percent excess air 100% rating
TBD

Turndown ratio
TBD

Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe.

Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe.

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

	Low excess air (LEA)		Flue gas recirculation	Other._____	
	Over fire air (OFA)		Burner out of service		
X	Low-NO_x burner		Reburning		
	Low NO_x burners with over fire air	**X**	Flue gas treatment (SCR / SNCR)		

Section B - Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation
N/A

Describe, in detail, the equipment provided to monitor and to record the source(s) operating conditions, which may affect emissions of air contaminants. Show that they are reasonable and adequate.

See, Addendim A Forms

Describe each proposed modification to an existing source.

N/A

Describe how emissions will be minimized especially during start up, shut down, combustion upsets and/or disruptions. Provide emission estimates for start up, shut down and upset conditions. Provide duration of start up and shut down.

Emissions during startup/shutdown will be minimized by limiting the time that the unit is in startup or shutdown mode. Startup and shutdown are defined in Section 5 of the narrative. The emissions from startup and shutdown shall be included in the 12-month rolling sum. Refer to Appendix C for startup and shutdown emission calculations.

Describe in detail with a schematic diagram of the control options adopted for SO_2 (if applicable).
N/A

Anticipated milestones:

Expected commencement date of construction/reconstruction:	Upon permit issuance
Expected completion date of construction/reconstruction:	Anticpated third quarter 2029
Anticipated date(s) of start-up:	Anticpated fourth quarter 2029

Section C - Air Cleaning Device

1. Precontrol Emissions*

Emission Rate

Pollutant	Maximum Emission Rate				Calculation/ Estimation Method
	Specify Units	Pounds/Hour	Hours/Year	Tons/Year	
PM					
PM_{10}					
SOx					
CO					
NO_x					
VOC					
Others: (e.g., HAPs)	-----	-----	-----		-----
Total HAPs					

* These emissions must be calculated based on the requested operating schedule and/or process rate, e.g., operating schedule for maximum limits or restricted hours of operation and/or restricted throughput. Describe how the emission values were determined. Attach calculations. See Appendix C for emission calculations.

2. Gas Conditioning

Water quenching ☒ YES ☐ NO Water injection rate 26.8 GPM

Radiation and convection cooling ☐ YES ☒ NO

Air dilution ☐ YES ☒ NO

If YES, _____ CFM

Forced draft ☐ YES ☒ NO

Water cooled duct work ☐ YES ☒ NO

Other _____

Inlet volume

_____ ACFM@ _____ °F

Outlet volume

_____ ACFM@ _____ °F _____ % Moisture

Describe the system in detail.

Section C - Air Cleaning Device (Continued)

8. ☒ **SELECTIVE CATALYTIC REDUCTION (SCR)**

☐ **SELECTIVE NON-CATALYTIC REDUCTION (SNCR)**

☐ **NON-SELECTIVE CATALYTIC REDUCTION (NSCR)**

Equipment specifications

Manufacturer	Type	Model No
TBD	TBD	TBD

Design inlet volume (SCFM)	Design operating temperature (°F)
273,030 - 435,990 ACFM (each CT)	699-850 F - Turbine Exhaust Temperature

Is the system equipped with process controls for proper mixing/control of the reducing agent in gas stream? If yes, give details.

Attach efficiency and other pertinent information (e.g., Ammonia, urea slip).
Refer to Appendix TBD

Operating parameters

Volume of gases handled (ACFM) 273,030 - 435,990 @ 699 - 850 (°F)

Operating temperature range for the SCR/SNCR/NSCR system (°F)	From	To
	699 F	850 F

Reducing agent used, if any.	Oxidation catalyst used, if any.
Aqueous Ammonia (19%)	Type of Catalyst TBD

State expected range of usage rate and concentration.
Usage rate and concentration TBD.

Service life of catalyst	Ammonia slip (ppm)
N/A	Up to 5 ppmvd @ 15 % O2 (3 x 1-hr tests)

Describe fully with a sketch giving locations of equipment, controls system, important parameters and method of operation.
This information can be provided upon request

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.
TBD

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)
NOx		2.79 lbs/hr	

Section C - Air Cleaning Device (Continued)

9. Other Control Equipment: Oxidation Catalyst

Equipment specifications

Manufacturer	Type	Model No
TBD	TBD	TBD

Design inlet volume (SCFM)	Capacity
273,030 - 435,990 ACFM (each CT)	TBD

Describe pH monitoring and pH adjustment, if any.
N/A

Indicate the liquid flow rate and describe equipment provided to measure pressure drop and flow rate, if any.
N/A

Attach efficiency curve and/ or other efficiency information.

Attach any additional data including auxiliary equipment and operation details to thoroughly evaluate the control equipment.
Refer to application narrative and Appendix TBD.

Operating parameters

Volume of gas handled

_____ @ _____ °F N/A _____ % Moisture

Describe, in detail, important parameters and method of operation.

Oxidation catalyst will be located upstream from the HRSG to remove carbon monoxide (CO) and volatile organic compounds (VOC) from the turbine exhuast gas stream.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.

TBD

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)
CO		9.35 lbs/hr	
VOC		3.12 lbs/hr	

Section C - Air Cleaning Device (Continued)

10. Costs

Indicate cost associated with air cleaning device and its operating cost (attach documentation if necessary)

Device	Direct Cost	Indirect Cost	Total Cost	Operating Cost
Selective Catalytic Reduction (SCR)				
Oxidation Catalyst				

11 MISCELLANEOUS

Describe in detail the removal, handling and disposal of dust, effluent, etc. from the air cleaning device including proposed methods of controlling fugitive emissions.

N/A

Attach manufacturer's performance guarantees and/or warranties for each of the major components of the control system (or complete system).

See Appendix C

Attach the maintenance schedule for the control equipment and any part of the process equipment that, if in disrepair, would increase air contaminant emissions.

Homer City Generation will develop a formal maintenance plan and will perform maintenance and monitoring in accordance with 40 CFR Part 60, Subpart KKKK.

Section F - Flue and Air Contaminant Emission

1. Estimated Maximum Emissions*

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM		3.00	132.45	Vendor data
$PM_{10/2.5}$		3.00	132.45	Vendor data
SO_2		0.42	17.96	Vendor data
CO		9.35	257.45	Vendor data
NO_x	2.5 ppmdv @ 15% O_2	2.79	132.00	Vendor data
VOC		3.12	51.13	Vendor data
Others: (e.g., HAPs)	-----	-----	-----	-----
Max single HAP (formaldehyde)	91 ppbdv @ 15% O_2	0.66	2.85	Vendor data
Total HAPs		1.15	4.98	AP-42

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Stack and Exhauster

Stack Designation/Number FT8_01 through FT8_10

List Source(s) or source ID exhausted to this stack:	% of flow exhausted to stack:
FT-8 Units 1-10	

Stack height above grade (ft.) 90 Grade elevation (ft.) 1200	Stack diameter (ft) or Outlet duct area (sq. ft.) 13 ft	Weather Cap ☐ YES ☒ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.

See, Point Source Locations Table and Appendix E

Does stack height meet Good Engineering Practice (GEP)?

No

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions. See, Application Narrative Section 6

Location of Stack**	Latitude			Longitude		
Latitude/Longitude Point of Origin	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
See, Point Source Locations Table						

Stack Exhaust – **Based on 59ºF @ 100% Load**

Volume 401,922 ACFM Temperature 800 °F Moisture 8.88 %

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____RPM.

** If the datum and collection method information and codes differ from those provided on the General Information Form - Authorization Application, provide the additional required by that form on a separate sheet.

Point Source Locations Table: Simple Cycle Turbines

	Latitude	Longitude	Distance to Property Boundary
Simple Cycle Unit 1	40° 31' 6.11"" N	079° 12' 13.77"" W	1,252 ft
Simple Cycle Unit 2	40° 31' 5.84"" N	079° 12' 12.37"" W	1,363 ft
Simple Cycle Unit 3	40° 31' 5.58"" N	079° 12' 10.96"" W	1,474 ft
Simple Cycle Unit 4	40° 31' 5.31"" N	079° 12' 9.55"" W	1,585 ft
Simple Cycle Unit 5	40° 31' 5.05"" N	079° 12' 8.14"" W	1,696 ft
Simple Cycle Unit 6	40° 31' 3.9"" N	079° 12' 16.17"" W	1,089 ft
Simple Cycle Unit 7	40° 31' 3.64"" N	079° 12' 14.76"" W	1,201 ft
Simple Cycle Unit 8	40° 31' 3.38"" N	079° 12' 13.34"" W	1,311 ft
Simple Cycle Unit 9	40° 31' 3.11"" N	079° 12' 11.94"" W	1,422 ft
Simple Cycle Unit 10	40° 31' 2.84"" N	079° 12' 10.54"" W	1,533 ft

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum A: Source Applicable Requirements

Describe and cite all applicable requirements pertaining to this source.
Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.

Citation Number	Citation Limitation	Limitation Used
25 Pa. Code Chapter 127.12(a)(5) – State Best Available Technology (BAT)	(Normal Operation) Combustion turbines (CTs) firing natural gas less than 3.75 lbs/hr of volatile organic compounds (VOC) @15% O2 (LAER/State BAT) (average of 3-run stack test using EPA Reference Method 25A) (Startup/Shutdown Periods) Refer to Addendum 1 for emission limits during periods of startup and shutdown.	Compliance with Nonattainment New Source Review (NNSR) lowest achievable emission rate (LAER) emissions requirements for VOC will assure compliance with State BAT requirements.
25 Pa. Code Chapter 127.205 – LAER	(Normal Operation) CTs firing natural gas less than 3.75 lbs/hr of VOC @15% O2 (LAER/State BAT)(average of 3-run stack test using EPA Referene Method 25A) (Startup/Shutdown Periods) Refer to Addendum 1 for emission limits during periods of startup and shutdown.	See citation limitation
25 Pa. Code Chapter 127.12(a)(5) – State Best Available Technology (BAT)	(Normal Operation) CTs firing natural gas: 2.5 ppmvd nitrogen oxides (NOx) at 15% O2 (State BAT) (4-hour rolling average) (Startup/Shutdown Periods) Refer to Addendum 1 for emission limits during periods of startup and shutdown.	See citation limitation
40 CFR Part 60, Subpart KKKK, §60.4320 – Standards of Performance for New Stationary Sources	(Normal Operation) New CT firing natural gas greater than 50 MMBtu/hr and less than or equal to 850 MMBtu/hr. NOx emission standard: 25 ppm at 15% O2. (Startup/Shutdown Periods) Refer to Addendum 1 for emission limits during periods of startup and shutdown.	Compliance with BAT emission limits for NOx will assure compliance with Subpart KKKK emission limits.
25 Pa. Code §123.51 – Standards for Contaminants (Monitoring Requirements)	NOx CEMS	Compliance with Title 25, Chapter 139, Subchapter C Requirements
40 CFR Part 52 – Prevention of	(Normal Operation) CTs firing natural gas: 0.0022 lb sulfuric acid mist (H2SO4)/MMBtu	See citation limitation

Significant Deterioration – BACT	(Average of three (3) test runs) (BACT/State BAT). Fuel sulfur content less than 0.5 gr/100scf.	
25 Pa. Code Chapter 127.12(a)(5) – State BAT	(Normal Operation) CTs firing natural gas: 0.0022 lb H2SO4/MMBtu (Average of three (3) test runs) (BACT/State BAT) Fuel sulfur content less than 0.5 gr/100scf.	Compliance with PSD BACT requirements for H2SO4 will ensure compliance with State BAT requirements.
25 Pa. Code Chapter 127.12(a)(5) – State BAT	(Normal Operation) CTs firing natural gas with less than 9.35 lbs/hr of CO @15% O2 (4-hour rolling average)(State BAT) (Startup/Shutdown Periods): Refer to Addendum 1 for emission limits during periods of startup and shutdown.	See citation limitation
40 CFR Part 52 – Prevention of Significant Deterioration – BACT	(Normal Operation) Each CT firing natural gas: 0.011 lb PM/MMBtu (average of three (3) stack test runs) Particulate matter comprises total particulate matter (PM), particulate matter with a diameter of less than 10 microns (PM10) including condensables, and particulate matter with a diameter of less than 2.5 microns (PM2.5) including condensables.	See citation limitation
25 Pa. Code §123.11(a)(3) – Standards for Contaminants (Combustion Units)	0.147 lbs PM/MMBtu	Compliance with PSD BACT requirements for PM will ensure compliance with 25 Pa. Code §123.11 requirements.
25 Pa. Code Chapter 127.12(a)(5) – State BAT	(Normal Operation) Each CT firing natural gas: 0.011 lb PM/MMBtu (average of three (3) stack test runs) Particulate matter comprises total particulate matter (PM), particulate matter with a diameter of less than 10 microns (PM10) including condensables, and particulate matter with a diameter of less than 2.5 microns (PM2.5) including condensables.	Compliance with PSD BACT requirements for PM will ensure compliance with State BAT requirements.
40 CFR Part 52 – Prevention of Significant Deterioration – BACT	1,450 lb CO2e/MW-hr (natural gas)	See citation limitation
25 Pa. Code Chapter 127.12(a)(5) – State BAT	1,450 lb CO2e/MW-hr (gross)	Compliance with PSD BACT requirements for CO2e will ensure compliance with State BAT requirements.
25 Pa. Code §123.22 –	4 lbs sulfur dioxide (SO2)/MMBtu (over a 1-hr	Compliance with NSPS KKKK requirements for SO2 will ensure compliance with 25 Pa. Code

Standards for Contaminants (Combustion Units)	period)	§123.22 requirements.
25 Pa. Code Chapter 127.12 (a)(5) – State BAT	Firing Natural Gas: 0.0014 lb SO2/MMBtu	See citation limitation
40 CFR Part 60, Subpart KKKK, §60.4330 – Standards of Performance for New Stationary Sources	0.90 lb SO2/MWh gross output, or 0.060 lb SO2/MMBtu heat input	Compliance with State BAT for SO2 will assure compliance with Subpart KKKK.
40 CFR 63 Subpart YYYY (§63.6095(c))	Limit the concentration of formaldehyde to 91 ppbvd or less at 15% O2.	See citation limitation
25 Pa. Code §123.41 – Standards for Contaminants (Limitations)	Limit visible emissions to 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour, and 60% at any time	Compliance with PSD BACT requirements for PM emissions will ensure compliance with 25 Pa. Code §123.41 requirements.
25 Pa. Code §127.531 and 40 CFR Parts 72-73, 75, and 77 – Acid Rain Permit	Submit an Acid Rain new unit exemption application to the permitting authority	See citation limitation

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: 80-0833693 **Firm Name:** Homer City Generation, L.P.

Plant Code: **Plant Name:** Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Ten (10) new simple cycle CTs

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: VOC: 25 Pa. Code Chapter 127.12(a)(5) – State BAT and 25 Pa. Code Chapter 127.205 – LAER

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.):

2. Monitoring device location:

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

3. How will data be reported:

Section 3: Testing

1. Reference Test Method Description:	Stack testing following U.S. EPA Reference Method 18, 25A, or equivalent.
2. Reference Test Method Citation:	U.S. EPA Reference Method 18, 25A, or equivalent

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain a copy of initial stack test results. Electronic storage includes the type of fuel being fired, the amount of fuel being fired, and if startup or shutdown is occurring.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Results of initial stack test within 60 days of stack test completion.

1. Reporting start date:	Within 60 days of completion of initial stack test.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to meet the
following emission limits:

VOC emissions will not exceed the following during normal operation:

(Normal Operation) CTs firing natural gas:
3.75 lbs/hr VOC @15% O2 (LAER/State BAT)(average of 3-run stack test using EPA Reference Method 25A)

Emissions during startup and shutdown shall be limited as follows:
1.3 lbs VOC/startup, where startup is defined as from initiation of unit start until full load emissions compliance, not to exceed 30 minutes in duration;
0.5 lbs VOC/shutdown, defined as the time that the combustion turbine drops below MECL during shutdown to termination of fuel flow to the combustion turbine, not to exceed 9 minutes in duration.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Ten (10) new simple cycle CTs

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: NOX: Limitations for 40 CFR Part 60, Subpart KKKK, §60.4320 – Standards of Performance for New Stationary Sources, 25 Pa. Code Chapter 127.12(a)(5) – State BAT, 25 Pa. Code §123.51 – Standards for Contaminants (Monitoring Requirements)

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. **Monitoring device type (stack test, CEM, etc.):** NOx CEM
2. **Monitoring device location:** After add-on SCR control.

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Per 40 CFR §60.4345,

1. Each NOX diluent CEMS must be installed and certified according to Performance Specification 2 (PS 2) in 40 CFR Part 60, Appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. With state approval, Procedure 1 in 40 CFR Part 60, Appendix F is not required. Alternatively, a NOx diluent CEMS that is installed and certified according to Appendix A of Part 75 of this chapter is acceptable for use under this subpart. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb/MMBtu basis.

2. As specified in 40 CFR §60.13(e)(2), during each full unit operating hour, both the NOX monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one (1) valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two (2) valid data points (one (1) in each of two (2) quadrants) are required for each monitor to validate the NOx emission rate for the hour.

3. Each fuel flowmeter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of Appendix D to Part 75 of this chapter are acceptable for use under this subpart.

4. Each watt meter, steam flow meter, and each pressure or temperature measurement device shall be installed, calibrated, maintained, and operated according to manufacturer's instructions.

5. Homer City Generation shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in paragraphs (a), (c), and (d) of this section. For the CEMS and fuel flow meters, Homer City Generation may, with state approval, satisfy the requirements of this paragraph by implementing the QA program and plan described in Section 1 of Appendix B to Part 75 of this chapter.

3. How will data be reported:	Deviations will be reported quarterly.

Section 3: Testing

1. Reference Test Method Description:	Per 40 CFR §60.4405, complete initial performance test for NOx using CEMS RATA runs.
2. Reference Test Method Citation:	U.S. EPA Reference Method 7E, or equivalent

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Per 40 CFR §60.7(b), Homer City Generation shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

Per 40 CFR §60.7(f), Homer City Generation shall retain a file of all information required for at least two (2) years following the date of the record.

Per 40 CFR §60.4345(e), Homer City Generation shall develop and keep on-site a QA plan for the NOX CEMS monitoring equipment.

Electronic storage includes CEM NOx minute data, the type of fuel being fired, the amount of fuel being fired, whether duct firing is occurring, and if startup or shutdown is occurring.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Per 40 CFR §60.7, Homer City Generation shall submit notification of the date of construction or reconstruction and actual start-up.

Per 40 CFR §60.4375(a), for each affected unit required to continuously monitor parameters or emissions, Homer City Generation must submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.

Per 40 CFR §60.4375(b), for each affected unit that performs annual performance tests in accordance with §60.4340(a), Homer City Generation must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.

1. Reporting start date:	Per 40 CFR §60.7, notification of construction commencement must be postmarked no later than 30 days after such date and notification of actual start-up is due must be post marked within 15 days of that date. Quarterly CEMS reporting to U.S. EPA and PADEP.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to meet the
following emission limits:

NOx emissions will not exceed the following during normal operation:

(Normal Operation) CTs firing natural gas:
2.5 ppmvd NOx at 15% O2 (State BAT) (4-hour rolling average)

Emissions during startup and shutdown shall be limited as follows:
14.4 lbs NOx/startup, where startup is defined as from initiation of unit start until full load emissions compliance, not to exceed 30 minutes in duration;
2.8 lbs NOx/shutdown, defined as the time that the combustion turbine drops below MECL during shutdown to termination of fuel flow to the combustion turbine, not to exceed 9 minutes in duration.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Ten (10) new simple cycle CTs

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: H2SO4: 40 CFR Part 52 – Prevention of Significant Deterioration and 25 Pa. Code Chapter 127.12(a)(5) – State BAT

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.): Testing of fuels for sulfur content or obtaining certified fuel sulfur content using test results from the fuel supplier.

2. Monitoring device location: Fuel

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Monthly sampling of natural gas for sulfur content will be conducted or facility owner/operator will obtain fuel supplier-testing results.

3. How will data be reported: N/A

Section 3: Testing

1. Reference Test Method Description:	Initial stack testing to determine emission factors.
2. Reference Test Method Citation:	U.S. EPA Reference Method 8, or equivalent

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation shall retain copies of initial stack test results. A correlation emissions factor will be developed from fuel sampling results at the time of stack testing.

Records of monthly sulfur content samples of natural gas will be recorded for use in determining monthly H2SO4 emissions.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Results of initial stack test within 60 days of stack test completion.

1. Reporting start date:	Within 60 days of completion of initial stack test.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to meet the
following emission limits:

(Normal Operation) CTs firing natural gas:
0.0022 lb H2SO4/MMBtu (Average of three (3) test runs) (BACT/State BAT)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Ten (10) new simple cycle CTs

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 25 Pa. Code Chapter 127.12(a)(5) – State BAT

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.): CO CEM

2. Monitoring device location: After oxidation catalyst.

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

CO will be monitored continuously, one measurement at least every 15 minutes

3. How will data be reported: Deviations will be reported quarterly.

Section 3: Testing

1. Reference Test Method Description:	Initial performance test for CO using CEMS RATA runs.
2. Reference Test Method Citation:	U.S. EPA Reference Method 10, or equivalent

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation shall retain copies of initial stack test results.

The CO CEM will record one (1) minute averages for use in determining 4-hr rolling average CO emission values.

Electronic storage includes CEM CO minute data, the type of fuel being fired, the amount of fuel being fired, whether duct firing is occurring, and if startup or shutdown is occurring.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Results of initial stack test within 60 days of stack test completion.

Submission of Quarterly CEMS data to PADEP.

1. Reporting start date:	Within 60 days of completion of initial stack test.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to meet the
following emission limits:

CO emissions will not exceed the following during normal operation:

(Normal Operation) CTs firing natural gas:
9.35 lbs/hr CO @15% O2 (4-hour rolling average)(State BAT)

Emissions during startup and shutdown shall be limited as follows:
27.7 lbs CO/startup, where startup is defined as from initiation of unit start until full load emissions compliance, not to exceed 30 minutes in duration;
6.7 lbs CO/shutdown, defined as the time that the combustion turbine drops below MECL during shutdown to termination of fuel flow to the combustion turbine, not to exceed 9 minutes in duration.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Ten (10) new simple cycle CTs

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: PM/PM10/PM2.5: 40 CFR Part 52 – Prevention of Significant Deterioration, 25 Pa. Code §123.11(a)(3) – Standards for Contaminants (Combustion Units) and 25 Pa. Code Chapter 127.12(a)(5) – State BAT

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.):

2. Monitoring device location:

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

3. How will data be reported:

Section 3: Testing

1. Reference Test Method Description:	Initial stack testing to determine filterable and condensable PM/PM10/PM2.5 emissions factors.
2. Reference Test Method Citation:	U.S. EPA Reference Methods 201/201A or equivalent and Method 202.

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation shall retain copies of initial stack test results and record the amount and type of fuel being fired.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Results of initial stack test within 60 days of stack test completion.

1. Reporting start date:	Within 60 days of completion of initial stack test.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to meet the
following emission limits:

PM/PM10/PM2.5 emissions will not exceed the following during normal operation:

(Normal Operation) Each CT firing natural gas:
0.011 lb PM/MMBtu (average of three (3) stack test runs)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Ten (10) new simple cycle CTs

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: CO2e: 40 CFR Part 52 – Prevention of Significant Deterioration and 25 Pa. Code Chapter 127.12(a)(5) – State BAT

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.):

2. Monitoring device location:

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

3. How will data be reported:

Section 3: Testing

1. Reference Test Method Description:	Initial stack testing to determine emission factors.
2. Reference Test Method Citation:	U.S. EPA Reference Method 3A, or equivalent.

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation shall retain copies of initial stack test results. Homer City Generation shall record the type and amount of fuel being fired,
and whether duct firing is occurring.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Results of initial stack test within 60 days of stack test completion.

1. Reporting start date:	Within 60 days of completion of initial stack test.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to meet the
following emission and efficiency limits:

1,425 lb CO2e/MWh (gross)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Ten (10) new simple cycle CTs

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: SO2: 25 Pa. Code §123.22 – Standards for Contaminants (Combustion Units), 25 Pa. Code Chapter 127.12(a)(5) – State BAT, and 40 CFR Part 60, Subpart KKKK, §60.4330 – Standards of Performance for New Stationary Sources

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☐ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.): Sulfur in fuel monitoring.

2. Monitoring device location: Prior to combustion.

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Per 40 CFR §60.4360 and §60.4365, Homer City Generation will demonstrate that the fuel it fires in the turbines does not exceed potential sulfur emissions of 0.060 lb SO2/MMBtu heat input by using one (1) of the following sources of information to make the required demonstration:

1. The fuel quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract for the fuel, specifying that the total sulfur content for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet, and has potential sulfur emissions of less than less than 0.060 lb SO2/MMBtu; or

2. Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 0.060 lb SO2/MMBtu heat input.

Monthly sampling of natural gas for sulfur content will be conducted.

3. How will data be reported: Deviations will be reported semi-annually.

Section 3: Testing

1. Reference Test Method Description: N/A

2. Reference Test Method Citation: N/A

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Records of monthly sulfur content samples of the natural gas will be recorded for use in determining monthly SO2 emissions.

Per 40 CFR §60.7(f) and 25 Pa. Code §123.22(g)(4)(i), Homer City Generation shall retain a file of all information required for at least two (2) years following the date of the record.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Per 40 CFR §60.7, Homer City Generation shall submit notification of the date of construction or reconstruction and actual start-up.

Per 40 CFR §60.4375(a), for each affected unit required to periodically determine the fuel sulfur content under this subpart, Homer City Generation must submit reports of excess emissions and monitor downtime, in accordance with 40 CFR §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.

Per 40 CFR §60.4375(b), for each affected unit that performs annual performance tests in accordance with §60.4340(a), Homer City Generation must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.

1. Reporting start date: Per 40 CFR §60.7, notification of construction commencement must be postmarked no later than 30 days after such date and notification of actual start-up is due must be post marked within 15 days of that date.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will monitor the sulfur content of the fuel fired at the facility in order to meet the following emission limits:
Firing Natural Gas: 0.0014 lb SO2/MMBtu

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Ten (10) new simple cycle CTs

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: *Although the proposed project is not subject to 40 CFR Part 63 Subpart YYYY, Homer City Generation proposes to comply with the formaldehyde emission limitation in Table 1 of this Subpart for State BAT.

Limit the concentration of formaldehyde to 91 ppbvd or less at 15% O2.

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☐ **Work Practice Standard**

Section 2: Monitoring

1. **Monitoring device type (stack test, CEM, etc.):** Oxidation catalyst inlet temperature.

2. **Monitoring device location:** Inlet ductwork to oxidation catalyst.

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Oxidation catalyst inlet temperature will be monitored on a 4-hour rolling average basis. Measurements will be taken at least once every fifteen minutes.

3. **How will data be reported:** Data will be reported through data historian.

Section 3: Testing

1. Reference Test Method Description:	The formaldehyde concentration must be corrected to 15% O2, on a dry basis. Results of this one (1) time performance test shall consist of the average of three 1-hour runs. Test must be conducted within 10 percent of 100% load.
2. Reference Test Method Citation:	Test Method 320 of 40 CFR Part 63, Appendix A; ASTM D6348-12e1 provided that the test plan preparation and implementation provisions of Annexes A1 through A8 are followed and the %R as determined in Annex A5 is equal or greater than 70% and less than or equal to 130%; or other methods approved by the Administrator

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Maintain source test report for a period of five (5) years.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Results of stack testing within 60 days of stack test completion and will be submitted through EPA's CDX and CEDRI online reporting systems per 40 CFR §60.6150.

Reporting of catalyst inlet temperature will be submitted semi-annually per 40 CFR §60.6150.

1. Reporting start date:	Report of stack testing within 60 days of completion of the source testing. Reports of deviations will be submitted by the first semi-annual compliance date (either January 31 or July 31).

Section 6: Work Practice Standard

Describe any work practice standards:

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Ten (10) new simple cycle CTs

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: Visible Emissions: 25 Pa. Code §123.41 – Standards for Contaminants (Limitations)

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☐ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.): Visual monitoring U.S. EPA Reference Method 9, or equivalent

2. Monitoring device location: N/A

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Opacity, weekly visual monitoring

3. How will data be reported: Deviations will be reported semi-annually.

Section 3: Testing

1. Reference Test Method Description:	Visible Emissions
2. Reference Test Method Citation:	U.S. EPA Reference Method 9, or equivalent

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain copies of weekly inspection results.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Semi-annual reporting of monitoring deviations for visible emissions monitoring.

1. Reporting start date:	First compliance certification submittal.

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will ensure this equipment is operated according to manufacturer's specifications in order to not exceed
the following visible emissions limitation:
20% for a period or periods aggregating more than three (3) minutes in any one (1) hour, and 60% at any time.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Ten (10) new simple cycle CTs

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 25 Pa. Code §127.531 and 40 CFR Parts 72-73, 75, and 77 – Acid Rain Permit

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☐ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☐ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.):

2. Monitoring device location:

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

3. How will data be reported:

Section 3: Testing

1. Reference Test Method Description:

2. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Maintain records that the nameplate capacity of each generator is not more than 25 MWe and the sulfur content of the gaseous fuel burned is less than 0.05 percent by weight.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Submit an Acid Rain new unit exemption application to the permitting authority.

1. Reporting start date: An Acid Rain new unit exemption application must be submitted before the date on which the unit commences operation.

Section 6: Work Practice Standard

Describe any work practice standards:

3. Fuel Gas Heaters

- Section B – Combustion Unit Information
- Section F – Flue and Air Contaminant Emission
- Addendum A: Source Applicable Requirements
- Addendum 1: Method of Compliance Worksheets

Section B - Combustion Unit Information

2. Combustion Units: ☐ Coal ☐ Oil ☒ Natural Gas Other: _____

Description: Fuel gas heaters

Manufacturer	Model No.	Number of units
TBD	TBD	7

Maximum heat input (Btu/hr)	Rated heat input (Btu/hr)	Typical heat input (Btu/hr)	Furnace Volume
10.8 MMBtu/hr, each	10.8 MMBtu/hr, each	10.8 MMBtu/hr, total	

Grate Area (if applicable)	Method of firing
N/A	

Indicate how combustion air is supplied to boiler
N/A

Indicate the Steam Usage: N/A

Mark and describe soot Cleaning Method:

i. Air Blown
ii. Steam Blown
iii. Brushed and Vacuumed
iv. Other N/A
v. Frequency of Cleaning _____

Maximum Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24 (each)	7 (each)	365 (each)	8,760 (each)

Operational restrictions taken or requested, if any (e.g., bottlenecks or voluntary restrictions to limit potential to emit)

Capacity (specify units)

Per hour	Per day	Per week	Per year
10.8 MMBtu (each)	259.2 MMBtu	1,814.4 MMBtu	94,608 MMBtu

Typical Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24 (each)	7 (each)	365 (each)	8,760 (each)

Seasonal variations (Months): If variations exist, describe them.

Operating using primary fuel: _____ From _____ to _____
Operating using secondary fuel: _____ Form _____ to _____
Non-operating: From _____ to _____

3. Specify the primary, secondary and startup fuel. Furnish the details in item 3.
Natural gas will be the primary fuel.

Section B - Combustion Unit Information (Continued)

5. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	0.0106 SCFH	92.59 X 10^6 SCF	0.5 gr/100 SCF	0	1,020 Btu/SCF
Gas (other)	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Coal					
Other*					

***** Note: Describe and furnish information separately for other fuels in Addendum B.

6. Burner

Manufacturer	Model Number	Type of Atomization (Steam, air, press, mech., rotary cup)
TBD	TBD	N/A

Number of Burners	Maximum fuel firing rate (all burners)	Normal fuel firing rate
TBD	10.8 MMBtu/hr	10.8 MMBtu/hr

If oil, temperature and viscosity.

Maximum theoretical air requirement

Percent excess air 100% rating

Turndown ratio

Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe.

Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe.

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

	Low excess air (LEA)	Flue gas recirculation	Other._____
	Over fire air (OFA)	Burner out of service	
X	Low-NO_x burner	Reburning	
	Low NO_x burners with over fire air	Flue gas treatment (SCR / SNCR)	

Section B - Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation
N/A

Describe, in detail, the equipment provided to monitor and to record the source(s) operating conditions, which may affect emissions of air contaminants. Show that they are reasonable and adequate.

See, Addendum A Forms

Describe each proposed modification to an existing source.

N/A

Describe how emissions will be minimized especially during start up, shut down, combustion upsets and/or disruptions. Provide emission estimates for start up, shut down and upset conditions. Provide duration of start up and shut down.

The fuel gas heaters are designed to operate with minimal startups and shutdowns. Emissions during

startup/shutdown will be minimized by limiting the time that the units are in startup or shutdown mode.

Describe in detail with a schematic diagram of the control options adopted for SO_2 (if applicable).
N/A

Anticipated milestones:

Expected commencement date of construction/reconstruction: Upon permit issuance
Expected completion date of construction/reconstruction: Anticpated third quarter 2029
Anticipated date(s) of start-up: Anticpated fourth quarter 2029

Section F - Flue and Air Contaminant Emission

1. Estimated Maximum Emissions*

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM		0.05	1.59	Vendor data
$PM_{10/2.5}$		0.05	1.59	Vendor data
SO_x		0.02	0.46	Mass balance
CO		0.40	12.2	Vendor data
NO_x		0.32	9.92	Vendor data
VOC		0.05	1.65	Vendor data
Others: (e.g., HAPs)	-----	-----	-----	-----
Max single HAP	(hexane)	1.33E-01	5.83E-01	AP-42
Total HAP		1.40E-01	6.12E-01	AP-42

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Stack and Exhauster

Stack Designation/Number HTR_1 through HTR_7

List Source(s) or source ID exhausted to this stack:	% of flow exhausted to stack: 100
Fuel Gas Heaters 1-7	

Stack height above grade (ft.) 15 Grade elevation (ft.) 1200	Stack diameter (ft) or Outlet duct area (sq. ft.) 2.5	Weather Cap ☐ YES ☒ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.

See, Point Source Locations Table and Appendix E

Does stack height meet Good Engineering Practice (GEP)?

No

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions. See, Application Narrative Section 6

Location of Stack**	Latitude			Longitude		
Latitude/Longitude Point of Origin	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
See, Point Source Locations Table						

Stack Exhaust

Volume 3,434 ACFM Temperature 670 °F Moisture _____ %

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____ RPM.

** If the datum and collection method information and codes differ from those provided on the General Information Form - Authorization Application, provide the additional required by that form on a separate sheet.

Point Source Locations Table: Fuel Gas Heaters

	Latitude	Longitude	Distance to Property Boundary
Fuel Gas Heater 1	40° 31' 16.25"" N	079° 12' 2.01"" W	1,803 ft
Fuel Gas Heater 2	40° 31' 12.09"" N	079° 12' 2.01"" W	1,994 ft
Fuel Gas Heater 3	40° 31' 7.9"" N	079° 12' 2.01"" W	2,101 ft
Fuel Gas Heater 4	40° 31' 3.73"" N	079° 12' 2.01"" W	2,180 ft
Fuel Gas Heater 5	40° 31' 7.91"" N	079° 11' 52.67"" W	2,629 ft
Fuel Gas Heater 6	40° 31' 3.74"" N	079° 11' 52.66"" W	2,898 ft
Fuel Gas Heater 7	40° 30' 59.58"" N	079° 11' 52.67"" W	2,938 ft

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum A: Source Applicable Requirements

Describe and cite all applicable requirements pertaining to this source.
Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.

Citation Number	Citation Limitation	Limitation Used
25 Pa. Code Chapter 123 – Standards for Contaminants	PM limit: 0.4 lb/MMBtu; Visible emissions: 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour, and 60% at any time	PM Limit: Compliance with PSD-BACT, and/or State BAT requirements will assure compliance with Chapter 123 PM emission requirements. Visible Emissions: Method 9.
40 CFR Part 52 – PSD 25 Pa. Code Chapter 127.12(a)(5) – State BAT 25 Pa. Code Chapter 127.205 – LAER	Compliance with State BAT, NNSR LAER and Federal PSD Air Pollution Control Technology Requirements as applicable.	PM/PM10/PM2.5 – 0.0048 lb/MMBtu (BACT/State BAT) NOX – 0.03 lb/MMBtu (BACT/State BAT/LAER) CO – 0.04 lb/MMBtu (BACT/State BAT) VOC – 0.005 lb/MMBtu (State BAT/LAER) SO2 – 0.0014 lb/MMBtu (State BAT) H2SO4 – 2.14E-5 lb/MMBtu (State BAT/BACT) GHGs – good combustion practices, clean fuels and energy efficiency utilization BACT/State BAT)
40 CFR 63 Subpart DDDDD	Performance of tune-ups, either annually or every 5 years	Record and maintain records of the tune-ups. Provide initial notification.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: 80-0833693 **Firm Name:** Homer City Generation, L.P.

Plant Code: **Plant Name:** Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Seven (7) Fuel Gas Heaters

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 25 Pa. Code Chapter 123 – Standards for Contaminants (PM, Visible Emissions)

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. **Monitoring device type (stack test, CEM, etc.):** N/A
2. **Monitoring device location:** N/A

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

N/A

3. **How will data be reported:** N/A

Section 3: Testing

1. Reference Test Method Description:	Visible Emissions Observation
2. Reference Test Method Citation:	U.S. EPA Reference Method 9, or equivalent

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will keep copies of each vendor guarantees for emissions and retain a record of visible emissions observations.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Annual compliance

certification.

1. Reporting start date:	Within one (1) year of startup.

Section 6: Work Practice Standard

Describe any work practice standards:

Good combustion practices, clean fuels, and energy efficiency will be utilized in order to meet the following emission limits:

PM emissions shall not exceed 0.4 lb/MMBtu;

Visible emissions shall not exceed 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour, and 60% at any time.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Seven (7) Fuel Gas Heaters

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 40 CFR Part 52 – PSD, 25 Pa. Code Chapter 127.12(a)(5) – State BAT, and 25 Pa. Code Chapter 127.205 – LAER

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☐ **Testing** ☐ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.): N/A

2. Monitoring device location: N/A

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

N/A

3. How will data be reported: N/A

Section 3: Testing

1. Reference Test Method Description:	N/A
2. Reference Test Method Citation:	N/A

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will keep copies of each vendor guarantees for emissions.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Annual compliance certification.

1. Reporting start date:	Within one (1) year of startup.

Section 6: Work Practice Standard

Describe any work practice standards:

Good combustion practices, clean fuels, and energy efficiency will be utilized in order to meet the following emission limits:

PM/PM10/PM2.5 – 0.0048 lb/MMBtu (BACT/State BAT)

NOX – 0.03 lb/MMBtu (State BAT)

CO – 0.04 lb/MMBtu (State BAT)

VOC – 0.005 lb/MMBtu (State BAT/LAER)

SO2 – 0.0014 lb/MMBtu (State BAT)

H2SO4 – 2.14E-5 lb/MMBtu (State BAT/BACT)

GHGs – good combustion practices, clean fuels and energy efficiency utilization (BACT/State BAT)

4. Auxiliary Boilers

- Section B – Combustion Unit Information
- Section C – Air Cleaning Device
- Section F – Flue and Air Contaminant Emission
- Addendum A: Source Applicable Requirements
- Addendum 1: Method of Compliance Worksheets

Section B - Combustion Unit Information

1. Combustion Units: ☐ Coal ☐ Oil ☒ Natural Gas Other: _____

Description: Three (3) natural gas-fired auxiliary boilers.

Manufacturer	Model No.	Number of units	
Superior Boiler or equivalent	TBD	3	
Maximum heat input (Btu/hr)	**Rated heat input (Btu/hr)**	**Typical heat input (Btu/hr)**	**Furnace Volume**
67.0 MMBtu/hr (each)	67.0 MMBtu/hr (each)	67.0 MMBtu/hr (each)	TBD
Grate Area (if applicable)		**Method of firing**	
N/A		TBD	

Indicate how combustion air is supplied to boiler
N/A

Indicate the Steam Usage: Steam from the auxiliary boiler is used to preheat components of the HRSG and steam turbine.

Mark and describe soot Cleaning Method:

i. Air Blown
ii. Steam Blown
iii. Brushed and Vacuumed
iv. Other N/A
v. Frequency of Cleaning _____

Maximum Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24 (each)	7 (each)	365 (each)	438 (each)

Operational restrictions taken or requested, if any (e.g., bottlenecks or voluntary restrictions to limit potential to emit)

Capacity (specify units)

Per hour	Per day	Per week	Per year
67.0 MMBtu (each)	1,608 MMBtu (each)	11,256 MMBtu (each)	29,346 MMBtu (each)

Typical Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24(each)	7 (each)	365 (each)	438 (each)

Seasonal variations (Months): If variations exist, describe them.

Operating using primary fuel: _____ From _____ to _____
Operating using secondary fuel: _____ Form _____ to _____
Non-operating: From _____ to _____

2. Specify the primary, secondary and startup fuel. Furnish the details in item 3.
Natural gas only.

Section B - Combustion Unit Information (Continued)

3. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	65,700 SCFH	28.78 MMscf/yr X 10^6 Gal	0.5 gr/100 SCF	0	1,020 Btu/SCF
Gas (other)	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Coal					
Other*					

***** Note: Describe and furnish information separately for other fuels in Addendum B.

4. Burner

Manufacturer	Model Number	Type of Atomization (Steam, air, press, mech., rotary cup)
Superior Boiler or equivalent	TBD	N/A

Number of Burners	Maximum fuel firing rate (all burners)	Normal fuel firing rate
1	0.0657 MMscf/hr (each boiler)	0.0657 MMscf/hr (each boiler)

If oil, temperature and viscosity.
N/A

Maximum theoretical air requirement
N/A

Percent excess air 100% rating
N/A

Turndown ratio
N/A

Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe.
N/A

Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe.
N/A

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

	Low excess air (LEA)	Flue gas recirculation	Other._____
	Over fire air (OFA)	Burner out of service	
X	Low-NO_x burner	Reburning	
	Low NO_x burners with over fire air	Flue gas treatment (SCR / SNCR)	

Section B - Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation
N/A

Describe, in detail, the equipment provided to monitor and to record the source(s) operating conditions, which may affect emissions of air contaminants. Show that they are reasonable and adequate.

See, Addendim A Forms

Describe each proposed modification to an existing source.

N/A

Describe how emissions will be minimized especially during start up, shut down, combustion upsets and/or disruptions. Provide emission estimates for start up, shut down and upset conditions. Provide duration of start up and shut down.

N/A

Describe in detail with a schematic diagram of the control options adopted for SO_2 (if applicable).
N/A

Anticipated milestones:

Expected commencement date of construction/reconstruction: Upon permit issuance
Expected completion date of construction/reconstruction: Anticpated third quarter 2029
Anticipated date(s) of start-up: Anticpated fourth quarter 2029

Section C - Air Cleaning Device (Continued)

10. Costs – N/A

Indicate cost associated with air cleaning device and its operating cost (attach documentation if necessary)

Device	Direct Cost	Indirect Cost	Total Cost	Operating Cost

11 MISCELLANEOUS

Describe in detail the removal, handling and disposal of dust, effluent, etc. from the air cleaning device including proposed methods of controlling fugitive emissions.

N/A

Attach manufacturer's performance guarantees and/or warranties for each of the major components of the control system (or complete system).

The manufacturer's emissions information is attached.

Attach the maintenance schedule for the control equipment and any part of the process equipment that, if in disrepair, would increase air contaminant emissions.

The auxiliary boilers and all of its emission-related equipment will be maintained as per the manufacturer's maintenance schedule.

Section F - Flue and Air Contaminant Emission

1. Estimated Maximum Emissions*

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM		1.50	0.33	AP-42
$PM_{10/2.5}$		1.50	0.33	AP-42
SO_x		0.28	0.06	AP-42
CO		16.55	3.36	AP-42
NO_x		9.85	2.16	AP-42
VOC		1.08	0.24	AP-42
Others: (e.g., HAPs)	-----	-----	-----	-----
Max single HAP	(hexane)	0.36	7.77E-02	AP-42
Total HAPs		0.37	0.08	AP-42

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Stack and Exhauster

Stack Designation/Number AUX_2, AUX_4, AUX_6

List Source(s) or source ID exhausted to this stack:	% of flow exhausted to stack: 100
Three Auxiliary Boilers	

Stack height above grade (ft.) 55 Grade elevation (ft.) 1200	Stack diameter (ft) or Outlet duct area (sq. ft.) 4 ft	Weather Cap ☐ YES ☒ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.

See, Point Source Locations Table and Appendix E

Does stack height meet Good Engineering Practice (GEP)?

No

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions. See, Application Narrative Section 6

Location of Stack** Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
See, Point Source Locations Table						

Stack Exhaust

Volume 21,242 ACFM Temperature 344.0 °F Moisture _____ %

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____ RPM.

** If the datum and collection method information and codes differ from those provided on the General Information Form - Authorization Application, provide the additional required by that form on a separate sheet.

Point Source Locations Table: Auxiliary Boilers

	Latitude	Longitude	Distance to Property Boundary
Aux Boiler 2	40° 31' 9.92"" N	079° 11' 59.19"" W	2,260 ft
Aux Boiler 4	40° 31' 1.62"" N	079° 11' 59.19"" W	2,417 ft
Aux Boiler 6	40° 31' 1.62"" N	079° 11' 49.88"" W	3,133 ft

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum A: Source Applicable Requirements

Describe and cite all applicable requirements pertaining to this source.
Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.

Citation Number	Citation Limitation	Limitation Used
40 CFR 60 Subpart Dc	Recordkeeping and Notification Only	Record and maintain records of the amount of natural gas combusted during each calendar month. Provide initial notification.
25 Pa. Code Chapter 123: Standards for Contaminants	1. PM limit: 2.85E-01 lb/MMBtu; 2. SO2 limit: 4 lb/MMBTU 3. Visible emissions: 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour, and 60% at any time	PM and SO2 Limit: Compliance with PSD-BACT, and/or State BAT requirements will assure compliance with Chapter 123 PM and SO2 emission requirements. Visible Emissions: Method 9.
40 CFR Part 52 – PSD 25 Pa. Code Chapter 127.12(a)(5) – State BAT 25 Pa. Code Chapter 127.205 – LAER	Compliance with State BAT, NNSR LAER and Federal PSD Air Pollution Control Technology Requirements as applicable.	PM/PM10/PM2.5 – 0.007 lb/MMBtu (BACT/ State BAT) NOx – 0.011 lb/MMBtu (State BAT) CO – 0.037 lb/MMBtu (State BAT) VOC – 0.004 lb/MMBtu (State BAT/LAER) SO2 – 0.009 lb/MMBtu (State BAT) H2SO4 – 0.0011 lb/MMBtu (BACT/State BAT) GHGs – good combustion practices, clean fuels and energy efficient utilization (BACT/State BAT)
40 CFR 63 Subpart DDDDD	Performance of tune-ups, either annually or every 5 years	Record and maintain records of the tune-ups. Provide initial notification.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Three (3) new natural gas-fired auxiliary boilers

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 40 CFR 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (NSPS)

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☐ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☐ **Work Practice Standard**

Section 2: Monitoring

1. **Monitoring device type (stack test, CEM, etc.):** Fuel flow meter
2. **Monitoring device location:** Prior to burner

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Fuel flow will be monitored continuously.

3. **How will data be reported:** N/A

Section 3: Testing

1. Reference Test Method Description:	
2. Reference Test Method Citation:	

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Per 40 CFR §60.48c (g)(2), Homer City Generation will record and maintain records of the amount of each fuel combusted during each calendar month.

Per 40 CFR §40.48c (i), Homer City Generation will maintain all records for a period of two (2) years following the date of such record.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Per 40 CFR §60.48c (a), Homer City Generation will submit notification of the date of construction or reconstruction and actual startup, as provided by 40 CFR §60.7.

1. Reporting start date:	Per 40 CFR §60.7, notification of construction commencement must be postmarked no later than 30 days after such date and notification of actual start-up is due must be post marked within 15 days of that date.

Section 6: Work Practice Standard

Describe any work practice standards:

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: 80-0833693 **Firm Name:** Homer City Generation, L.P.

Plant Code: **Plant Name:** Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Three (3) new natural gas-fired auxiliary boilers

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 25 Pa. Code Chapter 123 – Standards for Contaminants (PM, SO2, Visible Emissions)

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

4. Monitoring device type (stack test, CEM, etc.):

5. Monitoring device location:

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

6. How will data be reported:

Section 3: Testing

3. Reference Test Method Description:	Visible emissions observation, PM and sulfur in fuel
4. Reference Test Method Citation:	U.S. EPA Reference Method 9, or equivalent, Method 5 and a total sulfur analyzer meeting ASTM D4468

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

To demonstrate compliance with the emission limits, Homer City Generation will keep copies of each vendor guarantees for
emissions, source test and fuel sulfur analyzer results. Homer City Generation will keep log of visible emissions observations.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Annual compliance certification.

1. Reporting start date:	Within one (1) year of startup.

Section 6: Work Practice Standard

Describe any work practice standards:

Good combustion practices, clean fuels, and energy efficiency will be utilized in order to meet the following emission limits:

PM emissions shall not exceed 2.85E-01 lb/MMBtu;

SO2 emissions shall not exceed 4 lb/MMBtu;

Visible emissions shall not exceed 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour, and 60% at any time.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: 80-0833693 **Firm Name:** Homer City Generation, L.P.

Plant Code: **Plant Name:** Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Three (3) new natural gas-fired auxiliary boilers

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 40 CFR Part 52 – PSD, 25 Pa. Code Chapter 127.12(a)(5) – State BAT, and 25 Pa. Code Chapter 127.205 – LAER

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☐ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

7. Monitoring device type (stack test, CEM, etc.):

8. Monitoring device location:

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

9. How will data be reported:

Section 3: Testing

5. Reference Test Method Description:

6. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain copies of initial stack test results. Homer City Generation will calculate Project-wide GHG emissions on a 12-month rolling average.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Results of annual stack tests within 60 days of stack test completion.

2. Reporting start date: N/A

Section 6: Work Practice Standard

Describe any work practice standards:

Good combustion practices, clean fuels, and energy efficiency will be utilized in order to meet the following emission limits:
PM/PM10/PM2.5 – 0.007 lb/MMBtu (BACT/ State BAT)
NOX – 0.011 lb/MMBtu (State BAT)
CO – 0.037 lb/MMBtu (State BAT)
VOC – 0.004 lb/MMBtu (State BAT/LAER)
SO2 – 0.009 lb/MMBtu (State BAT)
H2SO4 – 0.0011 lb/MMBtu (BACT/State BAT)
GHGs – good combustion practices, clean fuels and energy efficiency utilization (BACT/State BAT)

5. Emergency Generators (1.0 MW each)

- Section B – Combustion Unit Information
- Section C – Air Cleaning Device
- Section F – Flue and Air Contaminant Emission
- Addendum A: Source Applicable Requirements
- Addendum 1: Method of Compliance Worksheets

Section B - Combustion Unit Information

1. Combustion Units: ☐ Coal ☒ Oil ☐ Natural Gas Other: _____

Description: Two (2) 1.0 MW (each 1,483 bhp) diesel fuel-fired emergency generators.

Manufacturer	Model No.	Number of units	
Caterpillar (or equivalent)	C32 or equivalent	2	
Maximum heat input (Btu/hr)	Rated heat input (Btu/hr)	Typical heat input (Btu/hr)	Furnace Volume
10.38 MMBtu/hr (each)	10.38 MMBtu/hr (each)	10.38 MMBtu/hr (each)	TBD
Grate Area (if applicable)		Method of firing	
N/A		TBD	

Indicate how combustion air is supplied to boiler
N/A

Indicate the Steam Usage:

Mark and describe soot Cleaning Method:

i. Air Blown
ii. Steam Blown
iii. Brushed and Vacuumed
iv. Other N/A
v. Frequency of Cleaning _____

Maximum Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24 (each)	7 (each)	365 (each)	500 (each)

Operational restrictions taken or requested, if any (e.g., bottlenecks or voluntary restrictions to limit potential to emit)

Capacity (specify units)

Per hour	Per day	Per week	Per year
10.38 MMBtu (each)	249.14 MMBtu (each)	1,744.01 MMBtu (each)	5,190.5 MMBtu (each)

Typical Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24(each)	7 (each)	365 (each)	500 (each)

Seasonal variations (Months): If variations exist, describe them.

Operating using primary fuel: _____ From _____ to _____
Operating using secondary fuel: _____ Form _____ to _____
Non-operating: From _____ to _____

2. Specify the primary, secondary and startup fuel. Furnish the details in item 3.
15 ppmw ULSD

Section B - Combustion Unit Information (Continued)

3. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number 2	each 75.8 GPH @ 60°F	each 37.9 X 10^3 Gal	0.0015% by wt	<0.001	each 137,000Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Gas (other)	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Coal					
Other*					

***** Note: Describe and furnish information separately for other fuels in Addendum B.

4. Burner

Manufacturer	Model Number	Type of Atomization (Steam, air, press, mech., rotary cup)
N/A	N/A	N/A

Number of Burners	Maximum fuel firing rate (all burners)	Normal fuel firing rate
N/A	N/A	

If oil, temperature and viscosity.
N/A

Maximum theoretical air requirement
N/A

Percent excess air 100% rating
N/A

Turndown ratio
N/A

Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe.
N/A

Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe.
N/A

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

Low excess air (LEA)	Flue gas recirculation	Other. TBD
Over fire air (OFA)	Burner out of service	
Low-NO_x burner	Reburning	
Low NO_x burners with over fire air	Flue gas treatment (SCR / SNCR)	

Section B - Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation
N/A

Describe, in detail, the equipment provided to monitor and to record the source(s) operating conditions, which may affect emissions of air contaminants. Show that they are reasonable and adequate.

See, Addendim A Forms

Describe each proposed modification to an existing source.

N/A

Describe how emissions will be minimized especially during start up, shut down, combustion upsets and/or disruptions. Provide emission estimates for start up, shut down and upset conditions. Provide duration of start up and shut down.

Emissions during startup/shutdown will be minimized by limiting the time that the units are in startup or shutdown mode.

Describe in detail with a schematic diagram of the control options adopted for SO_2 (if applicable).
N/A

Anticipated milestones:

Expected commencement date of construction/reconstruction: Upon permit issuance
Expected completion date of construction/reconstruction: Anticpated third quarter 2029
Anticipated date(s) of start-up: Anticpated fourth quarter 2029

Section C - Air Cleaning Device (Continued)

10. Costs – N/A

Indicate cost associated with air cleaning device and its operating cost (attach documentation if necessary)

Device	Direct Cost	Indirect Cost	Total Cost	Operating Cost

11 MISCELLANEOUS

Describe in detail the removal, handling and disposal of dust, effluent, etc. from the air cleaning device including proposed methods of controlling fugitive emissions.

N/A

Attach manufacturer's performance guarantees and/or warranties for each of the major components of the control system (or complete system).

The manufacturer will have to certify to meet EPA Tier 4 standards for diesel generators.
This will be provided when a manufacturer is chosen.

Attach the maintenance schedule for the control equipment and any part of the process equipment that, if in disrepair, would increase air contaminant emissions.

The engines' emissions control systems will be maintained as per the manufacturer's maintenance specifications.

Section F - Flue and Air Contaminant Emission

1. Estimated Maximum Emissions*

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM		0.15	0.04	NSPS IIII
$PM_{10/2.5}$		0.14	0.03	NSPS IIII, AP-42 speciation
SO_x		0.04	9.00E-03	AP-42
CO		17.07	4.27	NSPS IIII
NO_x		3.27	0.82	NSPS IIII
TOC		0.93	0.23	NSPS IIII
Others: (e.g., HAPs)	-----	-----	-----	-----
Max single HAP	(benzene)	1.61E-02	4.03E-03	AP-42
Total HAP		3.27E-02	8.17E-03	AP-42

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Stack and Exhauster

Stack Designation/Number S031 & S032

List Source(s) or source ID exhausted to this stack:	% of flow exhausted to stack: 100
Emergency Generators 11 and 12	

Stack height above grade (ft.) 20 Grade elevation (ft.)	Stack diameter (ft) or Outlet duct area (sq. ft.) 1.2 ft	Weather Cap ☐ YES ☒ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.

See, Point Source Locations Table and Appendix E

Does stack height meet Good Engineering Practice (GEP)?

No

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions. See, Application Narrative Section 6

Location of Stack**	Latitude			Longitude		
Latitude/Longitude Point of Origin	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
See, Point Source Locations Table						

Stack Exhaust

Volume 8,065 ACFM Temperature 889.5 °F Moisture _____ %

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____ RPM.

** If the datum and collection method information and codes differ from those provided on the General Information Form - Authorization Application, provide the additional required by that form on a separate sheet.

Point Source Locations Table: Emergency Generator Engines (1.0 MW)

	Latitude	Longitude	Distance to Property Boundary
EG-1MW-01	40° 31' 4.67"" N	079° 12' 11.84"" W	1,415 ft
EG-1MW-02	40° 31' 4.34"" N	079° 12' 12.8"" W	1,344 ft

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum A: Source Applicable Requirements

Describe and cite all applicable requirements pertaining to this source.
Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.

Citation Number	Citation Limitation	Limitation Used
25 Pa. Code Chapter 123 – Standards for Contaminants	25 Pa. Code §127.12(a)(5): Emissions from these sources will be the minimum attainable through the use of BAT. 25 Pa. Code §123.13(c)(1)(i): PM limit of 0.38 lb/MMBtu	Compliance with BAT will assure compliance with 25 Pa. Code §123.13(c)(1)(i).
25 Pa. Code Chapter 123 – Standards for Contaminants	25 Pa. Code §123.41 (Visible emissions): 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour, and 60% at any time	Compliance with Subpart IIII requirements will assure compliance with BAT and 25 Pa. Code §123.41.
40 CFR 60 Subpart IIII (§§60.4202 and 60.4209)	NMHC: 0.19 g/kW-hr; NOx: 0.67 g/kW-hr; PM: 0.03 g/kW-hr; and CO: 3.5 g/kW-hr. A non-resettable hour meter must be installed prior to startup of each engine.	Manufacturer certification to EPA Tier 4 standards.
40 CFR 60 Subpart IIII (§60.4207)	Sulfur content – diesel fuel that meets the requirements of 40 CFR §80.510(b) – 15 ppm	Use of ULSD as fuel, which has less than or equal to 15 ppm sulfur.
40 CFR Part 52 – PSD 25 Pa. Code Chapter 127 – BAT	H2SO4: 0.0004 lb/MMBtu; CO: 2.61 g/hp-hr; PM/PM10/PM2.5: 0.022 g/hp-hr; VOC: 0.142 g/hp-hr; and NOx: 0.5 g/hp-hr.	Compliance with Subpart IIII emissions requirements will assure compliance with BACT/State BAT requirements.
25 Pa. Code Chapter 127.205 – LAER	VOC: 0.142 g/hp-hr;	Same limits used.
40 CFR 63 Subpart ZZZZ	No limitations are applicable for emergency engines > 500 bhp at major source of HAP emissions.	Only required to submit initial notification.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Ten (10) Emergency Generators (2.5 MW), Two (2) Emergency Generators (1.0 MW)

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 40 CFR Part 52 – PSD, 25 Pa. Code Chapter §127.12 – BAT, Chapter §123.13 – Standards for Contaminants (PM), and 25 Pa. Code Chapter §127.205 – LAER

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☐ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

10. Monitoring device type (stack test, CEM, etc.): N/A

11. Monitoring device location:

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

12. How will data be reported:

Section 3: Testing

7. Reference Test Method Description: N/A

8. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain records and 12-month rolling average fuel usage rates by fuel type.

Homer City Generation will retain records of supporting calculations used to determine compliance with the emissions limits based on manufacturer guarantees.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Report emissions to PADEP annually to demonstrate compliance with permitted emissions limits and for the annual air emissions inventory.

3. Reporting start date: One (1) year after start-up

Section 6: Work Practice Standard

Describe any work practice standards:

(1) Operate and maintain the stationary CI internal combustion engines and control devices according to the manufacturer's emissions-related written instructions;

(2) Change only those emissions-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR Parts 89, and/or 1068, as they apply.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Ten (10) Emergency Generators (2.5 MW), Two (2) Emergency Generators (1.0 MW)

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 40 CFR Part 52 – PSD, 25 Pa. Code Chapter §127.12 – BAT, Chapter §123.13 – Standards for Contaminants (PM), and 25 Pa. Code Chapter §127.205 – LAER

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☐ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☐ **Work Practice Standard**

Section 2: Monitoring

13. Monitoring device type (stack test, CEM, etc.): Methods 9 and 22

14. Monitoring device location: N/A

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Periodic monitoring of emergency generator stacks for presence of visible emissions while operating.

15. How will data be reported: Deviations will be reported semi-annually.

Section 3: Testing

9. Reference Test Method Description: N/A

10. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain records of visible emissions readings conducted on a weekly basis.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Six (6)-month and annual compliance reporting.

Annual air emissions reporting.

4. Reporting start date: 6-month period after start-up

Section 6: Work Practice Standard

Describe any work practice standards: N/A

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: 80-0833693 **Firm Name:** Homer City Generation, L.P.

Plant Code: **Plant Name:** Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Ten (10) Emergency Generators (2.5 MW), Two (2) Emergency Generators (1.0 MW)

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 40 CFR Part 60, Subpart IIII (§60.4202)

Demonstrate that the emergency engine meets the applicable emissions standards and has not been operated for more than 100 hours per calendar year for non-emergency operation.

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☐ **Testing** ☐ **Reporting**

☒ **Record Keeping** ☐ **Work Practice Standard**

Section 2: Monitoring

16. Monitoring device type (stack test, CEM, etc.): Non-resettable hour meter.

17. Monitoring device location: N/A

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

N/A

18. How will data be reported: N/A

Section 3: Testing

11. Reference Test Method Description: N/A

12. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain records of the operation of the engines in emergency and non-emergency service that are
recorded through the non-resettable hour meter. These records will include descriptions of non-emergency operations (i.e., maintenance check, readiness testing, etc.).

Section 5: Reporting

Describe what is to be reported and the frequency of reporting: N/A

5. Reporting start date:

Section 6: Work Practice Standard

Describe any work practice standards:

The manufacturer has certified that the emergency generators meet the following standards:

NMHC: 0.19 g/kW-hr;

NOx: 0.67 g/kW-hr;

PM: 0.03 g/kW-hr; and

CO: 3.5 g/kW-hr.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Ten (10) Emergency Generators (2.5 MW), Two (2) Emergency Generators (1.0 MW)

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 40 CFR Part 60, Subpart IIII (§60.4207) – Diesel fuel with a sulfur content of less than or equal to 15 ppm by weight.

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☐ **Testing** ☐ **Reporting**

☒ **Record Keeping** ☐ **Work Practice Standard**

Section 2: Monitoring

19. Monitoring device type (stack test, CEM, etc.): N/A

20. Monitoring device location:

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

21. How will data be reported:

Section 3: Testing

13. Reference Test Method Description: N/A

14. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain records of the ULSD fuel specifications from the supplier as deliveries arrive on-site.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting: N/A

6. Reporting start date:

Section 6: Work Practice Standard

Describe any work practice standards: N/A

6. Emergency Generators (2.5 MW each)

- Section B – Combustion Unit Information
- Section C – Air Cleaning Device
- Section F – Flue and Air Contaminant Emission
- *See 1MW Units for Addendum A: Source Applicable Requirements*
- *See 1MW Units for Addendum 1: Method of Compliance Worksheets*

Section B - Combustion Unit Information

1. Combustion Units: ☐ Coal ☒ Oil ☐ Natural Gas Other: _____

Description: Ten (10) 2.5 MW (each 3,633 bhp) ultra low sulfur diesel fuel-fired emergency generators.

Manufacturer	Model No.	Number of units	
TBD	TBD	10	
Maximum heat input (Btu/hr)	Rated heat input (Btu/hr)	Typical heat input (Btu/hr)	Furnace Volume
25.43 MMBtu/hr (approximate, each)	25.43 MMBtu/hr (approximate, each)	25.43 MMBtu/hr (approximate, each)	TBD
Grate Area (if applicable)		Method of firing	
N/A		TBD	

Indicate how combustion air is supplied to boiler
N/A

Indicate the Steam Usage: N/A

Mark and describe soot Cleaning Method:

i. Air Blown
ii. Steam Blown
iii. Brushed and Vacuumed
iv. Other N/A
v. Frequency of Cleaning _____

Maximum Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24 (each)	7 (each)	365 (each)	500 (each)

Operational restrictions taken or requested, if any (e.g., bottlenecks or voluntary restrictions to limit potential to emit)

Capacity (specify units)

Per hour	Per day	Per week	Per year
25.43 MMBtu	610.34 MMBtu	4,272.41 MMBtu	12,715.50 MMBtu

Typical Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24(each)	7 (each)	365 (each)	500 (each)

Seasonal variations (Months): If variations exist, describe them.

Operating using primary fuel: _____ From _____ to _____
Operating using secondary fuel: _____ Form _____ to _____
Non-operating: From _____ to _____

2. Specify the primary, secondary and startup fuel. Furnish the details in item 3.
15 ppmw Ultra-low sulfur diesel

Section B - Combustion Unit Information (Continued)

3. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number 2	each 185.63 GPH @ 60°F	each 92.8 X 10^3 Gal	0.0015% by wt	<0.001	each 137,000Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Gas (other)	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Coal					
Other*					

***** Note: Describe and furnish information separately for other fuels in Addendum B.

4. Burner

Manufacturer	Model Number	Type of Atomization (Steam, air, press, mech., rotary cup)

Number of Burners	Maximum fuel firing rate (all burners)	Normal fuel firing rate

If oil, temperature and viscosity.
N/A

Maximum theoretical air requirement
N/A

Percent excess air 100% rating
N/A

Turndown ratio
N/A

Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe.
N/A

Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe.
N/A

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

Low excess air (LEA)	Flue gas recirculation	Other._____
Over fire air (OFA)	Burner out of service	
Low-NO_x burner	Reburning	
Low NO_x burners with over fire air	Flue gas treatment (SCR / SNCR)	

Section B - Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation
N/A

Describe, in detail, the equipment provided to monitor and to record the source(s) operating conditions, which may affect emissions of air contaminants. Show that they are reasonable and adequate.

See, Addendim A Forms

Describe each proposed modification to an existing source.

N/A

Describe how emissions will be minimized especially during start up, shut down, combustion upsets and/or disruptions. Provide emission estimates for start up, shut down and upset conditions. Provide duration of start up and shut down.

Emissions during startup/shutdown will be minimized by limiting the time that the units are in startup or shutdown mode.

Describe in detail with a schematic diagram of the control options adopted for SO_2 (if applicable).
N/A

Anticipated milestones:

Expected commencement date of construction/reconstruction: Upon permit issuance
Expected completion date of construction/reconstruction: Anticpated third quarter 2029
Anticipated date(s) of start-up: Anticpated fourth quarter 2029

Section C - Air Cleaning Device (Continued)

10. Costs – N/A

Indicate cost associated with air cleaning device and its operating cost (attach documentation if necessary)

Device	Direct Cost	Indirect Cost	Total Cost	Operating Cost

11 MISCELLANEOUS

Describe in detail the removal, handling and disposal of dust, effluent, etc. from the air cleaning device including proposed methods of controlling fugitive emissions.

N/A

Attach manufacturer's performance guarantees and/or warranties for each of the major components of the control system (or complete system).

The manufacturer will have to certify to meet EPA Tier 4 standards for diesel generators.
This will be provided when a manufacturer is chosen.

Attach the maintenance schedule for the control equipment and any part of the process equipment that, if in disrepair, would increase air contaminant emissions.

The engines' emissions control systems will be maintained as per the manufacturer's maintenance specifications.

Section F - Flue and Air Contaminant Emission

1. Estimated Maximum Emissions*

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM		1.79	0.45	NSPS IIII
$PM_{10/2.5}$		1.66	0.41	NSPS IIII, AP-42 speciation
SO_x		0.44	0.11	AP-42
CO		209.04	52.26	NSPS IIII
NO_x		40.02	10.00	NSPS IIII
TOC		11.35	2.84	NSPS IIII
Others: (e.g., HAPs)	-----	-----	-----	-----
Max single HAP	()	0.20	0.05	AP-42
Total HAP		0.40	0.10	AP-42

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Stack and Exhauster

Stack Designation/Number G01_25MW through G10_25MW

List Source(s) or source ID exhausted to this stack:
Emergency Generators 1-10

% of flow exhausted to stack: 100

Stack height above grade (ft.) 20
Grade elevation (ft.) 1,200

Stack diameter (ft) or Outlet duct area (sq. ft.)
1.2 ft

Weather Cap
☐ YES ☒ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.

See, Point Source Locations Table and Appendix E

Does stack height meet Good Engineering Practice (GEP)?
No

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions. See, Application Narrative Section 6

Location of Stack** Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
See, Point Source Locations Table						

Stack Exhaust

Volume 4,524 ACFM Temperature 964.0 °F Moisture _____%

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____RPM.

** If the datum and collection method information and codes differ from those provided on the General Information Form - Authorization Application, provide the additional required by that form on a separate sheet.

Point Source Locations Table: Emergency Generator Engines (2.5 MW)

	Latitude	Longitude	Distance to Property Boundary
G01_25MW	40° 31' 15.09"" N	079° 11' 54.73"" W	1,889 ft
G02_25MW	40° 31' 10.94"" N	079° 11' 54.74"" W	2,308 ft
G03_25MW	40° 31' 6.74"" N	079° 11' 54.73"" W	2,675 ft
G04_25MW	40° 31' 2.58"" N	079° 11' 54.73"" W	2,750 ft
G05_25MW	40° 31' 6.74"" N	079° 11' 45.38"" W	2,871 ft
G06_25MW	40° 31' 2.60"" N	079° 11' 45.38"" W	3,272 ft
G07_25MW	40° 30' 58.43"" N	079° 11' 45.38"" W	3,509 ft
G08_25MW	40° 30' 59.02"" N	079° 11' 54.26"" W	2,820 ft
G09_25MW	40° 30' 44.37"" N	079° 11' 35.83"" W	3,119 ft
G10_25MW	40° 30' 58.34"" N	079° 11' 24.27"" W	2,867 ft

7. Fire Water Pump

- Section B – Combustion Unit Information
- Section C – Air Cleaning Device
- Section F – Flue and Air Contaminant Emission
- Addendum A: Source Applicable Requirements
- Addendum 1: Method of Compliance Worksheets

Section B – Combustion Unit Information

1. Combustion Units: ☐ Coal ☒ Oil ☐ Natural Gas Other: _____

Description: One - 399 bhp - diesel fuel-fired emergency fire pump engine.

Manufacturer	Model No.	Number of units
TBD	TBD	1

Maximum heat input (Btu/hr)	Rated heat input (Btu/hr)	Typical heat input (Btu/hr)	Furnace Volume
2.793 MMBtu/hr	2.793 MMBtu/hr	2.793 MMBtu/hr	TBD

Grate Area (if applicable)	Method of firing
N/A	TBD

Indicate how combustion air is supplied to boiler
N/A

Indicate the Steam Usage:

Mark and describe soot Cleaning Method:

i. Air Blown
ii. Steam Blown
iii. Brushed and Vacuumed
iv. Other N/A
v. Frequency of Cleaning _____

Maximum Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24	7	365	500

Operational restrictions taken or requested, if any (e.g., bottlenecks or voluntary restrictions to limit potential to emit)

Capacity (specify units)

Per hour	Per day	Per week	Per year
2.793 MMBtu	67.032 MMBtu	469.22 MMBtu	1,396.5 MMBtu

Typical Operating schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24	7	365	500

Seasonal variations (Months): If variations exist, describe them.

Operating using primary fuel: _____ From _____ to _____
Operating using secondary fuel: _____ Form _____ to _____
Non-operating: From _____ to _____

2. Specify the primary, secondary and startup fuel. Furnish the details in item 3.
ULSD

Section B – Combustion Unit Information (Continued)

3. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number 2	20.39 GPH @ 60°F	10.19 X 10^3 Gal	0.0015% by wt	<0.001	each 137,000Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Gas (other)	SCFH	X 10^6 Gal	gr/100 SCF		Btu/SCF
Coal					
Other*					

***** Note: Describe and furnish information separately for other fuels in Addendum B.

4. Burner

Manufacturer	Model Number	Type of Atomization (Steam, air, press, mech., rotary cup)
N/A	N/A	N/A

Number of Burners	Maximum fuel firing rate (all burners)	Normal fuel firing rate
N/A	N/A	

If oil, temperature and viscosity.
N/A

Maximum theoretical air requirement
N/A

Percent excess air 100% rating
N/A

Turndown ratio
N/A

Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe.
N/A

Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe.
N/A

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

Low excess air (LEA)	Flue gas recirculation	Other._____
Over fire air (OFA)	Burner out of service	
Low-NO_x burner	Reburning	
Low NO_x burners with over fire air	Flue gas treatment (SCR / SNCR)	

Section B – Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation
N/A

Describe, in detail, the equipment provided to monitor and to record the source(s) operating conditions, which may affect emissions of air contaminants. Show that they are reasonable and adequate.

See, Addendim A Forms

Describe each proposed modification to an existing source.

N/A

Describe how emissions will be minimized especially during start up, shut down, combustion upsets and/or disruptions. Provide emission estimates for start up, shut down and upset conditions. Provide duration of start up and shut down.

Emissions during startup/shutdown will be minimized by limiting the time that the units are in startup or shutdown mode.

Describe in detail with a schematic diagram of the control options adopted for SO_2 (if applicable).
N/A

Anticipated milestones:

Expected commencement date of construction/reconstruction:	Upon permit issuance
Expected completion date of construction/reconstruction:	Anticpated third quarter 2029
Anticipated date(s) of start-up:	Anticpated fourth quarter 2029

Section C – Air Cleaning Device (Continued)

10. Costs – N/A

Indicate cost associated with air cleaning device and its operating cost (attach documentation if necessary)

Device	Direct Cost	Indirect Cost	Total Cost	Operating Cost

11 MISCELLANEOUS

Describe in detail the removal, handling and disposal of dust, effluent, etc. from the air cleaning device including proposed methods of controlling fugitive emissions.

N/A

Attach manufacturer's performance guarantees and/or warranties for each of the major components of the control system (or complete system).

TBD

Attach the maintenance schedule for the control equipment and any part of the process equipment that, if in disrepair, would increase air contaminant emissions.

The engines' emissions control systems will be maintained as per the manufacturer's maintenance specifications.

Section F – Flue and Air Contaminant Emission

1. Estimated Maximum Emissions*

Pollutant	Maximum emission rate: specify units	Maximum emission rate: lbs/hr	Maximum emission rate: tons/yr.	Calculation/ Estimation Method
PM		0.13	0.03	NSPS IIII
$PM_{10/2.5}$		0.12	0.03	NSPS IIII, AP-42 speciation
SO_X		4.84E-03	1.21E-03	AP-42
CO		2.29	0.57	NSPS IIII
NO_x		2.64	0.66	NSPS IIII
TOC		2.64	0.66	NSPS IIII
Others: (e.g., HAPs)	-----	-----	-----	-----
Max single HAP	(formaldehyde)	3.30E-03	8.24E-04	AP-42
Total HAP		1.08E-02	2.70E-03	AP-42

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Stack and Exhauster

Stack Designation/Number FWP_1

List Source(s) or source ID exhausted to this stack:
Emergency Fire Pump Engine

% of flow exhausted to stack: 100

Stack height above grade (ft.) 12
Grade elevation (ft.) 1,200

Stack diameter (ft) or Outlet duct area (sq. ft.)
0.5 ft

Weather Cap
☐ YES ☒ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.

2,475 ft

Does stack height meet Good Engineering Practice (GEP)?
No

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions. See, Application Narrative Section 6

Location of Stack** Latitude/Longitude Point of Origin	Latitude: Degrees	Latitude: Minutes	Latitude: Seconds	Longitude: Degrees	Longitude: Minutes	Longitude: Seconds
See, Point Source Locations Table	40	31	15.09	-79	11	54.73

Stack Exhaust

Volume 2,214 ACFM Temperature 826.0 °F Moisture _____%

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____RPM.

** If the datum and collection method information and codes differ from those provided on the General Information Form – Authorization Application, provide the additional required by that form on a separate sheet.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum A: Source Applicable Requirements

Describe and cite all applicable requirements pertaining to this source.
Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.

Citation Number	Citation Limitation	Limitation Used
25 Pa. Code Chapter 123 – Standards for Contaminants	25 Pa. Code §127.12(a)(5): Emissions from these sources will be the minimum attainable through the use of BAT. 25 Pa. Code §123.13(c)(1)(i): PM limit of 0.4 lb/MMBtu	Compliance with BAT will assure compliance with 25 Pa. Code §123.13(c)(1)(i).
25 Pa. Code Chapter 123 – Standards for Contaminants	25 Pa. Code §123.41 (Visible emissions): 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour, and 60% at any time	Compliance with Subpart IIII requirements will assure compliance with BAT and 25 Pa. Code §123.41.
40 CFR 60 Subpart IIII (§§60.4202 and 60.4209)	NMHC + NO_X: 3.0 g/bhp-hr; PM: 0.15 g/bhp-hr; and CO: 3.5 g/bhp-hr. A non-resettable hour meter must be installed prior to startup of each engine.	Manufacturer certification to applicable standards.
40 CFR 60 Subpart IIII (§60.4207)	Sulfur content – diesel fuel that meets the requirements of 40 CFR §80.510(b) – 15 ppm	Use of ULSD as fuel, which has less than or equal to 15 ppm sulfur.
40 CFR Part 52 – PSD 25 Pa. Code Chapter 127 – BAT	H2SO4: 0.0002 lb/MMBtu; CO: 2.6 g/hp-hr; PM/PM10/PM2.5: 0.15 g/hp-hr; NO_X+VOC: 3.0 g/hp-hr.	Same limits used.
25 Pa. Code Chapter 127.205 – LAER	NO_X+VOC: 3.0 g/hp-hr.	Same limits used.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: 80-0833693 **Firm Name:** Homer City Generation, L.P.

Naming.Plant **Plant Name:** Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☐ **A group of sources, Group ID:**

☒ **A single source, Unit ID:** Fire Water Pump

☐ **Alternative Scenario, Scenario Name:**

Citation #: 25 Pa. Code §127.12(a)(5) – BAT and 25 Pa. Code §123.13(c)(1)(i) – Standards for Contaminants (PM)

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☐ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. **Monitoring device type (stack test, CEM, etc.):** N/A
2. **Monitoring device location:**

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

3. **How will data be reported:**

Section 3: Testing

1. Reference Test Method Description: N/A

2. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain records and 12-month rolling average fuel usage rates by fuel type.

Homer City Generation will retain records of supporting calculations used to determine compliance with the emissions limits based on manufacturer emissions guarantees.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Report emissions to PADEP annually to demonstrate compliance with emissions limits and for the annual air emissions inventory.

1. Reporting start date: One (1) year after start-up.

Section 6: Work Practice Standard

Describe any work practice standards:

(1) Operate and maintain the stationary CI internal combustion engines and control devices according to the manufacturer's emissions-related written instructions;

(2) Change only those emissions-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR Parts 89, and/or 1068, and they apply.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: 80-0833693 **Firm Name:** Homer City Generation, L.P.

Plant Code: **Plant Name:** Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☐ **A group of sources, Group ID:**

☒ **A single source, Unit ID:** Fire Water Pump

☐ **Alternative Scenario, Scenario Name:**

Citation #: 25 Pa. Code §127.12(a)(5) – BAT and Chapter 123.41 – Standards for Contaminants – Visible Emissions

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☐ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☐ **Work Practice Standard**

Section 2: Monitoring

1. **Monitoring device type (stack test, CEM, etc.):** Methods 9 and 22

2. **Monitoring device location:** N/A

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

N/A

3. **How will data be reported:** Deviations will be reported semi-annually.

Section 3: Testing

1. Reference Test Method Description: N/A

2. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain records of visible emissions readings when operating.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Six (6)-month and annual compliance reporting.

Annual air emissions reporting.

2. Reporting start date: Six (6)-month period after start-up.

Section 6: Work Practice Standard

Describe any work practice standards: N/A

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: 80-0833693 **Firm Name:** Homer City Generation, L.P.

Plant Code: **Plant Name:** Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☐ **A group of sources, Group ID:**

☒ **A single source, Unit ID:** Fire Water Pump

☐ **Alternative Scenario, Scenario Name:**

Citation #: 40 CFR Part 60, Subpart IIII (§60.4202)

Citation #: 40 CFR Part 60, Subpart IIII (§60.4202)

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☐ **Testing** ☐ **Reporting**

☒ **Record Keeping** ☐ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.): Non-resettable hour meter

2. Monitoring device location: N/A

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Demonstrate that the emergency engine has not been operated for more than 100 hours per calendar year for non-emergency operation.

3. How will data be reported: N/A

Section 3: Testing

1. Reference Test Method Description: N/A

2. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. These records will include descriptions of non-emergency operations (i.e., maintenance check, readiness testing, etc.).

Section 5: Reporting

Describe what is to be reported and the frequency of reporting: N/A

1. Reporting start date:

Section 6: Work Practice Standard

Describe any work practice standards: N/A

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: 80-0833693 **Firm Name:** Homer City Generation, L.P.

Plant Code: **Plant Name:** Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☐ **A group of sources, Group ID:**

☒ **A single source, Unit ID:** Fire Water Pump

☐ **Alternative Scenario, Scenario Name:**

Citation #: 40 CFR Part 60, Subpart IIII (§60. 4207) – Diesel fuel with a sulfur content of less than or equal to 15 ppm by weight.

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☐ **Testing** ☐ **Reporting**

☒ **Record Keeping** ☐ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.): N/A

2. Monitoring device location: N/A

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Fuel Sulfur content will be provided by fuel provider

3. How will data be reported: N/A

Section 3: Testing

1. Reference Test Method Description: N/A

2. Reference Test Method Citation:

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain records of the ULSD fuel specifications from the supplier as deliveries arrive on-site.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting: N/A

1. Reporting start date:

Section 6: Work Practice Standard

Describe any work practice standards:

The manufacturer has certified that the emergency generators meet the following standards:

NMHC + NOX: 4.0 g/kW-hr / 3.0 g/bhp-hr;

PM: 0.2 g/kW-hr / 0.15 g/bhp-hr; and

CO: 3.5 g/kW-hr / 2.6 g/bhp-hr.

8. Cooling Towers

- Section B – Combustion Unit Information
- Section F – Flue and Air Contaminant Emission
- Addendum A: Source Applicable Requirements
- Addendum 1: Method of Compliance Worksheets

Section B - Processes Information

1. Source Information

Source Description (give type, use, raw materials, product, etc). Attach additional sheets as necessary.
Seven (7) Cooling towers, each consisting of 8-Cells each, 56 cells total

Manufacturer	Model No.	Number of Sources
TBD	TBD	7
Source Designation	**Maximum Capacity**	**Rated Capacity**
CT01-CT07	95,007 gpm, total	95,007 gpm, total

Type of Material Processed
cooling water

Maximum Operating Schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24	7	365	8,760

Operational restrictions existing or requested, if any (e.g., bottlenecks or voluntary restrictions to limit PTE)

Capacity (specify units)

Per Hour	Per Day	Per Week	Per Year
5,700,420 gal/hr, total for all 7 cooling towers	136,810,080 gal/day, total for all 7 cooling towers	957,670,560 gal/wk, total for all 7 cooling towers	49,936 MMgal/yr, total for all 7 cooling towers

Operating Schedule

Hours/Day	Days/Week	Days/Year	Hours/Year
24	7	365	8,760

Seasonal variations (Months) From to

If variations exist, describe them
N/A

2. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number _____	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number _____	GPH @ 60°F	X 10^3 Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	SCFH	X 10^6 SCF	grain/100 SCF		Btu/SCF
Gas (other) _____	SCFH	X 10^6 SCF	grain/100 SCF		Btu/SCF
Coal _____	TPH	Tons	% by wt		Btu/lb
Other * _____					
_____					
_____					

*Note: Describe and furnish information separately for other fuels in Addendum B.

Section B - Processes Information (Continued)

3. Burner

Manufacturer	Type and Model No.	Number of Burners
N/A	N/A	N/A

Description:
N/A

Rated Capacity	Maximum Capacity
N/A	N/A

4. Process Storage Vessels

A. For Liquids:

Name of material stored
N/A

Tank I.D. No.	Manufacturer	Date Installed
N/A	N/A	N/A

Maximum Pressure	Capacity (gallons/Meter^3)
N/A	N/A

Type of relief device (pressure set vent/conservation vent/emergency vent/open vent)
N/A

Relief valve/vent set pressure (psig)	Vapor press. of liquid at storage temp. (psia/kPa)
N/A	N/A

Type of Roof: Describe:
N/A

Total Throughput Per Year	
N/A	Number of fills per day (fill/day): N/A Filling Rate (gal./min.): N/A Duration of fill hr./fill): N/A

B. For Solids

Type: ☐ Silo ☐ Storage Bin ☐Other, Describe	Name of Material Stored
	N/A

Silo/Storage Bin I.D. No.	Manufacturer	Date Installed
N/A	N/A	N/A

State whether the material will be stored in loose or bags in silos	Capacity (Tons)
N/A	N/A
Turn over per year in tons	Turn over per day in tons
N/A	N/A

Describe fugitive dust control system for loading and handling operations
N/A

Describe material handling system
N/A

5. Request for Confidentiality

Do you request any information on this application to be treated as "Confidential"? ☐ Yes ☒ No
If yes, include justification for confidentiality. Place such information on separate pages marked **"confidential"**.

Section B - Processes Information (Continued)

6. Miscellaneous Information

Attach flow diagram of process giving all (gaseous, liquid and solid) flow rates. Also, list all raw materials charged to process equipment, and the amounts charged (tons/hour, etc.) at rated capacity (give maximum, minimum and average charges describing fully expected variations in production rates). Indicate (on diagram) all points where contaminants are controlled (location of water sprays, collection hoods, or other pickup points, etc.). Describe collection hoods location, design, airflow and capture efficiency. Describe any restriction requested and how it will be monitored.

See, Appendix C.

Describe fully the facilities provided to monitor and to record process operating conditions, which may affect the emission of air contaminants. Show that they are reasonable and adequate.

Refer to Addendum A1 forms.

Describe each proposed modification to an existing source.

N/A

Identify and describe all fugitive emission points, all relief and emergency valves and any by-pass stacks.

N/A

Describe how emissions will be minimized especially during start up, shut down, process upsets and/or disruptions.

Drift eliminators with an efficiency of 0.0005% will be incorporated into the cooling tower design to decrease the amount and size of cooling tower water droplets that are carried out with the exhaust from the cooling tower system. Because there is no U.S. EPA methodology for source testing the cooling tower for emissions, the efficiency of the drift eliminator for the towers is certified by the tower manufacturer from test data on the drift eliminator design in a controlled test cell.

Anticipated Milestones:

i. Expected commencement date of construction/reconstruction/installation: Upon permit issuance
ii. Expected completion date of construction/reconstruction/installation: Anticpated third quarter 2029
iii. Anticipated date of start-up: Anticpated fourth quarter 2029

Section F - Flue and Air Contaminant Emission

1. Estimated Atmospheric Emissions*

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM		0.71	3.13	AP-42 & New Mexico Guidance document
PM_{10}		0.50	2.20	AP-42 & New Mexico Guidance document
SO_x				
CO				
NO_x				
VOC				
Others: (e.g., HAPs)	-----	-----	-----	-----

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Stack and Exhauster

Stack Designation/Number

List Source(s) or source ID exhausted to this stack: CT01-CT07	% of flow exhausted to stack: 100	
Stack height above grade (ft.) 55 Grade elevation (ft.) 1,200	Stack diameter (ft) or Outlet duct area (sq. ft.) 34 ft, per cooling tower cell	f. Weather Cap ☐ YES ☒ NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.

See, Point Source Locations Table

Does stack height meet Good Engineering Practice (GEP)?

No

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions. See, Application Narrative Section 6.

Location of stack** Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
See, Point Source Locations Table						

Stack exhaust

Volume 1,328,300 ACFM (per cell) Temperature 110 °F Moisture _____ %

Indicate on an attached sheet the location of sampling ports with respect to exhaust fan, breeching, etc. Give all necessary dimensions.

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____RPM.

** If the data and collection method codes differ from those provided on the General Information Form-Authorization Application, provide the additional detail required by that form on a separate form.

Point Source Locations Table: Cooling Tower Cells (7 cooling towers, 8 cells each)

	Latitude	Longitude	Distance to Property Boundary			Latitude	Longitude	Distance to Property Boundary
CT1_1	40° 31' 13.42"" N	079° 12' 2.43"" W	1,929 ft		CT4_5	40° 31' 0.4"" N	079° 12' 2.44"" W	2,178 ft
CT1_2	40° 31' 13.43"" N	079° 12' 1.75"" W	1,980 ft		CT4_6	40° 31' 0.39"" N	079° 12' 1.76"" W	2,231 ft
CT1_3	40° 31' 13.43"" N	079° 12' 1.08"" W	2,030 ft		CT4_7	40° 31' 0.4"" N	079° 12' 1.08"" W	2,283 ft
CT1_4	40° 31' 13.43"" N	079° 12' 0.39"" W	2,064 ft		CT4_8	40° 31' 0.41"" N	079° 12' 0.4"" W	2,335 ft
CT1_5	40° 31' 12.94"" N	079° 12' 2.43"" W	1,942 ft		CT5_1	40° 31' 5.05"" N	079° 11' 53.08"" W	2,842 ft
CT1_6	40° 31' 12.94"" N	079° 12' 1.75"" W	1,993 ft		CT5_2	40° 31' 5.06"" N	079° 11' 52.4"" W	2,892 ft
CT1_7	40° 31' 12.95"" N	079° 12' 1.06"" W	2,043 ft		CT5_3	40° 31' 5.07"" N	079° 11' 51.73"" W	2,924 ft
CT1_8	40° 31' 12.95"" N	079° 12' 0.39"" W	2,094 ft		CT5_4	40° 31' 5.07"" N	079° 11' 51.04"" W	2,932 ft
CT2_1	40° 31' 9.24"" N	079° 12' 2.46"" W	2,034 ft		CT5_5	40° 31' 4.57"" N	079° 11' 53.08"" W	2,854 ft
CT2_2	40° 31' 9.24"" N	079° 12' 1.77"" W	2,085 ft		CT5_6	40° 31' 4.57"" N	079° 11' 52.4"" W	2,905 ft
CT2_3	40° 31' 9.25"" N	079° 12' 1.1"" W	2,135 ft		CT5_7	40° 31' 4.58"" N	079° 11' 51.71"" W	2,956 ft
CT2_4	40° 31' 9.25"" N	079° 12' 0.41"" W	2,186 ft		CT5_8	40° 31' 4.58"" N	079° 11' 51.04"" W	2,980 ft
CT2_5	40° 31' 8.76"" N	079° 12' 2.45"" W	2,047 ft		CT6_1	40° 31' 0.89"" N	079° 11' 53.08"" W	2,893 ft
CT2_6	40° 31' 8.75"" N	079° 12' 1.77"" W	2,098 ft		CT6_2	40° 31' 0.9"" N	079° 11' 52.4"" W	2,945 ft
CT2_7	40° 31' 8.76"" N	079° 12' 1.09"" W	2,148 ft		CT6_3	40° 31' 0.91"" N	079° 11' 51.73"" W	2,997 ft
CT2_8	40° 31' 8.77"" N	079° 12' 0.41"" W	2,199 ft		CT6_4	40° 31' 0.91"" N	079° 11' 51.04"" W	3,050 ft
CT3_1	40° 31' 5.04"" N	079° 12' 2.45"" W	2,133 ft		CT6_5	40° 31' 0.41"" N	079° 11' 53.08"" W	2,898 ft
CT3_2	40° 31' 5.05"" N	079° 12' 1.77"" W	2,186 ft		CT6_6	40° 31' 0.41"" N	079° 11' 52.4"" W	2,950 ft
CT3_3	40° 31' 5.05"" N	079° 12' 1.09"" W	2,237 ft		CT6_7	40° 31' 0.42"" N	079° 11' 51.72"" W	3,003 ft
CT3_4	40° 31' 5.05"" N	079° 12' 0.41"" W	2,290 ft		CT6_8	40° 31' 0.42"" N	079° 11' 51.04"" W	3,055 ft
CT3_5	40° 31' 4.56"" N	079° 12' 2.45"" W	2,138 ft		CT7_1	40° 30' 56.76"" N	079° 11' 53.12"" W	2,930 ft
CT3_6	40° 31' 4.56"" N	079° 12' 1.76"" W	2,190 ft		CT7_2	40° 30' 56.77"" N	079° 11' 52.43"" W	2,982 ft
CT3_7	40° 31' 4.56"" N	079° 12' 1.08"" W	2,243 ft		CT7_3	40° 30' 56.78"" N	079° 11' 51.76"" W	3,034 ft
CT3_8	40° 31' 4.57"" N	079° 12' 0.4"" W	2,295 ft		CT7_4	40° 30' 56.78"" N	079° 11' 51.07"" W	3,087 ft
CT4_1	40° 31' 0.88"" N	079° 12' 2.45"" W	2,173 ft		CT7_5	40° 30' 56.28"" N	079° 11' 53.11"" W	2,935 ft
CT4_2	40° 31' 0.88"" N	079° 12' 1.76"" W	2,226 ft		CT7_6	40° 30' 56.28"" N	079° 11' 52.43"" W	2,987 ft
CT4_3	40° 31' 0.89"" N	079° 12' 1.09"" W	2,277 ft		CT7_7	40° 30' 56.29"" N	079° 11' 51.75"" W	3,040 ft
CT4_4	40° 31' 0.89"" N	079° 12' 0.4"" W	2,330 ft		CT7_8	40° 30' 56.29"" N	079° 11' 51.07"" W	3,092 ft

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum A: Source Applicable Requirements

Describe and cite all applicable requirements pertaining to this source.
Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.

Citation Number	Citation Limitation	Limitation Used
25 Pa. Code Chapter 123 – Standards for Contaminants	25 Pa. Code §123.13(c)(1)(iii): PM limit of 0.02 gr/dscf	Compliance with BAT will assure compliance with 25 Pa. Code §123.13(c)(1)(i).
25 Pa. Code Chapter 123 – Standards for Contaminants	25 Pa. Code §123.41 (Visible emissions): 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour, and 60% at any time	No visible emissions, except for uncombined water vapor. Compliance with BAT will assure compliance with 25 Pa. Code §123.41.
40 CFR Part 52 – PSD BACT	PM, PM10, and PM2.5 BACT for the cooling tower will consist of limiting the drift rate to 0.0005%. Emissions will be limited to 0.71 pounds per hour for PM, 0.50 pounds per hour for PM10, and 1.61e-3 pounds per hour for PM2.5, based on a maximum total dissolved solid (TDS) of 3,000 parts per million (ppm).	PM, PM10, and PM2.5 BACT for the cooling tower will consist of limiting the drift rate to 0.0005%. Emissions will be limited to 0.71 pounds per hour for PM, 0.50 pounds per hour for PM10, and 1.61e-3 pounds per hour for PM2.5, based on a maximum total dissolved solid (TDS) of 3,000 parts per million (ppm).
25 Pa. Code Chapter 127.12(a)(5) – BAT	PM, PM10, and PM2.5 BACT for the cooling tower will consist of limiting the drift rate to 0.0005%. Emissions will be limited to 0.71 pounds per hour for PM, 0.50 pounds per hour for PM10, and 1.61e-3 pounds per hour for PM2.5, based on a maximum total dissolved solid (TDS) of 3,000 parts per million (ppm).	Compliance with Federal PSD BACT Air Pollution Control Technology Requirements will assure compliance with State BAT as applicable.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id:	80-0833693	**Firm Name:**	Homer City Generation, L.P.
Plant Code:		**Plant Name:**	Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Cooling Towers

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 25 Pa. Code §123.13(c)(1)(iii) – Standards for Contaminants (PM) and 25 Pa. Code Chapter 127.12(a)(5) – State BAT

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☒ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. Monitoring device type (stack test, CEM, etc.): Sample of cooling tower blowdown water for total dissolved solids (TDS). Volume of circulating cooling water and number of concentration cycles.

2. Monitoring device location: Sampling of the cooling tower blowdown water discharge (twice monthly).

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Sampling of cooling tower blowdown water will occur twice monthly, monitoring of cooling tower circulating water flow rate will be continuous.

3. How will data be reported:	Sampling results will be used to determine monthly and 12-month rolling TDS and PM/PM10/PM2.5 emissions calculations.

Section 3: Testing

1. Reference Test Method Description:	TDS method approved under facility NPDES water quality permit.
2. Reference Test Method Citation:	N/A

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain records of the control efficiency of the drift eliminators that will be installed.

Homer City Generation will retain records of all TDS sampling results and monthly water flow rates and the number of concentration cycles being used.

Homer City Generation will record monthly and 12-month rolling average TDS results.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Six (6)-month and annual compliance reporting.

Annual air emissions reporting.

1. Reporting start date:	N/A

Section 6: Work Practice Standard

Describe any work practice standards:

Homer City Generation will install, operate, and maintain drift eliminators to ensure compliance with this standard.

TDS in cooling water tower blowdown shall not exceed 3,000 ppmw (12-month rolling average)

PM emissions shall not exceed 0.71 lb/hr (12-month rolling average); PM10 emissions shall not exceed 0.5 lb/hr (12-month rolling average); PM2.5 emissions shall not exceed 0.00161 lb/hr (12-month rolling average).

No substances containing zinc or chromium shall be used in the water treatment chemicals for the cooling towers.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

Addendum 1
Method Of Compliance Worksheet

SECTION 1. APPLICABLE REQUIREMENT

Federal Tax Id: 80-0833693 **Firm Name:** Homer City Generation, L.P.

Plant Code: **Plant Name:** Homer City Generation

Applicable Requirement for: (please check only one box below)

☐ **The entire site**

☒ **A group of sources, Group ID:** Cooling Towers

☐ **A single source, Unit ID:**

☐ **Alternative Scenario, Scenario Name:**

Citation #: 25 Pa. Code Chapter 127.12(a)(5) – State BAT and 25 Pa. Code §123.41: Standards for Contaminants – Visible Emissions

Compliance Method based upon: ☒ **Applicable Requirement** ☐ **Gap Filling Requirement**

Method of Compliance Type: (Check all that applies and complete all appropriate sections below)

☐ **Monitoring** ☒ **Testing** ☒ **Reporting**

☒ **Record Keeping** ☒ **Work Practice Standard**

Section 2: Monitoring

1. **Monitoring device type (stack test, CEM, etc.):** N/A
2. **Monitoring device location:**

Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

3. **How will data be reported:**

Section 3: Testing

3. Reference Test Method Description:	U.S. EPA Reference Method 22 and/or Reference Method 9.
4. Reference Test Method Citation:	N/A

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:

Homer City Generation will retain records of visible emissions readings conducted on a monthly basis.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

Six (6)-month and annual compliance reporting.

Annual air emissions reporting.

1. Reporting start date:	N/A

Section 6: Work Practice Standard

Describe any work practice standards:

Cooling towers will be operated according to manufacturer specifications so that there are no visible emissions, except for uncombined water vapor.