217/785-1705

CONSTRUCTION PERMIT/PSD APPROVAL -- REVISED
NSPS

PERMITTEE

Dynegy Kendall Energy, LLC
Attn: Alan M. Bargender, Plant Manager
1401 County Line Road
Minooka, Illinois 60447

Application No: 98110017 I.D. No.: 093808AAD
Applicant's Designation:
Initial Date Received: November 5, 1998 Initial Date Issued: June 2, 1999
Date Revision Received: September 16, 2010
Date Revision Issued:
Subject: Electric Generation Facility
Location: Kendall County Generation Facility, 1401 County Line Road, Minooka

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of 4 combustion turbines (CT) and associated heat recovery steam generator (HRSG) each with supplemental firing, and ancillary operations as described in the above referenced application and summarized in Attachment A. This Permit is granted based upon and subject to the findings and special conditions which follow:

In conjunction with this permit, approval is given with respect to the Prevention of Significant Deterioration of Air Quality Regulations (PSD) to construct the above referenced project, in that the Illinois Environmental Protection Agency (Illinois EPA) finds that the application fulfills all applicable requirements of 40 CFR 52.21. This approval is issued pursuant to the Clean Air Act, as amended, 42 U.S.C. 7401 et. seq., the Federal regulations promulgated thereunder at 40 CFR 52.21 for Prevention of Significant Deterioration of Air Quality (PSD), and a Delegation of Authority agreement between the United States Environmental Protection Agency and the Illinois EPA for the administration of the PSD Program. This approval becomes effective in accordance with the provisions of 40 CFR 124.15 and may be appealed in accordance with the provisions of 40 CFR 124.19. This approval is also based upon and subject to the following findings and conditions which follow:

Findings for Revised Permit

1a. Dynegy Kendall Energy, LLC (Kendall Energy) requested changes to this construction permit to clarify certain short-term emission limits that apply to the generating units at this facility in each mode of operation. The requested clarifications involve the emission limits in pounds/mmBtu and pounds/hour set by Condition 10(a) and Tables 1A and 1B in Attachment A of this permit. The requested changes do not involve emission limits for the units set as Best Available Control Technology (BACT).

b. This natural gas-fired electric generation facility has four combustion turbines (CT) equipped with heat recovery steam generators (HRSG). In addition to firing fuel in the CTs, the CT/HRSG also have the capability for to fire natural gas using separate “duct burners” located in the ductwork between the CT and the HRSG. This mode of operation increases the amount of power generated by the units.

2. The Illinois EPA determined that the clarifications to the permit sought by Kendall Energy would comply with all applicable Illinois Pollution Board Regulations and the federal PSD regulations.

3. A copy of the application, the project summary and a draft of this revised permit were placed in a location in the vicinity of the project, and the public was given notice and an opportunity to examine this material and to submit comments and to request a public hearing on this matter.

The Illinois EPA is issuing this permit and approval subject to the following special conditions and consistent with the specifications and data included in the application. Any departure from the conditions of this approval or terms expressed in the application would need to receive prior written authorization by Illinois EPA.

Conditions

1. Standard conditions for issuance of construction permits, attached hereto and incorporated herein by reference, shall apply to this project, unless superseded by the following special conditions.

2. Each combustion turbine (CT) is subject to the following requirements.

   a. Each CT shall be equipped, operated, and maintained with dry low NO_x combustors and a selective catalytic reduction (SCR) system in the HRSG to reduce emissions of NO_x.

   b. The emissions of NO_x from each CT/HRSG shall not exceed 4.5 ppmvd at 15% O_2 on an hourly average, except during startup, malfunction, shutdown or periodic tuning as addressed by Condition 3.

   c. The CT and duct burners shall be maintained and operated with good combustion practice to reduce emissions of CO, VOM, and PM.

3a. At all times, each CT/HRSG shall be operated in a manner consistent with good air pollution control practice to minimize emissions of NO_x including:

   i. Operation in accordance with the manufacturer’s written instructions or other written instructions developed by the Permittee;

ii. Review of operating parameters of the CT during startup, malfunction, breakdown, or shutdown as necessary to make adjustments to minimize NO_x emissions.

iii. Operation of the SCR system as soon as and as long as the unit operating conditions are amenable to its effective use, except when precluded during periodic tuning.

iv. Review of the operating parameters of the CT/HRSG during startup, malfunction, breakdown or shutdown of the duct burners or steam augmentation as necessary to make adjustments to minimize NO_x emissions.

b. Upon malfunction of the SCR system that will result in NO_x emissions in excess of Conditions 2(b).

i. The Permittee shall as soon as practicable repair the affected system or remove the CT from service so that excess emissions cease.

ii. Consistent with the above, the Permittee shall begin shutdown of the CT within 90 minutes, unless the malfunction is expected to be repaired in 120 minutes or such shutdown would threaten the stability of the regional electrical power system. In such case, shutdown of the CT shall be undertaken when it is apparent that repair will not be accomplished within 120 minutes or shutdown would not endanger the regional power system. In no case shall shutdown of a CT be delayed solely for the economic benefit of the Permittee.

4a. The fuel heater shall be equipped with low-NO_x burners designed to emit no more than 0.15 lb NO_x/million Btu heat input (HHV) on an hourly average.

b. The fuel heater shall be maintained and operated with good combustion practice to reduce emissions of CO, VOM, and PM.

5a. The cooling towers shall each be equipped, operated, and maintained with drift eliminators designed to limit the loss of water droplets from the cooling tower to not more than 0.001% of the circulating water flow.

b. Good operating practices shall be followed for the cooling tower to maintain the level of dissolved solids in the cooling tower blowdown to not more than 5,750 mg/L, composite daily sample.

Conditions 2, 3, 4, and 5 represent the application of the Best Available Control Technology as required by Section 165 of the Clean Air Act. This permit is issued based on BACT for SO_2 being provided because natural gas is the only fuel proposed for use.

6a. The combustion turbines (CT) are subject to the New Source Performance Standard (NSPS) for Stationary Gas Turbines, 40 CFR 60, Subparts A and GG. The Illinois EPA is administrating NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

i. The NO_x emissions from each CT shall not exceed the limit established by the NSPS, pursuant to 40 CFR 60.332(a)(1).

ii. The emission from each CT shall not contain SO_2 in excess of 0.015 percent by volume at 15% O_2 and on a dry basis or the CT shall not burn any fuel which contains sulfur in excess of 0.8 percent by weight, pursuant to 40 CFR 60.333 (a) and (b).

b. The duct burners in the HRSG are subject to the New Source Performance Standard (NSPS) for Electric Utility Steam Generating Units, 40 CFR 60, Subparts A and Da. The Illinois EPA is administrating NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

i. The NO_x emissions from each HRSG's duct burner shall not exceed the limit set by the NSPS, pursuant to 40 CFR 60.44a(d)(1).

ii. The SO_2 emissions from each HRSG's duct burner shall not exceed 0.20 lb/mmBtu, pursuant to 40 CFR 60.43a(b)(2).

iii. The PM emission from each HRSG's duct burner shall not exceed 0.03 lb/mmBtu, pursuant to 40 CFR 60.42a(a)(1).

c. At all times, the Permittee shall maintain and operate the CT's and HRSG duct burners in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to the NSPS, 40 CFR 60.11(d).

7a. The emission of smoke or other particulate matter from a CT or fuel heater shall not have an opacity greater than 30 percent, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 201.149, 212.123(b) or 212.124.

b. When the duct burner in a HRSG is being fired, the emission of smoke or other particulate matter from the CT/HRSG system shall not have an opacity greater than 20 percent, pursuant to 40 CFR 60.42a(b) and 35 IAC 212.122(a), except for one 6-minute period per hour of not more than 27 percent opacity, as further allowed by 40 CFR 60.42a(b). Pursuant to 40 CFR 60.46a(c), this opacity standards shall apply at all times except during periods of startup, shutdown and malfunction as defined by 40 CFR 60.2.

8. Deleted (This Condition in the original permit addressed simple cycle operation of the CTs.)

9a. i. The only fuels fired in the CT shall be natural gas, as defined in 40 CFR 60.331.

ii. Duct burners and the fuel heater shall only be fired with natural gas, as defined in 40 CFR 60.331.

10a. i. Emissions from CT/HRSGs shall not exceed the limits in Tables 1A, 1B, and 1C.

ii. Deleted (This Condition in the original permit addressed simple cycle operation of the CTs.)

iii. On a daily basis during the non-ozone season (January through April and October through December) , VOM emissions from the CT/HRSGs shall not exceed 3,725 pounds, total.

On a daily basis, VOM emissions from the CTG/HRSGs during the ozone season (May through September) shall not exceed 3000 pounds, total.

Note: These requirements are set to address the impact of the facility's VOM emissions on ozone air quality.

b. Emissions of NO_x from the fuel heater, in total, shall not exceed 1.5 lbs/hour and 6.4 tons/year.

c. Emissions of PM from the cooling towers, in total, shall not exceed 30.2 tons/year.

11a. Under this permit, each CT and each HRSG may be operated for a period of up to 180 days from initial startup to allow for equipment shakedown and emissions testing as required. This period may be extended by the Illinois EPA upon request of the Permittee if additional time is needed to complete startup or perform emission testing.

b. Upon successful completion of emission testing demonstrating compliance with applicable limitations, the Permittee may continue to operate the facility as allowed by Section 39.5 (5) of the Environmental Protection Act.

c. This Condition supersedes Standard Condition 6.

12a. Within 60 days after operating a CT/HRSG at the greatest load at which it will normally be operated but not later than 180 days after its initial startup, the Permittee shall perform emissions tests of the CT/HRSG as follows. These tests shall be used as the initial compliance tests to demonstrate compliance with the limits and conditions set in this permit.

b. Emissions shall be measured by an approved testing service at maximum load for NO_x, CO, PM, VOM, and opacity. During the initial performance tests, emissions shall also be measured at the minimum load, and four intermediate load levels for NO_x and VOM, including partial firing of the duct burners if installed, full turbine load without the duct burner, and two partial turbine loads without the duct burner. Unless

the CT/HRSG is equipped with appropriately located test ports in the duct work between the CT and HRSG, compliance of the HRSG with the NSPS shall be determined by the difference between measurements with and without the duct burner in service.

c. The following USEPA methods and procedures shall be used for testing of emissions, unless another USEPA method is approved or specified by the Illinois EPA. For each turbine, measurement of NO_x and SO_2 emissions shall be conducted and data collected in accordance with the test methods and procedures specified in 40 CFR 60.335.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3 or 3A
Moisture	USEPA Method 4
Particulate Matter	USEPA Method 5
Nitrogen Oxides	USEPA Method 20
Opacity	USEPA Method 9
Carbon Monoxide	USEPA Method 10
Volatile Organic Material	USEPA Method 18 or 25A
PM_{10}	USEPA Method 5* or Method 201 or 201A (40 CFR 51, Appendix M)

* The Permittee may report all PM emissions measured by USEPA Method 5 as PM_{10}, including back half condensable particulate. If the Permittee reports USEPA Method 5 PM emissions as PM_{10}, testing using USEPA method 201 or 201A need not be performed.

d. At least 60 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing and shall include as a minimum:

i. The person(s) who will be performing sampling and analysis and their experience with similar tests.

ii. The specific conditions under which testing shall be performed including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the CT/HRSG will be tracked and recorded.

iii. The specific determinations of emissions that are intended to be made, including sampling and monitoring locations. As part of this plan, the Permittee may set forth a strategy for performing emission testing of selected turbines provided that all turbines are fitted for testing; the identity of the CT/HRSG to be tested is determined immediately before testing, by the Illinois EPA or otherwise randomly; and continuous emission monitoring of NO_x is present on all turbines.

iv. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods.

e. The Illinois EPA shall be notified prior to these tests to enable it to observe these tests. Notification for the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.

f. Three copies of the Final Reports for these tests shall be forwarded to the Illinois EPA, Compliance Section in Springfield within 30 days after the test results are compiled and finalized, in advance of the operating permit application if necessary. The Final Report from testing shall contain a minimum:

i. A summary of results;

ii. General information;

iii. Description of test method(s), including a description of sampling points, sampling train, analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. Fuel consumption (standard ft^3);

B. Firing rate (million Btu/hour); and

C. Turbine/Generator output rate (MW).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analysis, sample calculations, and data on equipment calibration.

g. Submittals and notification with respect to emissions testing shall be made to the following:

Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
9511 West Harrison
Des Plaines, Illinois 60016

Telephone: 847/294-4000 Fax: 847/294-4018

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P. O. Box 19276
Springfield, Illinois 62794-9276

Telephone: 217/782-5811 Facsimile: 217/782-6348

13a. The Permittee shall install, operate, and maintain a Continuous Emissions Monitoring (CEM) system to measure emissions of NO_x from each CT/HRSG to demonstrate compliance with the limitations of this permit.

b. i. The procedures under 40 CFR 60.13 and 75.12 shall be followed for the installation, evaluation, and operation these CEM systems. Compliance with the quality assurance and quality control requirements in 40 CFR 75, Appendix B, may be used as allowed in the 40 CFR 60.334.

ii. The Permittee shall submit to the Illinois EPA for review and comments detailed monitoring plans as follows:

A. At least 30 days prior to initial startup of a CT; a plan shall be submitted describing the configuration and operation of the NO_x CEM system(s). The plan shall also state whether the Permittee is installing a SO_2 CEM system (40 CFR 75.11) rather than sulfur analysis and flow monitoring equipment in accordance with 40 CFR 75.11(e).

B. At least 30 days prior to initial startup of a HRSG; a plan shall be submitted describing the proposed changes to the NO_x CEM system for monitoring at the discharge from the HRSG.

c. These CEMS shall be operational and collecting data in accordance with the provisions of the Acid Rain Program.

14a. The Permittee shall either monitor the fuel being fired in each CT for total sulfur content pursuant to 40 CFR 60.334(h)(1) or demonstrate that the fuel for the CT meets the definition of “natural gas” in 40 CFR 60.334(u), in accordance with 40 CFR 60.334(h)(3) and (i)(2).

b. If the Permittee relies on an allowance for fuel bound nitrogen (F-value) in the fuel for a CT for the purpose of determining compliance with Condition 6(a)(i), the Permittee shall conduct monitoring for the nitrogen content of such fuel in accordance with 40 CFR 60.335(b)(9) and (i)(2), as provided by 40 CFR 60.334(h)(2). Otherwise, monitoring of fuel nitrogen content is not required.

15. The Permittee shall install, operate, and maintain monitors on each CT/HRSG to measure and record fuel consumption.

16a. The Permittee shall maintain a file of the following items:

i. The heat content (HHV) of the fuel fired in the CT and HRSG's (Btu/standard ft^3); and

ii. The sulfur content of the fuel for the CT/HRSG in accordance with Condition 14.

b. The Permittee shall maintain the following daily records:

i. The quantity of fuel consumed for each CT (standard ft^3);

ii. The quantity of fuel consumed for each duct burner (standard ft^3);

iii. Operating hours for each duct burner; and

iv. Identification of each hour when a turbine is operated at less than 50% load, other than during startup, malfunction, or shutdown as addressed below in Condition 16(d).

c. The Permittee shall keep inspection, maintenance, and repair logs with dates and nature of such activities for the following:

i. Each CT/HRSG, including duct burners;

ii. Each SCR system;

iii. The SCR reagent storage system;

iv. The fuel heater; and

v. Cooling tower drift eliminators.

d. The Permittee shall maintain following records for each CT/HRSG related to startup, malfunction and breakdown, and shutdown:

i. The time and date of startup, malfunction or breakdown and shutdown of the CT/HRSG, and confirmation that standard practices were followed.

ii. The time and date of startup, malfunction or breakdown and shutdown of the duct burners or power augmentation in the CT/HRSG, and confirmation that standard practices were followed.

iii. Each incident when operation of the CT/HRSG or the duct burners for the HRSG continued during malfunction or breakdown with excess emissions, including the following information:

A. Date and duration of malfunction or breakdown;

B. Description of the malfunction or breakdown;

C. The reason continued operation of the unit was necessary, including supporting documentation; and

D. The corrective actions used to reduce the quantity of emissions and the duration of the incident.

e. The Permittee shall maintain following records for each CT/HRSG related to periodic tuning:

i. The date and duration of periodic tuning of the CT/HRSG and/or associated SCR control system;

ii. The reason for tuning (e.g., regularly scheduled or special purpose), scope of tuning (e.g., performance of the CT, SCR and/or duct burner) and identity and employer of individual(s) supervising tuning;

iii. Identification of each operating scenario for which tuning is performed, with the emission rates before and after tuning and a summary of the adjustments that were made to settings for operating parameters; and

iv. Recommendations, if any, for additional tuning or maintenance/repair to be performed for the unit.

f. The Permittee shall keep the following records with regards to emissions:

i. A. NO_x emissions from each CT/HRSG recorded hourly, quarterly, and annual (in lbs/mmBtu) by combining the NO_x concentration (in ppm) and diluent concentration (in percent O_2 or CO_2) measurements according to the procedures in 40 CFR 75 Appendix F;

B. NO_x emissions from each CT/HRSG recorded during periodic tuning and each startup, malfunction or breakdown and shutdown during operation with duct burners or steam augmentation (in lbs/event).

ii. Monthly emissions of NO_x, CO, SO_2, VOM, and PM from each CT/HRSG and fuel heater (tons/month). NO_x emissions from each CT/HRSG shall be based on data from the CEM. All other emissions shall be calculated based on fuel consumption data and site-specific emission factors developed from emission test data or manufacturer's published emission rates; and

iii. Annual plant emissions of NO_x, CO, SO_2, VOM, and PM, based on monthly emission totals.

g. The Permittee shall keep following records for the cooling towers:

i. A file containing the manufacturer's specification for drift loss from the cooling towers with supporting documentation.

ii. Records for the solids contents of the cooling tower water, on a daily composite basis, as determined by sampling and analysis.

iii. Records for the actions used to routinely verify the solids contents of the cooling tower such as grab sampling and analysis, NPDES sampling and analysis, conductivity measurements, etc., including:

A. A written description of the procedures, with explanation of how they act to address compliance.

B. Records for implementation of the procedure, including measured value(s) of relevant parameter(s).

iv. Records for the amount of water circulated in the cooling towers, gallons/month.

v. Records for emission of particulate matter from the cooling towers (ton/month and ton/year), with supporting calculations.

17. All records required by this permit shall be retained on site for a period of at least 3 years and shall be made available for inspection and copying by the Illinois EPA upon request.

18a. For each CT and HRSG, the Permittee shall fulfill applicable notification requirements of the NSPS, 40 CFR 60.7(a), including notifications for date of commencement of construction, anticipated date of initial startup and actual date of initial startup. With the notification for commencement of construction, the Permittee shall identify the manufacturers and model of the turbine, HRSG, and SCR that it has selected and provide a copy of the manufacturer's guarantee for emissions.

b. The Permittee shall submit quarterly operating reports and emission data that include the following information for each CT/HRSG.

i. Number of startups, average duration of startup and total hours of operation;

ii. Number of duct burner events and duration of such operation;

iii. Number of power augmentation events and duration of such operation;

iv. Number of malfunction events and duration of such operation; and

v. Number of periodic tuning events and duration of such operation.

c. In the event continued operation of a CT/HRSG with excess NO_x emissions during a malfunction of the SCR system is expected to occur for more than 90 minutes, as addressed by Condition 3(b), the Permittee shall promptly notify the Illinois EPA's regional office of the malfunction and the reason for continued operation.

19a. If there is an exceedance of the requirements of Condition 2 through 10 of this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include a description of the exceedance, a copy of relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

b. The Permittee shall comply with applicable reporting requirements under the Acid Rain Program, with a single copy of such report sent to Illinois EPA, Division of Air Pollution Control, Compliance Section.

20a. Any required reports and notifications shall be sent to the Illinois EPA at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

Telephone: 217/782-5811 Fax: 217/782-6348

b. A copy of all reports and notifications, as required above, except the Annual Emission Report required by 35 Ill. Adm. Code 254, shall also be sent to the Illinois EPA at the following address:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

Telephone: 847/294-4000 Fax: 847/294-4018

21a. Pursuant to 40 CFR 52.21(r)(2), this permit shall become invalid if construction is not commenced within 18 months after this permit becomes effective, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable period of time. The 18 month period may be extended by the Illinois EPA upon a satisfactory showing than an extension is justified. This condition supersedes Standard Condition 1.

b. i. This permit shall become invalid as applied to a particular CT unit if construction of such unit does not commence within 18 months after this permit becomes effective, if construction is discontinued for a period of 18 months or more, or if

construction of the CT is not completed within a reasonable period of time. The 18 month period may be extended by the Illinois EPA upon a satisfactory showing from the Permittee than an extension is justified.

ii. This permit shall become invalid as applied to a particular HRSG unit if construction of such unit does not commence within 18 months after completion of construction of the associated CT, if construction is discontinued for a period of 18 months or more, or if construction of the HRSG is not completed within a reasonable period of time. The 18 month period may be extended by the Illinois EPA upon a satisfactory showing from the Permittee than an extension is justified.

c. For purposes of the above provisions, the definitions of "construction" and "commence" at 40 CFR 52.21 (b)(8) and (9) shall apply, which require that a source must enter into a binding agreement for on-site construction or begin actual on-site construction. (Also see the definition of "begin actual construction," 40 CFR 52.21 (b)(11))

22. This Permit for the above referenced project does not relieve the Permittee of the responsibility to comply with all Local, State and Federal Regulations which are part of the applicable Illinois State Implementation Plan, as well as all other applicable Federal, State, and Local requirements.

If you have any questions concerning this permit, please contact Shashi Shah at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

REP:SRS:jws

cc: Region 1
USEPA, Region V

Attachment A: Emission Units[1]

Unit I.D.	Description	Number	Rated Heat Input[2] (HHV) (mmBtu/hr)	Rated Electrical Output[2] (MWe)	Control
Unit 1 – 4	Combustion Turbine (CT)	4	2,166	180-220	Selective Catalytic Reduction and Low NO_x Combustors
HRSG 1 – 4	Heat Recovery Steam Generator (HRSG) with Duct Burner	4	350	-------	Selective Catalytic Reduction and Low NO_x Combustors
	Fuel Heater	1	20.1	-------	Low NO_x Burner
	Backup Diesel Generator (750 HP Maximum)[3]	2	---	-------	None
	Backup Diesel Fire Pump(300 HP Maximum)[2]	1	---	-------	None
	Cooling Towers	18 Cells	---	-------	Drift Eliminators

1. This permit does not address natural gas fired heaters (capacity less than 2.0 mmBtu/hour, each) used for freeze protection of the HRSG as these heaters were not installed as a part of the original construction of the facility.

2. Nominal ratings per unit.

3. Unit operated on a limited basis for backup purposes. For example, diesel electric generators are needed to maintain lubrication and other auxiliary systems in the event of a power failure during shutdown. As a result, the units are not considered significant units.

Table 1A: Emission Limits for Each CT/HRSG Without Duct Burners Operating

Pollutant	(Lbs/mmBtu[1])	(Lbs/Hour[2])
NO_x	-	36.0
CO	0.0511	93.8
PM/PM_{10}	0.0180	36.7
VOM	0.0094	17.3
SO_2	0.006	13.4

1. Limits are based on vendor/manufacturer data and information provided in the permit application. These limits apply in the maximum load range of the CT/HRSG and not during startup, shutdown or other operation below the maximum load range.

2. Limits are based on modeling data and information provided in the permit application. The limit for NO_x does not apply during startup, shutdown, periodic tuning or malfunction (see Conditions 2(b) and 3). The limits for CO and VOM apply when turbines are operating above 50 percent load and not during startup, shutdown or operation below 50 percent load, when the CO and VOM limits are 2,000 and 35 pounds/hour, respectively. The limits for PM/PM_{10} and SO_2 apply at all times.

Table 1B: Emission Limits for Each CT/HRSG With Duct Burners Operating

Pollutant	(Lbs/mmBtu[1])	(Lbs/Hour[2])
NO_x	-	41.7
CO	0.0626	136.7
PM/PM_{10}	0.0183	43.9
VOM	0.0162	35.3
SO_2	0.006	15.6

1. Limits are based on vendor/manufacturer data and information provided in the permit application. These limits apply in the maximum load range of the CT/HRSG and not during startup, shutdown or other operation below the maximum load range.

2. Limits are based on modeling data, vendor/manufacturer data and information provided in the permit application. The limits for NO_x does not apply during startup, shutdown, periodic tuning or malfunction (see Conditions 2(b) and 3). The limits for other pollutants apply at all times.

Table 1C: Annual Emissions (Tons/Year) for CT/HRSG

Pollutant	Contribution (Each)	Limit (Total)
NO_x	157.7	630.7
CO	598.8	2,395.2
PM/PM_{10}	192.3	769.1
VOM	154.6	618.4
SO_2	68.3	273.3

The annual limits for CO, PM/PM_{10}, VOM, and SO_2 are based on continuous operation at the maximum hourly emission rate.

Table 2: Emissions from Other Significant Units (Tons/Year)

Unit	NO_x (Ton/Yr)	CO (Ton/Yr)	PM (Ton/Yr)	VOM (Ton/Yr)	SO_2 (Ton/Yr)
Fuel heater	6.4	5.3	0.7	0.5	0.5
Cooling towers	----	----	30.2	---	---
Totals:	6.4	5.3	30.9	0.5	0.5