

# Oregon Clean Energy Center



## Application for Prevention of Significant Deterioration Preconstruction Permit

### Volume 2

*Siemens SGT-8000H Turbine Scenario*

Submitted By:



Prepared By:



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**Revision 1**

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- Appendix A: Printout of Ohio EPA Permit Forms
- Appendix B: Supporting Calculations
- Appendix C: RBLC Tables

**List of Acronyms and Abbreviations**

°F	degrees Fahrenheit
%	percent
AWMA	Air and Waste Management Association
AQRV	Air Quality Related Values
BAAMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
BAT	Best Available Technology
BP	British Petroleum
Btu	British thermal units
Btu/kW-hr	British thermal unit per kilowatt-hour
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CARB	California Air Resource Board
CATEF	California Air Toxics Emission Factor
CCGT	combined-cycle gas turbine
CCS	carbon capture and sequestration
CEMS	continuous emissions monitoring systems
CFR	Code of Federal Regulations
CH <sub>4</sub>	methane
CI	compression ignition
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalents
the Court	U.S. Court of Appeals for the D.C. Circuit
CSAPR	Cross-State Air Pollution Rule
CTG	combustion turbine generator
DB	duct burner
DLN	dry low NO <sub>x</sub>
EGU	Electric Utility Generating Units

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EPRI	Electric Power Research Institute
FGD	flue gas desulfurization
FLM	Federal Land Manager
GHG	greenhouse gas
g/hp-hr	grams per horsepower-hour
g/kW-hr	grams per kilowatt-hour
gr	grains
HAP	hazardous air pollutant
HHV	higher heating value
H <sub>2</sub> O	water
hp	horsepower
HRSG	heat recovery steam generator
H <sub>2</sub> SO <sub>4</sub>	sulfuric acid mist
ISO	International Standards Organization
km	kilometer
kV	kilovolts
kW	kilowatts
LAER	Lowest Achievable Emission Rate
lb	pounds
lb/hr	pounds per hour
lb/MMBtu	pounds per million British thermal units
lb/MW-hr	pounds per megawatt-hour
LNB	Low NO <sub>x</sub> Burner
MACT	Maximum Achievable Control Technology
MAGLC	Maximum Acceptable Ground-Level Concentration
mg/l	milligrams per liter
min	minutes
MMBtu	million British thermal units
MMBtu/hr	million British thermal units per hour
MW	megawatts

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MW-hr	megawatt-hour
N <sub>2</sub>	nitrogen gas
n/a	not applicable
NESHAP	National Emission Standards for Hazardous Air Pollutants
NAAQS	National Ambient Air Quality Standards
ng/J	nanograms per Joule
NH <sub>3</sub>	ammonia
NO	nitrogen oxide
NO <sub>2</sub>	nitrogen dioxide
N <sub>2</sub> O	nitrous oxide
NO <sub>x</sub>	nitrogen oxides
NSPS	New Source Performance Standards
O <sub>2</sub>	oxygen
OAC	Ohio Administrative Code
OCE	Oregon Clean Energy, LLC
Ohio EPA	Ohio Environmental Protection Agency
Pb	lead
PM <sub>10</sub>	particulate matter with a diameter equal to or less than 10 microns
PM <sub>2.5</sub>	particulate matter with a diameter equal to or less than 2.5 microns
ppm	parts per million
ppm <sub>v</sub>	parts per million by volume
ppm <sub>w</sub>	parts per million by weight
the Project	Oregon Clean Energy Center
PSD	Prevention of Significant Deterioration
psia	pounds per square inch absolute
PTE	Potential to Emit
PTI	Permit to Install
RACT	Reasonably Available Control Technology
RBLC	RACT/BACT/LAER Clearinghouse
RICE	Reciprocating Internal Combustion Engines

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scf	standard cubic feet
SCR	selective catalytic reduction
SER	Significant Emission Rate
SF <sub>6</sub>	sulfur hexafluoride
SIL	Significant Impact Level
SO <sub>2</sub>	sulfur dioxide
SO <sub>3</sub>	sulfur trioxide
SO <sub>4</sub>	sulfate
STG	steam turbine generator
TDS	total dissolved solids
TES	Toledo Environmental Services
TLV	threshold limit value
tpy	tons per year
TSP	total suspended particulates
ULSD	ultra low sulfur diesel
USEPA	United States Environmental Protection Agency
VCAPCD	Ventura County Air Pollution Control District
VOC	volatile organic compounds

## **1. INTRODUCTION**

### **1.1 Project Overview**

Oregon Clean Energy, LLC (OCE) is proposing to construct the Oregon Clean Energy Center, a nominal 799-megawatt (MW) (unfired International Standards Organization [ISO] conditions) combined cycle gas turbine (CCGT) facility (the Project). The Project will utilize combined cycle combustion turbine technology in a 2 x 2 x 1 configuration. OCE is requesting a permit-to-install (PTI) that will allow two optional plant configurations. The turbines being considered for the Project are:

- Option 1 -- Two Mitsubishi M501 GAC units; or
- Option 2 – Two Siemens SGT-8000H units.

The permit application is being provided in two submittals to differentiate the two options. This submittal, Volume 2, presents information for Option 2, the Siemens engines. Volume I reflects the same information for the Mitsubishi engines.

The major equipment will include two combustion turbine generators (CTGs), two supplementary-fired heat recovery steam generators (HRSGs), one steam turbine generator (STG), a mechanical draft wet cooling tower, and associated auxiliary and balance of plant equipment and systems. The Project is anticipated to be fired with natural gas; no oil backup is proposed. Where necessary, ancillary equipment utilizing fuel oil will utilize ultra-low sulfur (0.0015%) diesel (ULSD) fuel. The Project is intended to operate as a base-load facility and is proposing to be available to operate up to 8,760 hours per year, incorporating a range of load conditions. The Project seeks the flexibility to operate with frequent starts in order to meet energy demand (anticipating potential operation for 16 hours per day, five days per week).

OCE proposes to construct the Project within an approximately 30-acre parcel of land located entirely within Lucas County in the City of Oregon, Ohio. The site is industrially zoned within the Cedar Point Development Park, a designated Foreign Trade Zone. Its setting is within a mixed industrial, commercial and agricultural area that is located east of North Lallendorf Road, west of farmland located at 4632 Cedar Point Road, north of the Norfolk Southern Railroad, and south of the John Gradel and Sons' Farms. Access to the site is via North Lallendorf Road. The western edge of the site is transected by Driftmeyer Ditch, while Johlin Ditch transects the eastern portion of the site.

Air emissions from the proposed Project primarily consist of products of combustion from the combustion turbines, HRSG duct burners, and ancillary equipment. Pollutants that are regulated under federal and Ohio programs, such as Prevention of Significant

Deterioration (PSD), include: carbon monoxide (CO); nitrogen dioxide (NO<sub>2</sub>); sulfur dioxide (SO<sub>2</sub>); total suspended particulates (TSP); particulate matter with a diameter equal to or less than 10 microns (PM<sub>10</sub>); particulate matter with a diameter equal to or less than 2.5 microns (PM<sub>2.5</sub>); volatile organic compounds (VOC); greenhouse gases (GHGs); lead (Pb); sulfuric acid mist (H<sub>2</sub>SO<sub>4</sub>); and hazardous air pollutants (HAPs). Potential emissions from the proposed Project on a tons per year (tpy) basis are presented in Table 1-1.

**Table 1-1: Summary of Proposed Potential Emissions and Applicable Regulatory Thresholds**

<b>Pollutant</b>	<b>Annual Emissions (tpy)</b>	<b>PSD Major Source Threshold (tpy)</b>	<b>PSD Significant Emission Rate (tpy)</b>	<b>PSD Applies? (Yes/No)</b>
NO <sub>x</sub>	193.36	100	40 <sup>a</sup>	Yes
VOC	58.77	100	40	Yes
CO	154.53	100	100	Yes
PM <sub>10</sub>	128.22	100	15	Yes
PM <sub>2.5</sub>	123.72	100	10	Yes
SO <sub>2</sub>	36.95	100	40	No
H <sub>2</sub> SO <sub>4</sub>	13.15	100	7	Yes
GHGs <sup>b</sup>	2,884,330	100,000	75,000	Yes
Pb	0.00008	10	0.6	No
a. PSD significant emission rate for NO <sub>2</sub> . b. GHGs are expressed as carbon dioxide equivalents (CO <sub>2</sub> e).				

**1.2 Regulatory Overview**

The Project incorporates emissions control technology that reflect Best Available Control Technology (BACT) and Best Available Technology (BAT), as applicable. In addition to the use of clean-burning natural gas, emissions of nitrogen oxides (NO<sub>x</sub>) will be controlled with selective catalytic reduction (SCR). Emissions of CO and VOC will be controlled with oxidation catalyst systems.

## **1.3 Application Overview**

### 1.3.1 Application Organization

This permit application is divided into five sections. Section 2 provides a detailed description of the proposed Project, including a facility description and estimated emissions. Section 3 provides a review of regulations applicable to the proposed Project. Section 4 provides the BACT/BAT control technology evaluations. Section 5 provides a list of references. The air quality modeling analysis for the Project is provided in a separate report.

A printout of the information submitted to the Toledo Environmental Services (TES) via the Ohio Environmental Protection Agency (Ohio EPA) Air Services eBusiness Center is included as Appendix A. Emission calculation spreadsheets providing supporting calculations for the application are provided in Appendix B. Appendix C presents summary tables supporting the BACT/BAT analysis.

### 1.3.2 Application Contacts

To facilitate agency review of this application, individuals familiar with the Project and this application are identified below.

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## **2. PROJECT DESCRIPTION**

### **2.1 Overview**

OCE proposes development of a nominal 799-MW electric generating facility (ISO conditions) at an industrially zoned site in the City of Oregon, Ohio. Figure 1 presents the proposed Project location on a topographic map. The facility will include the following major and ancillary equipment:

- Two CTGs;
- Two HRSGs with supplemental duct firing;
- One STG;
- One mechanical draft wet cooling tower;
- One 2,250-kilowatt (kW) emergency diesel generator;
- One natural gas-fired, 99-million British thermal units (MMBtu) steam production auxiliary boiler; and
- One 300-horsepower (hp) fire pump.

The Project will be fueled by clean-burning natural gas. A new natural gas lateral will be built and operated to connect with nearby natural gas transmission lines. Electrical interconnection will be to the 345-kilovolt (kV) FirstEnergy transmission line, located just north of the site. Steam condenser cooling will utilize a 16-cell mechanical draft wet cooling tower system with average consumptive water use of 3-4 million gallons per day. Raw water from the City of Oregon is proposed to meet process requirements. Discharge of wastewater is proposed to be to the Oregon sanitary sewer system for treatment at the City's wastewater treatment plant, located within one mile of the site.

### **2.2 Site Location**

The proposed site consists of an irregularly shaped parcel of land, totaling approximately 30 acres, located entirely within Lucas County in the City of Oregon, Ohio. The site consists of farmland with associated structures, including two single-family dwellings, a garage and a barn. The majority of the parcel is in active agricultural use. Site topography is relatively flat, at an elevation of approximately 588 feet above mean sea level. The Maumee River, which flows southwest to northeast to its confluence with Lake Erie, is situated approximately 2 miles northwest of the site.

The Project is located approximately 2 miles south of First Energy's existing Bay Shore coal-fired power plant on Lake Erie. British Petroleum's (BP's) expansive Toledo

Refinery is located less than 0.5 mile to the north, beyond the electric transmission corridor. Land uses east and southeast of the site are primarily agricultural, with some residences along the roads which divide the land in a grid-like fashion. A cluster of commercial/industrial uses border the site to the south-southwest, including several manufacturing and warehouse facilities. More densely developed residential areas are located about a mile southwest of the site.

Pearson Park is located approximately 1.5 miles south of the site, Collins Park is 1.5 miles west-southwest of the site, and Maumee Bay State Park is approximately 2 miles east-northeast of the site. Further east-northeast, along the shore of Lake Erie are Mallard Club Wilderness Area and Cedar Point National Wildlife Refuge.

### **2.3 Combined Cycle Combustion Turbines**

The Project's major equipment will include two CTGs, two supplementary-fired HRSGs, one STG, and a 16-cell mechanical draft wet cooling tower. This equipment is described in more detail below. The information provided in this application is based upon Siemens SGT-8000H turbines.

#### **2.3.1 Combustion Turbine Generators**

Thermal energy will be produced in the two CTGs through the combustion of natural gas as the sole fuel. Each CTG is capable of running independently of the other. The thermal energy is converted to mechanical energy in the CTG turbine that drives the CTG compressor and electric generator. The maximum heat input rate of each CTG is 2,932 MMBtu per hour (MMBtu/hr) (higher heating value [HHV]) and occurs at 100 percent load, 0 degrees Fahrenheit [°F]), relative humidity of 188 percent and an atmospheric pressure of 14.387 pounds per square inch absolute (psia).

#### **2.3.2 Heat Recovery Steam Generators and Duct Burners**

In combined cycle configuration, each CTG will exhaust through a dedicated HRSG to generate steam from the waste heat energy in the exhaust gas. Each HRSG will be equipped with supplemental fuel firing via a duct burner. The duct burners provide additional thermal energy to the HRSG, to provide more steam to the STG during periods of high demand. The duct burners will be natural gas-fired and each will have a maximum input capacity of 300 MMBtu/hr (HHV), although the duct burners will not always operate at maximum capacity. The use of the duct burners will vary based upon different temperature and operating conditions.

### 2.3.3 Steam Turbine Generator

Steam generated in the HRSGs will be expanded through a multi-stage, reheat-capable, condensing steam turbine. Rotational power in the steam turbine is converted to electric power via the steam turbine generator.

### 2.3.4 Cooling Tower

The steam condenser cooling system will utilize a 16-cell mechanical draft wet cooling tower. In the cooling tower, circulating water is distributed among multiple cells of the cooling tower, where it cascades downward through each cell and then collects in the cooling tower basin. The mechanical draft cooling tower employs electric motor-driven fans to move air through each cooling tower cell. The cascading circulating water is partially evaporated and the evaporated water is dispersed to the atmosphere as part of the moist air leaving each cooling tower cell. The circulating water is cooled primarily through its partial evaporation. The cooling tower will be equipped with a high-efficiency drift eliminator with a drift rate of 0.0005 percent.

## 2.4 Air Pollution Control Equipment

The emission control technologies proposed for the combustion turbine and duct burner exhaust gases include dry low-NO<sub>x</sub> (DLN) combustors, an SCR to control NO<sub>x</sub> emissions, and an oxidation catalyst to control CO and VOC emissions. The DLN is integrated within the combustion turbines and the SCR and oxidation catalyst are located within each HRSG. The DLN combustion controls NO<sub>x</sub> formation by pre-mixing fuel and air immediately prior to combustion. Pre-mixing inhibits NO<sub>x</sub> formation by minimizing both the flame temperature and the concentration of oxygen at the flame front. Emissions of SO<sub>2</sub>, PM<sub>10</sub>/PM<sub>2.5</sub>, and H<sub>2</sub>SO<sub>4</sub> will be minimized through the exclusive use of pipeline quality natural gas in the combustion turbines. The SCR and oxidation catalyst are discussed further in the sections below.

### 2.4.1 Selective Catalytic Reduction

SCR, a post-combustion chemical process, will be installed in the HRSGs to treat exhaust gases downstream of the CTGs. The SCR process will use 19 percent aqueous ammonia (NH<sub>3</sub>) as a reagent. Aqueous NH<sub>3</sub> will be injected into the flue gas stream, upstream of the SCR catalyst, where it will mix with NO<sub>x</sub>. The catalyst bed will be located in a temperature zone of the HRSG where the catalyst is most effective. The mixture will pass over the catalyst and the NO<sub>x</sub> will be reduced to nitrogen gas (N<sub>2</sub>) and water (H<sub>2</sub>O). The SCR system will reduce NO<sub>x</sub> concentrations to 2.0 parts per million by volume (ppm<sub>v</sub>) at 15 percent oxygen (O<sub>2</sub>) with or without duct firing at all load conditions and ambient

temperatures. A small amount of NH<sub>3</sub> will remain un-reacted through the catalyst, which is called “ammonia slip.” The NH<sub>3</sub> slip will be limited to 5.0 ppm<sub>v</sub> at all load conditions and ambient temperatures.

#### 2.4.2 Oxidation Catalyst

An oxidation catalyst system will be located within each HRSG to control emissions of CO and VOC. Exhaust gases from the turbines will be passed over a catalyst bed where excess air will oxidize the CO and VOC to form carbon dioxide (CO<sub>2</sub>) and H<sub>2</sub>O. The oxidation catalyst system will reduce CO concentrations to 2.0 ppm<sub>v</sub> (at 15% O<sub>2</sub>) in the exhaust gas under all load conditions and ambient temperatures. The oxidation catalyst will also reduce VOC emissions, to between 1.0 parts per million (ppm) to 1.9 ppm, depending on the amount of supplemental duct firing.

### **2.5 Ancillary Equipment**

The proposed Project will utilize a variety of ancillary equipment to support the facility including an auxiliary boiler, emergency generator, emergency fire pump, and storage tanks. This equipment is discussed further in the sections below.

#### 2.5.1 Auxiliary Boiler

The auxiliary boiler will be natural gas-fired and operate as needed to keep the HRSG warm during periods of turbine shutdown and provide sealing steam to the steam turbine during warm and hot starts. The auxiliary boiler will have a maximum input capacity of 99 MMBtu/hr, and will be limited to 2,000 hours of operation per year.

#### 2.5.2 Emergency Diesel Generator

The Project will have a 2,250 kW (3016.6 hp) emergency diesel generator to provide on-site emergency power capabilities independent of the utility grid. The emergency generator will fire ULSD fuel and will typically only operate for testing and to maintain operational readiness in the event of an emergency. Routine operation of the generator will be limited to a maximum of 500 operating hours per year.

#### 2.5.3 Emergency Diesel Fire Pump

The Project will have a 300-hp (223.6 kW) emergency fire pump to provide on-site fire fighting capabilities independent of the utility grid. The emergency fire pump will fire ULSD fuel and will typically only operate for testing and to maintain operational readiness in the

event of an emergency. Similar to the emergency generator, it will be limited to a maximum of 500 operating hours per year.

#### 2.5.4 Aqueous Ammonia Storage Tank

The proposed facility will have tanks for storage of 19 percent aqueous NH<sub>3</sub> for use in the SCR system. The tanks will be equipped with secondary containment sized to accommodate the entire volume of one tank and sufficient freeboard for precipitation. The tanks will be located outdoors within an impermeable containment area, surrounded by a wall. The floor of the containment area will be covered with plastic balls designed to float on the liquid surface in the event of a spill, thereby reducing the exposed surface area, and minimizing potential emissions.

## 2.6 Emissions Estimates

The combined cycle units will typically operate at or near full load capacity to respond to electricity demands as needed. However, depending upon the demand, each unit can operate at loads ranging from approximately 50 percent turbine load without supplemental duct firing to 100 percent load with supplemental duct firing (full capacity). Combustion turbine performance and emissions are affected by ambient conditions: humidity, pressure, and temperature; with turbine fuel consumption, power output and emissions increasing at lower ambient temperatures. Supplemental duct firing performance and emissions are affected indirectly by ambient conditions, with fuel consumption, heat output and emissions increasing at higher ambient temperatures. As the combustion turbine decreases heat output to the HRSG at higher ambient temperatures, the supplemental duct firing increases to make up the loss of heat output to maintain maximum steam production to the steam turbine.

Table 2-1 presents a summary of the proposed limits for pollutants emitted from combined cycle combustion turbines at steady state full load operation. The limits incorporate BACT/BAT as applicable (Section 4.0). Because of the different emission rates and exhaust characteristics, a range of operation modes, including partial load operation, will be evaluated in the OCE Dispersion Modeling Report.

Combined cycle start-up and shutdown scenarios are also addressed in this air permit application. Emissions during start-up may, for some pollutants, result in an increase in short-term (pounds per hour [lb/hr]) emission rates. There is a minimum turbine downtime (preceding a start-up) and maximum duration associated with each type of start-up. Potential annual emissions estimates for the proposed Project include emissions from start-up and shutdown.

**Table 2-1: Summary of Proposed Emission Limits for Combined Cycle Combustion Turbines (Steady State Full Load Operation)<sup>a</sup>**

<b>Pollutant</b>	<b>Case</b>	<b>Emission Rate (lb/MMBtu)<sup>b</sup></b>	<b>Emission Rate (ppm<sub>v</sub>)<sup>c</sup></b>
NO <sub>x</sub>	CT Only	0.0077	2.0
	CT with DB <sup>d</sup>	0.0077	2.0
VOC	CT Only	0.0013	1.0
	CT with DB	0.0026	1.9
CO	CT Only	0.0047	2.0
	CT with DB	0.0047	2.0
PM <sub>10</sub> /PM <sub>2.5</sub>	CT Only	0.0047	n/a
	CT with DB	0.0055	n/a
SO <sub>2</sub>	CT Only	0.0015	n/a
	CT with DB	0.0015	n/a
H <sub>2</sub> SO <sub>4</sub>	CT Only	0.0006	n/a
	CT with DB	0.0007	n/a
GHG	CT Only	833 <sup>e</sup>	n/a

a. Facility may exceed these limits during defined periods of start-up and shutdown.  
b. Emission rates are based on HHV of natural gas.  
c. Concentrations are ppm<sub>v</sub> at 15% O<sub>2</sub>.  
d. Duct burner.  
e. BACT/BAT for GHGs is expressed as lb CO<sub>2</sub> per megawatt hour (MW-hr) gross output on an annual basis.

The following sections provide estimated emissions from the combined cycle combustion turbines and from the facility's ancillary equipment. Emissions of air contaminants from this equipment have been estimated based upon vendor emission guarantees, United States Environmental Protection Agency (USEPA) emission factors, mass balance calculations and engineering estimates.

#### 2.6.1 Combined Cycle Combustion Turbine Emissions – Steady State Operation

Table 2-2 presents short term (lb/hr) emissions estimates from each combined cycle turbine under ISO conditions at 100 percent load conditions including duct burner operations. These emissions were developed from vendor estimates. The PM<sub>10</sub>/PM<sub>2.5</sub> emissions estimates include filterable and condensable particulate matter and an allowance for sulfate and/or ammonia salt formation due to the reaction of sulfur trioxide (SO<sub>3</sub>) with H<sub>2</sub>O and/or excess NH<sub>3</sub> in the SCR and oxidation catalyst systems. Emission rates for all base load operating conditions are provided in Appendix B.

Potential non-criteria pollutant emissions from the operation of the combustion turbines and ancillary equipment were estimated using AP-42 emission factors (USEPA, 2000) with the following exceptions. Emissions of formaldehyde from the combustion turbine

generators were estimated using an emission factor from a California Air Resource Board (CARB) database. The California Air Toxics Emission Factor (CATEF) database contains air toxics emission factors calculated from source test data collected for California's Air Toxics Hot Spots Program (CARB, 1996). Emissions of hexane from the duct burner and the auxiliary boiler were estimated using an emission factor from the Ventura County Air Pollution Control District (VCAPCD, 2001). In both cases, the AP-42 emission factors had a very low emission factor rating and were not considered representative of the proposed equipment. The CARB and VCAPCD emission factors are considered more appropriate for the advanced technology of the combustion turbines. Potential emissions of HAPs and Ohio EPA air toxics from operation of the combustion turbines and duct burners are also provided in Appendix B.

**Table 2-2: Summary of Short Term Emission Rates for a Single Combustion Turbine<sup>a</sup>**

Pollutant	100% Load with Duct Burning (lb/hr)	100% Load without Duct Burning (lb/hr)
NO <sub>x</sub>	21.0	20.0
VOC	5.2	3.4
CO	13.0	12.0
PM <sub>10</sub> /PM <sub>2.5</sub>	14.0	11.8
SO <sub>2</sub>	4.2	3.9
H <sub>2</sub> SO <sub>4</sub>	1.5	1.4
NH <sub>3</sub>	19.0	18.0
CO <sub>2</sub>	327,380	301,814
CO <sub>2e</sub> <sup>b</sup>	327,819	302,110
<p>a. Emissions presented in table are for ISO conditions. These may not represent worst-case conditions for air quality dispersion modeling. Appropriate worst-case conditions are used for analyses in the Dispersion Modeling Report.</p> <p>b. CO<sub>2e</sub> incorporate emissions of methane and nitrous oxide.</p>		

### 2.6.2 Combined Cycle Combustion Turbine Emissions – Start-up and Shutdown Operations

Potential emissions associated with start-up of the combustion turbines were developed using vendor supplied information. Table 2-3 presents the emissions and downtimes

(minimum number of hours the turbines would be off before a re-start) associated with startup events for the combined cycle turbines. In most cases emissions from these events are “self-correcting” on an annual basis. In other words, the average hourly emissions for each start-up event, incorporating the minimum downtime, are less than the corresponding steady state emission rate. Table 2-3 identifies the pollutants that are self-correcting for each event. Note that the shutdown emissions (not included in the tables) will be significantly lower than the start-up emissions and are also self-correcting on an annual basis.

**Table 2-3: Emissions and Downtimes Associated with Start-up Events**

	<b>Cold Start-up</b>	<b>Hot Start-up</b>	<b>Warm Start-up</b>
<b>Number of Events per Year</b>	50	0 <sup>a</sup>	250 <sup>a</sup>
<b>Minimum Downtime Preceding Event (hours)<sup>b</sup></b>	64	0	16
<b>Duration of Event (min)<sup>c</sup></b>	180	82	98
	<b>Emissions Per Event (lb)<sup>d</sup></b>		
<b>PM<sub>10</sub>/PM<sub>2.5</sub></b>	56	22	26
<b>NO<sub>x</sub></b>	188	105	129
<b>CO</b>	546	289	351
<b>VOC</b>	168	114	138
	<b>Self-Correcting</b>		
<b>PM<sub>10</sub>/PM<sub>2.5</sub></b>	Yes	No	Yes
<b>NO<sub>x</sub></b>	Yes	No	Yes
<b>CO</b>	Yes	No	No
<b>VOC</b>	Yes	No	No
a. Total hot start and warm start emissions are 250 starts. b. Cold start applies to units that are down more than 60 hours. Warm start applies to units that are down between 8 and 60 hours. Hot start applies to units that are down less than 8 hours. c. minutes d. pounds			

Proposed annual emission estimates for the facility incorporate those conditions that are not considered self-correcting. Table 2-4 presents the average hourly emission rates associated with each start-up/shutdown event. The average emission rates for dispersion modeling for compliance with short-term air quality standards are shown along with

emission rates to be used in calculating annual emissions. The latter emission rates incorporate the minimum downtime that would precede each event. These average hourly rates were used to determine if the event was considered self-correcting compared to steady state emission rates. Emissions of SO<sub>2</sub> will always be self-correcting because SO<sub>2</sub> emissions are dependent upon the amount of fuel burned, and steady state is always worst-case.

**Table 2-4: Average Hourly Emissions for Start-up and Shutdown Events**

Pollutant	Cold Start-up (lb/hr)		Hot Start-up (lb/hr)		Warm Start-up (lb/hr)	
	Short-term	Long-term <sup>b</sup>	Short-term	Long-term <sup>b</sup>	Short-term	Long-term <sup>b</sup>
PM <sub>10</sub> /PM <sub>2.5</sub>	18.67	0.84	16.10	16.10	15.92	1.47
NO <sub>x</sub>	62.67 <sup>a</sup>	2.81	76.83 <sup>a</sup>	76.83	78.98 <sup>a</sup>	7.32
CO	182.00 <sup>a</sup>	8.15	211.46 <sup>a</sup>	211.46	214.90 <sup>a</sup>	19.91
VOC	56.00	2.51	83.41	83.41	84.49	7.83
<p>a. Short-term emission rate during start-up was used in modeling analysis demonstrating compliance with ambient air quality standards.</p> <p>b. Long-term emission rate during start-up was used for determining annual Potential to Emit (PTE). This rate incorporates the minimum downtime.</p>						

### 2.6.3 Ancillary Equipment

This section presents estimated criteria pollutant emissions from the ancillary equipment at the facility. The proposed ancillary equipment includes one auxiliary boiler, one emergency generator, one emergency fire pump, and the cooling tower. The following assumptions were used in evaluating emissions from this equipment:

- The natural gas-fired auxiliary boiler will have a maximum input capacity of 99.0 MMBtu/hr and will be limited to 2,000 hours of operation per year.
- The diesel-fired emergency fire pump with a rated capacity of 300 hp (or 223.8 kW) will have a maximum heat input of approximately 2.1 MMBtu/hr (15.3 gallons per hour) and will be limited to 500 hours of operation per year.
- The diesel-fired emergency generator with a rated capacity of 2,250 kW (or 3,016.6 hp) will have a maximum heat input of approximately 15.8 MMBtu/hr (115 gallons per hour) and will be limited to 500 hours of operation per year.

- The cooling tower is expected to have a recirculating flow rate of 322,000 gallons per minute and 2,031 milligrams per liter (mg/l) of total dissolved solids (TDS).

Criteria pollutant emissions from the ancillary equipment were estimated based on vendor-supplied information except for SO<sub>2</sub> emissions from the emergency equipment, which are based on a mass balance. PM<sub>10</sub>/PM<sub>2.5</sub> emissions from the cooling tower are estimated using a particulate distribution developed by the Electric Power Research Institute (EPRI) and presented in an Air and Waste Management Association (AWMA) publication (AWMA, 2001) with design values and conservatively assuming five cycles of concentration. The cooling tower will utilize a high efficiency (0.0005%) drift eliminator.

Tables 2-5 and 2-6 summarize estimated short-term (lb/hr) and annual emissions of criteria pollutants from the ancillary equipment, respectively. Supporting calculations are located in Appendix B.

HAP emissions will be less than major source thresholds, which are less than 10 tpy for any individual HAP and 25 tpy for total HAPs.

#### 2.6.4 Potential Annual Emissions

Potential annual emissions from the proposed facility were estimated using the following worst-case assumptions:

- Full-load operation of the combustion turbines (at 59°F ambient temperature);
- Duct burning for 8,760 hours per year during steady state operation of each combustion turbine;
- Incorporation of start-up/shutdown events as described in Section 2.6.2; for start-up/shutdown events that are not self-correcting, a total of 300 combined start-up events per year per year were assumed (see Table 2-3); and
- Incorporation of emissions from ancillary equipment as discussed in Section 2.6.3 (see Table 2-6).

Potential annual emissions for the proposed Project are summarized in Table 2-7.

**Table 2-5: Short-Term Potential Emissions from Ancillary Equipment**

Pollutant	Auxiliary Boiler (lb/hr)	Emergency Fire Pump (lb/hr)	Emergency Generator (lb/hr)	Cooling Tower (lb/hr)
PM <sub>10</sub>	0.79	0.1	0.99	1.03
PM <sub>2.5</sub>	0.79	0.1	0.99	0.0034
SO <sub>2</sub>	0.14	0.003	0.03	--
H <sub>2</sub> SO <sub>4</sub>	0.011	0.000065	0.00016	--
NO <sub>x</sub>	1.98	1.7	27.8	--
CO	5.45	1.7	17.35	--
VOC	0.59	0.25	3.93	--
Pb	0.00	0.00003	0.0003	--
CO <sub>2e</sub>	11,671	347.3	3,512	--

**Table 2-6: Potential Annual Emissions from Ancillary Equipment**

Pollutant	Auxiliary Boiler (tpy)	Emergency Fire Pump (tpy)	Emergency Generator (tpy)	Cooling Tower (tpy)	Total (tpy)
PM <sub>10</sub>	0.79	0.025	0.25	4.5	5.57
PM <sub>2.5</sub>	0.79	0.025	0.25	0.015	1.08
SO <sub>2</sub>	0.14	0.0008	0.008	--	0.15
H <sub>2</sub> SO <sub>4</sub>	0.011	0.000016	0.00016	--	0.011
NO <sub>x</sub>	1.98	0.43	6.95	--	9.36
CO	5.45	0.43	4.34	--	10.22
VOC	0.59	0.06	0.98	--	1.63
Pb	0.00	0.000007	0.00007	--	0.000077
CO <sub>2e</sub>	11,671	87	878	--	12,636

**Table 2-7: Summary of Annual Potential Emissions**

<b>Pollutant</b>	<b>Combustion Turbines (tpy)</b>	<b>Ancillary Equipment (tpy)</b>	<b>Cooling Tower (tpy)</b>	<b>Total (tpy)</b>
PM <sub>10</sub>	122.64	1.07	4.5	128.2
PM <sub>2.5</sub>	122.64	1.07	0.015	123.7
SO <sub>2</sub>	36.79	0.15	0.0	36.9
NO <sub>x</sub>	183.96	9.36	0.0	193.3
CO	144.32	10.22	0.0	154.5
VOC	57.13	1.63	0.0	58.8
H <sub>2</sub> SO <sub>4</sub>	13.14	0.011	0.0	13.15
NH <sub>3</sub>	166.44	0.0	0.0	166.4
Pb	0.0	0.000077	0.0	0.00008
CO <sub>2</sub> e	2,871,694	12,636	0.0	2,884,330

### **3. REGULATORY APPLICABILITY EVALUATION**

OCE is requesting approval to construct a nominal 799-MW (ISO conditions) combined cycle electric generating facility in the City of Oregon, Lucas County, Ohio. The Project is considered a new major stationary combustion source under PSD regulations because the potential annual emissions from the facility exceed major source thresholds as illustrated in Table 1-1.

This section contains an analysis of the applicability of federal and state air quality regulations to the proposed Project. The specific regulations and programs that are included in this review include:

- PSD New Source Review;
- Federal New Source Performance Standards (NSPS);
- Federal National Emission Standards for Hazardous Air Pollutants (NESHAP);
- Federal Acid Rain Program; and
- Other Ohio EPA requirements.

#### **3.1 PSD New Source Review**

Combined cycle power plants with potential emissions greater than 100 tpy of one or more criteria pollutants are considered new major stationary sources under the PSD program. As shown in Table 1-1, the potential emissions of at least one regulated criteria pollutant will exceed this threshold. As such, the proposed facility is subject to PSD New Source Review. Under the PSD regulations, once a major source threshold is triggered, PSD review must be completed for all pollutants whose potential emissions exceed their respective Significant Emission Rate (SER).

On April 2, 2007, the U.S. Supreme Court found that GHGs, including CO<sub>2</sub>, are air pollutants covered by the Clean Air Act (CAA). On May 13, 2010, the USEPA issued a final rule (called the "Tailoring Rule") that establishes an approach to GHG emissions from stationary sources under the CAA. This final rule "tailors" the requirements of the CAA permitting program to limit which facilities will be required to obtain PSD permits. The CAA permitting program emissions thresholds for criteria pollutants are 100 tpy or 250 tpy, depending on the source category. While these thresholds are appropriate for criteria pollutants, they are not feasible for GHG emissions as they are emitted in much greater quantities. Under the rule, new construction projects that exceed 100,000 tpy of GHG emissions are subject to PSD review, and the SER for GHGs is 75,000 tpy.

As presented in Table 1-1, the Project has triggered major source thresholds for GHGs. In addition, PSD review is required for NO<sub>x</sub>, CO, VOC, H<sub>2</sub>SO<sub>4</sub> and PM<sub>10</sub>/PM<sub>2.5</sub> emissions.

PSD review requirements include application of BACT, an ambient air quality modeling analysis demonstrating compliance with National Ambient Air Quality Standards (NAAQS) and PSD increments, and additional impacts analyses. Ohio EPA has been delegated PSD review authority by the USEPA. For an air contaminant subject to BACT, compliance with BACT requirements also represents Ohio EPA BAT.

#### 3.1.1 Best Available Control Technology

Pollutants subject to PSD review are required to apply BACT for control of emissions of PSD pollutants. BACT is defined as an emission limitation based on the maximum degree of reduction, on a case-by-case basis, taking into account energy, environmental and economic considerations. In establishing the final BACT limit, agencies may consider any new information, including recent permit decisions, subsequent to submittal of a complete application. The BACT analyses for NO<sub>x</sub>, CO, VOC, H<sub>2</sub>SO<sub>4</sub>, PM<sub>10</sub>/PM<sub>2.5</sub> and GHG are presented in Section 4.0.

#### 3.1.2 Air Quality Impact Analysis

An ambient air quality analysis must be performed to demonstrate compliance with NAAQS and PSD increments. Proposed new sources subject to PSD review may not cause or significantly contribute to a violation of the NAAQS. As part of this demonstration, the USEPA has established Significant Impact Levels (SILs) for all of the criteria pollutants. SILs represent concentrations of pollutants that are considered to be insignificant with respect to demonstration of NAAQS compliance. Proposed new sources whose air quality impacts exceed the SILs must complete a cumulative analysis taking into consideration existing background air quality levels and contributions from other sources.

The air quality impact analysis for the Project, which demonstrates that all impacts are below SILs and comply with all applicable NAAQS and PSD increments, is presented in the OCE Dispersion Modeling Report, Volume 2.

#### 3.1.3 PSD Class I Area Impact Analysis

PSD regulations require that proposed major sources within 100 kilometers (km) of a PSD Class I area perform an assessment of potential impacts in the PSD Class I area. PSD Class I areas are specifically designated areas of special national or regional value from a natural, scenic, recreational or historic perspective. These areas are administered by the

National Park Service, United States Fish and Wildlife Service, or the United States Forest Service. These Federal Land Managers (FLMs) are responsible for evaluating proposed projects' air quality impacts in the Class I areas and may make recommendations to the permitting agency to approve or deny permit applications.

PSD Class I area impact analyses may consist of:

- An air quality impact analysis;
- A visibility impairment analysis; and
- An analysis of impacts on other air quality related values (AQRVs) such as impacts to flora and fauna, water, and cultural resources.

There are no PSD Class I areas within 100 km of the proposed Project site. The nearest PSD Class I areas are the Otter Creek and Dolly Sods Wilderness Areas in West Virginia, and the Mammoth Cave National Park in Kentucky. These PSD Class I areas are located over 250 miles (400 km) from the Project site. Ohio EPA recommends that a screening formula from *The Federal Land Managers AQRV Workgroup (FLAG) Phase I Report – Revised* (FLAG, 2010) be used to determine if a Class I Area is close enough to warrant analysis. A screening analysis using this methodology, which is presented in the OCE Dispersion Modeling Report, Volume 2, demonstrates that a Class I analysis is not required for this Project.

#### 3.1.4 Additional Impact Analyses

Additional impact analyses are also required as part of PSD review and Ohio EPA regulations. These additional analyses include an assessment of impacts on community growth resulting from the Project, an assessment of visibility impairment and an assessment of impacts to soils and vegetation. These impact analyses are presented in the OCE Dispersion Modeling Report.

Federal actions, such as the issuance of PSD permits (in this case, delegated to the state), require review and consideration of the potential implications of a proposed project to endangered or threatened species and their habitats, as well as cultural resources. OCE has consulted with applicable agencies to determine whether such resources will require specific consideration, and records of these communications are provided in the OCE Dispersion Modeling Report.

### **3.2 New Source Performance Standards**

NSPS are technology-based standards applicable to new and modified stationary sources. NSPS have been established for approximately 70 source categories. Based upon a review of these standards, several subparts are applicable to the proposed Project. The Project's compliance with each of these standards is presented in the sections below.

#### 3.2.1 40 CFR 60 – Subpart A – General Provisions

Any source subject to an applicable standard under 40 Code of Federal Regulations (CFR) 60 is also subject to the general provisions under Subpart A. Because the Project is subject to other Subparts of the regulation, the requirements of Subpart A will also apply. OCE will comply with the applicable notifications, performance testing, recordkeeping and reporting outlined in Subpart A.

#### 3.2.2 40 CFR 60 – Subpart KKKK – Stationary Combustion Turbines

Subpart KKKK places emission limits on NO<sub>x</sub> and SO<sub>2</sub> from new combustion turbines. The proposed combustion turbines and duct burners will be subject to this standard. For new combustion turbines firing natural gas with a rated heat input greater than 850 MMBtu/hr, NO<sub>x</sub> emissions are limited to:

- 15 ppm<sub>v</sub> at 15 percent O<sub>2</sub>; or
- 54 nanograms per Joule (ng/J) of useful output (0.43 pounds per megawatt-hour [lb/MW-hr]).

Additionally, SO<sub>2</sub> emissions must meet one of the following:

- Emissions limited to 110 ng/J (0.90 lb/MW-hr) gross output; or
- Emissions limited to 26 ng/J (0.060 pounds per million British thermal units [lb/MMBtu]).

As described in Section 2.0, the proposed Project will use an SCR system to reduce NO<sub>x</sub> emissions to 2.0 ppm<sub>v</sub> at 15 percent O<sub>2</sub> and pipeline natural gas to limit SO<sub>2</sub> emissions to 0.0015 lb/MMBtu. As such, the Project will meet the emission limits under Subpart KKKK.

Additionally, the provisions of this Subpart require continuous monitoring of water-to-fuel ratio, but allow for the use of either a 40 CFR Part 60 or Part 75 certified NO<sub>x</sub> continuous emissions monitoring system (CEMS) in lieu of this requirement. OCE is proposing to use a 40 CFR Part 75 certified NO<sub>x</sub> CEMS, which will satisfy this requirement.

### 3.2.3 40 CFR 60 – Subpart Dc – Small Industrial-Commercial-Institutional Steam Generating Units

Subpart Dc is applicable to steam generating units with a maximum input capacity greater than 10 MMBtu/hr and less than 100 MMBtu/hr. The proposed auxiliary boiler has a maximum input capacity of 99 MMBtu/hr, and is, therefore, subject to the standard. For units combusting natural gas, the standard requires initial notifications at the start of construction and at initial start-up. In addition, records must be maintained regarding the amount of fuel burned on a monthly basis; however, since natural gas is the only fuel burned in the proposed boiler, there are no specific reporting requirements to the USEPA under Subpart Dc.

### 3.2.4 40 CFR 60 – Subpart IIII – Stationary Compression Ignition Internal Combustion Engines

Subpart IIII is applicable to owners and operators of stationary compression ignition (CI) internal combustion engines that commence operation after July 11, 2005. Relevant to the proposed Project, this rule applies to the emergency generator and emergency fire pump.

For model year 2009 and later fire pump engines with a displacement less than 30 liters per cylinder and an energy rating between 300 and 600 hp, Subpart IIII provides the following emission limits:

- 4.0 grams per kilowatt-hour (g/kW-hr) (3.0 grams per horsepower-hour [g/hp-hr]) of VOC + NO<sub>x</sub>
- 3.5 g/kW-hr (2.6 g/hp-hr) of CO
- 0.2 g/kW-hr (0.15 g/hp-hr) of particulate matter

The Project will install a fire pump meeting these emission standards.

To comply with Subpart IIII, the emergency generator must meet the emission standards for new non-road CI engines (Tier 2 or 3). Engines with a model year 2006 or later with a power rating of 560 kW (750 hp) or greater must meet the following limits:

- 6.4 g/kW-hr (4.8 g/hp-hr) of VOC + NO<sub>x</sub>
- 3.5 g/kW-hr (2.6 g/hp-hr) of CO
- 0.2 g/kW-hr (0.15 g/hp-hr) of particulate matter

The emergency generator associated with the proposed Project will be certified to meet non-road emission standards.

### **3.3 State of Ohio Best Available Technology**

"Best available technology," or BAT, means any combination of work practices, raw material specifications, throughput limitations, and source design characteristics. BAT can include an evaluation of the annualized cost per ton of air pollutant removed, and air pollution control devices that have been previously demonstrated to the director of environmental protection to operate satisfactorily in this state or other states with similar air quality on substantially similar air pollution sources (Ohio Administrative Code [OAC] Rule 3745-31-01 [T]).

Ohio EPA has published several memoranda (inter-office communications) and engineering guides that explain the implementation of the BAT program. Under the BAT program, sources with pollutants meeting certain other standards are also presumed to meet BAT. For pollutants subject to BACT requirements, BACT is presumed to meet BAT requirements. For pollutants subject to NSPS, compliance with NSPS represents BAT. If there is a Reasonably Available Control Technology (RACT) minimum limit anywhere in the state, BAT is determined to be, at a minimum, equivalent to the most stringent pollutant emission rate limit no matter where in the state the RACT limit applies. Where the above prescriptive approach is not applicable to a criteria pollutant, a case-by-case BAT determination may be conducted using a "top down" approach, similar to a BACT analysis. BAT for criteria pollutants is described in Section 4.0.

For HAPs subject to Maximum Available Control Technology (MACT), compliance with MACT represents BAT. In addition, BAT is applied to any air toxic (non-criteria pollutant) for which there is no federal or state standard using Ohio EPA's Air Toxics policy. Ohio EPA's Air Toxic policy is contained in the guidance document titled "Option A – Review of New Sources of Air Toxics." The guidelines provide the following approach:

- Determine if a threshold limit value (TLV) exists for the specific compound, which is emitted from the source.
- Divide the TLV by ten to adjust the standard from the working population to the general public (TLV/10).
- Adjust the standard to account for the duration of the exposure (operating hours of source) of "X" hours per day and "Y" days per week from 8 hours per day and 5 days per week. This formula is used to obtain the Maximum Acceptable Ground-Level

Concentration (MAGLC) or Acceptable Incremental Impact:

$$\frac{TLV}{10} \times \frac{8}{X} \times \frac{5}{Y} = 4 \frac{TLV}{XY} = MAGLC$$

- Compare the one-hour average ambient pollutant concentrations, predicted by an appropriate air dispersion model, with the corresponding MAGLC for compliance with the air toxic's policy.

A comprehensive list of air toxics to which the policy applies is contained in Appendix B of OAC Rule 3745-114. For these air toxics, Ohio EPA requires only those emitted above 1 tpy to be subject to review. For the Project, the following air toxics will be subject to "Option A" review or require a BAT determination: ammonia; formaldehyde; toluene; xylene; and sulfuric acid.

### **3.4 Operating Permit**

OAC Rule 3745-77 specifies that a facility with an annual PTE equal to or exceeding any of the following thresholds is required to obtain an Operating Permit from Ohio EPA:

- CO – 100 tpy;
- PM<sub>10</sub> – 100 tpy;
- TSP – 100 tpy;
- SO<sub>2</sub> – 100 tpy;
- NO<sub>x</sub> – 100 tpy;
- VOC – 100 tpy;
- Pb – 10 tpy;
- Any other contaminant, except CO<sub>2</sub> – 100 tpy;
- Any single HAP – 10 tpy; and
- Combination of HAPs – 25 tpy.

Potential NO<sub>x</sub>, CO, VOC, PM<sub>10</sub>, and TSP emissions for the Project exceed the Title V Operating Permit applicability threshold, triggering the need to apply for the Operating Permit. The Project is also required to obtain an Operating Permit due to the combustion turbines being subject to NSPS Subpart KKKK.

An Operating Permit application is a comprehensive document that includes: PTE data for all sources across the facility; supporting information and calculations; control equipment data; a review of state and federal regulations; a description of proposed monitoring methods; fuel data; stack and vent information; a proposed compliance plan; proposed operating hours; and descriptions of normal source operation and start-up and shutdown conditions for each source at the facility along with emissions data for those operating modes. Permit applications are submitted using the Ohio EPA Air Services system.

Pursuant to OAC rule 3745-77-04, a timely and complete Title V operating permit is required to be submitted within 12 months after commencing operations. As per OAC rule 3745-77-08, the state shall take final action on the application within 18 months of receiving a complete application. The draft permit shall be issued no later than 45 days before the aforementioned deadline for final action on the permit.

### **3.5 National Emission Standards for Hazardous Air Pollutants (40 CFR Parts 61 and 63)**

There are no 40 CFR Part 61 standards applicable to the proposed facility operations. Current USEPA AP-42 emission factors, other applicable emission factors and vendor information were reviewed in determining if the proposed Project was subject to a standard under 40 CFR Part 63. Based on potential emission calculations, the potential emissions of a single HAP will not exceed the major source threshold of 10 tpy. In addition, potential emissions of combined HAPs will be less than the major source threshold of 25 tpy. Therefore, the major source NESHAP standards under 40 CFR Part 63 are not applicable to this Project.

The USEPA has also promulgated a variety of standards applicable to area sources, those sources that are not considered major sources of HAPs. USEPA recently promulgated an area source standard for industrial, commercial and institutional boilers. This standard does not have requirements for boilers that are exclusively natural gas-fired. As such, the auxiliary boiler associated with the proposed Project does not have any requirements under this standard.

The USEPA has also promulgated an area source NESHAP for Reciprocating Internal Combustion Engines (RICE) under 40 CFR 63 Subpart ZZZZ. Under this NESHAP, new emergency engines are required to meet the requirements under the applicable NSPS. As discussed in Section 3.2.4, the emergency engines associated with the Project will meet the NSPS requirements under 40 CFR 60 Subpart IIII.

### **3.6 Acid Rain Program**

Title IV of the Clean Air Act Amendments required USEPA to establish a program to reduce emissions of acid rain forming pollutants, called the Acid Rain Program. The overall goal of this program is to achieve significant environmental benefits through reduction in SO<sub>2</sub> and NO<sub>x</sub> emissions. To achieve this goal, the program employs both traditional and market-based approaches for controlling air pollution. Under the market-based aspect of the program, affected units are allocated SO<sub>2</sub> allowances by the USEPA, which may be used to offset emissions, or traded under the market allowance program. In addition, in order to ensure that facilities do not exceed their allowances, affected units are required to monitor and report their emissions using a CEMS system, as approved under 40 CFR Part 75.

The Project is subject to the Acid Rain Program based on the provisions of 40 CFR 72.6(a)(3) because the turbines are considered utility units under the program definition and they do not meet the exemptions listed under paragraph (b) of this Section. The Project will be required to submit an acid rain permit application at least 24 months prior to the date on which the affected unit commences operation. OCE will submit an acid rain permit application in compliance with these requirements prior to this deadline.

### **3.7 Cross-State Air Pollution Rule**

On March 10, 2005, USEPA issued the Clean Air Interstate Rule (CAIR) which requires reductions in emissions of NO<sub>x</sub> and SO<sub>2</sub> from large fossil fueled electric generating units using a cap-and-trade system. The rule provides both annual emissions budgets and an ozone season emission budget for each state. On July 11, 2008, the U.S. Court of Appeals for the D.C. Circuit (the Court) issued an opinion vacating and remanding these rules. However, on December 23, 2008, the Court granted rehearing only to the extent that it remanded the rules to USEPA without vacating them. The December 23, 2008 ruling leaves CAIR in place until the USEPA issues a new rule to replace CAIR in accordance with the July 11, 2008 provisions. On July 6, 2011, the USEPA issued the Cross-State Air Pollution Rule (CSAPR) which replaced CAIR. Ohio power generation sources of 25 MW or greater would be subject to this rule. CSAPR was to go into effect January 1, 2012 and would have imposed new cap-and-trade programs for ozone season NO<sub>x</sub>, annual NO<sub>x</sub>, and annual SO<sub>2</sub> emissions. However, a ruling issued by the Court on December 30, 2011 stayed CSAPR until further resolution of petitions filed by several entities. On August 21, 2012, the Court vacated CSAPR and ruled that the former CAIR remain in effect until a viable replacement to CSAPR is made. Under CSAPR, electric generating facilities in Ohio would have been required to obtain allowances for ozone season NO<sub>x</sub>, annual NO<sub>x</sub>, and annual SO<sub>2</sub> emissions.

Under CAIR, assets holding excess allowances will be able to sell or trade allowances to those without sufficient allowances. The Project will comply with the rules currently in effect at the time of operational start.

### **3.8 State Regulations**

In addition to regulations already discussed in preceding sections, state regulations that pertain to this facility are listed in Table 3-2. Titles shown in capital letters in the table are permits, notifications, and/or reports that will be needed for construction and operation of this facility.

Federal authority is delegated to the State of Ohio, and all permit applications will be submitted to Ohio EPA through the delegated local permitting agency. In Lucas County, the TES in Toledo, Ohio will handle these permit applications. The PTI will serve as the air construction permit and initial operating permit for emission testing purposes. As explained in preceding sections, the following list of air permits is applicable to the proposed facility:

- 1) Ohio EPA PTI: OAC Chapter 3745-31 – Permit to Install New Source of Pollution. The PTI will serve as the submission vehicle for the preconstruction permit.
- 2) Title V Permit: OAC Chapter 3745-77 – Title V Permits.
- 3) Acid Rain Permit: OAC Chapter 3745-103 – Title IV Acid Rain Permits and Compliance.

**Table 3-1: Ohio EPA Applicable Regulations**

<b>Rule</b>	<b>Description</b>
OAC 3745-17-07	Control of visible particulate emissions from stationary sources
OAC 3745-17-10	Restrictions on particulate emissions from fuel burning equipment
OAC 3745-18-06	General emission limit provisions for sulfur dioxide
OAC 3745-21-07	Control of emissions of organic materials from stationary sources
OAC 3745-21-09	Control of emissions of volatile organic compounds from stationary sources
OAC 3745-23-06	Control of nitrogen oxides emissions from stationary sources
OAC 3745-25-03	Emission control action programs
OAC 3745-31	PERMIT TO INSTALL NEW SOURCES OF POLLUTION
OAC 3745-71-02	Emissions test methods and procedures for new and existing sources
OAC 3745-77	TITLE V PERMITS
OAC 3745-100	TOXIC CHEMICAL RELEASE REPORTING
OAC 3745-103	ACID RAIN PERMITS AND COMPLIANCE
OAC 3745-104	ACCIDENTAL RELEASES PREVENTION PROGRAM

#### **4. CONTROL TECHNOLOGY EVALUATION – BACT/BAT**

Control technology evaluations for new major stationary sources involve an evaluation of BACT for pollutants subject to PSD pre-construction review and State of Ohio BAT for other pollutants not subject to PSD. A control technology analysis has been performed for the proposed facility based upon the USEPA guidance document New Source Review Workshop Manual (USEPA, 1990). The PSD and State of Ohio BAT requirements for each pollutant were defined in Section 3.0 of this application, and are briefly summarized in the sections below.

##### **4.1 Regulatory Applicability of Control Requirements**

This section provides a brief summary of the control technology requirements under the PSD and state of Ohio permitting programs for each pollutant. Control technology requirements are generally based on the potential emissions from the new or modified source and the attainment status of the area in which the source is located. A detailed determination of applicable regulatory requirements under PSD rules is provided in Section 3.0. The following sections discuss the applicability of BACT and BAT requirements for emissions from the equipment associated with the Project.

###### **4.1.1 PSD Pollutants Subject to BACT/BAT**

Pollutants subject to a PSD review are also subject to a BACT analysis. The proposed Project is considered a major source for PSD purposes since potential emissions of one or more criteria pollutants exceed major source thresholds. Therefore, individual pollutants are subject to BACT requirements if their potential emissions exceed the SERs presented in Table 1-1. As shown in this table, the Project is subject to PSD review for the criteria pollutants: NO<sub>2</sub>, CO, VOC, H<sub>2</sub>SO<sub>4</sub>, GHG and PM<sub>10</sub>/PM<sub>2.5</sub> and is, therefore, required to implement BACT for these pollutants. Criteria pollutants for which BACT is not required to be implemented are subject to BAT.

As described in Section 3.3, sources with pollutant emission rates meeting certain other standards are also presumed to meet BAT. For pollutants subject to BACT requirements, compliance with BACT meets BAT requirements. For HAPs subject to MACT, compliance with MACT meets BAT requirements. For pollutants subject to NSPS, compliance with NSPS represents BAT. Sources subject to BAT may comply with the levels achieved by similar sources or may conduct a case-by-case BAT determination using a “top down” approach, similar to a BACT analysis. BAT for non-criteria or air toxic pollutants are addressed by an “Option A” evaluation described in Section 3.3. This evaluation is included in the Air Modeling Dispersion Report submitted for the Project.

#### 4.1.2 Emission Units Subject to BACT Analyses

For a facility subject to a BACT analysis, each pollutant emitted in amounts greater than the regulatory thresholds are subject to a prescribed level of control technology review for each emission unit that emits that pollutant. For the proposed Project, the source responsible for the majority of the Project's emissions will be the combined cycle combustion turbines with supplemental duct burning. Therefore, the primary focus of the BACT analyses presented in the following sections is on the combined cycle combustion turbines. Evaluation of the ancillary equipment is conducted consistent with proposed small annual emission levels and with limited hours of operation.

## **4.2 BACT Analysis Approach**

The sections below outline the approach used to conduct the BACT/BAT analyses presented in this application.

#### 4.2.1 Best Available Control Technology

BACT is defined as the optimum level of control applied to a pollutant emissions based upon consideration of energy, economic and environmental factors. In a BACT analysis, the energy, environmental, and economic factors associated with each alternate control technology are evaluated, as necessary, in addition to the benefit of reduced emissions that each technology would provide. The BACT analyses presented in the following sections consist of up to four steps as outlined below.

##### *4.2.1.1 Identification of Technically Feasible Control Options*

The first step in a BACT analysis is the identification of technically feasible and available control technology options, including consideration of transferable and innovative control measures that may not have been previously applied to the source type under analysis. The minimum requirement for a BACT proposal is an option that meets federal NSPS limits or other minimum state or local requirements, such as RACT or Ohio EPA emission standards. After elimination of technically infeasible control technologies, the remaining options are ranked by control effectiveness.

If there is only a single feasible option, or if the most stringent alternative is proposed, then no further analysis is required. Technical considerations and site-specific sensitive issues will often play a role in BACT determinations. Generally, if the most stringent technology is rejected as BACT, the next most stringent technology is evaluated and so on.

In order to identify options for each class of equipment, a search of the USEPA's RACT/BACT/LAER Clearinghouse (RBLC) database was performed. Individual searches were performed for each pollutant emitted from each emission unit. The most recently issued permits from Ohio and other permits listed on the RBLC were also analyzed if available. Information was found for several hundred large combined cycle power plant projects permitted in the past decade. Appendix C provides a summary of recent similar energy projects from around the country. Less recent projects were also included due to regional proximity and/or very stringent emission limits. Using these criteria, lists for each pollutant for each equipment source were compiled and are presented in Appendix C.

If two or more technically feasible options are identified, the next three steps (as presented below) are applied to identify and compare the economic, energy and environmental impacts of the options.

#### *4.2.1.2 Economic (Cost-Effectiveness) Analysis*

This analysis consists of an estimation of cost and calculation of the cost-effectiveness of each control technology, on a dollar per ton of pollution removed basis. Annual emissions with a control option are subtracted from base case emissions to calculate tons of pollutant controlled per year. The base case may be uncontrolled emissions or the maximum emission rate allowed with BACT considerations (such as an NSPS or RACT limit). Annual costs are calculated by adding annual operation and maintenance costs to the annualized capital cost of a control option. Cost-effectiveness (dollars per ton) of a control option is the annual cost (dollars per year) divided by the annual reduction in emissions (tpy). If either the most effective control option is proposed, or if there are no technically feasible control options, an economic analysis is not required.

#### *4.2.1.3 Energy Impact Analysis*

Two types of energy impacts are normally considered quantifiable. First, when the installation of a particular option would result in a reduction in either the power output capacity or reliability of a unit, this reduction is a quantifiable energy impact. Second, the consumption of energy by the control option itself is a quantifiable energy impact. These impacts can be quantified by either an increase in fuel consumption due to reduced efficiency or fuel consumption to power the equipment.

#### *4.2.1.4 Environmental Impact Analysis*

The primary focus of the environmental impact analysis is the reduction in ambient concentrations of the pollutant being emitted. Collateral increases or decreases in emissions of other criteria or non-criteria pollutants may occur with some technologies and

should be identified. Non-air related impacts such as solid waste generation, increased water consumption or waste water generation may also be an issue associated with a control option. These additional impacts should be identified and qualitatively or quantitatively evaluated.

### **4.3 BACT Analysis for NO<sub>x</sub>**

NO<sub>x</sub> is formed during the combustion of fuel and is generally classified as either thermal NO<sub>x</sub> or fuel-related NO<sub>x</sub>. Thermal NO<sub>x</sub> results when atmospheric nitrogen is oxidized at high temperatures to produce nitrogen oxide (NO), NO<sub>2</sub>, and other oxides of nitrogen. The major factors influencing the formation of thermal NO<sub>x</sub> are temperature, concentrations of oxygen in the inlet air and residence time within the combustion zone. Fuel-related NO<sub>x</sub> is formed from the oxidation of chemically bound nitrogen in the fuel. Fuel-related NO<sub>x</sub> is generally minimal for natural gas combustion. As such, NO<sub>x</sub> formation from combustion of natural gas is due mostly to thermal NO<sub>x</sub> formation.

Reduction in NO<sub>x</sub> formation can be achieved using combustion controls and/or flue gas treatment. Available combustion controls include water or steam injection and low emission combustors. Most gas turbines are designed to operate at a nearly stoichiometric ratio of fuel in the combustion zone, with additional air introduced downstream. Fuel-to-air ratios below stoichiometric are referred to as fuel-lean mixtures. This type of fuel mixture limits the formation of NO<sub>x</sub> because there is lower flame temperature with a lean fuel mixture. Using this concept, lean combustors are designed to operate below the stoichiometric ratio, thereby reducing the thermal NO<sub>x</sub> formation within the combustion chamber.

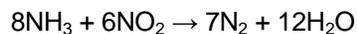
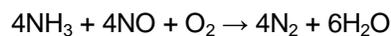
The turbines proposed for the Project utilize a lean fuel technology. In addition, exhaust gases from the turbine (and duct burner) will exhaust through an SCR system (discussed below) to further reduce NO<sub>x</sub> emissions to 2.0 ppm<sub>v</sub> at 15 percent O<sub>2</sub>, with and without duct burning.

The Project will also utilize an auxiliary boiler, emergency diesel fire pump and emergency diesel generators. The auxiliary boiler will utilize flue gas recirculation and low-NO<sub>x</sub> burner technology, two combustion optimization techniques that also reduce the formation of NO<sub>x</sub>. Using these enhanced combustion techniques, emissions from the auxiliary boiler will be limited to 0.02 lb/MMBtu. As discussed in Section 3.2.4, the emergency diesel fire pump and the diesel black-start engines will meet the emission limitations for current model years under the NSPS for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60 Subpart IIII).

The following discussion demonstrates that the proposed NO<sub>x</sub> emission rates for the combined cycle turbines and ancillary equipment are considered BACT.

#### 4.3.1 Identification of Control Options

SCR is an add-on NO<sub>x</sub> control technology that is placed in the exhaust stream following the gas turbine/duct burner. SCR involves the injection of ammonia into the exhaust gas upstream of a catalyst bed. On the catalyst surface, NH<sub>3</sub> reacts with the NO<sub>x</sub> contained within the flue gas to form nitrogen gas and water in accordance with the following chemical reactions:



The catalyst's active surface is usually a noble metal (platinum), base metal (titanium or vanadium) or a zeolite-based material. Metal-based catalysts are usually applied as a coating over a metal or ceramic substrate. Zeolite catalysts are typically a homogeneous material that forms both the active surface and the substrate. NH<sub>3</sub> is fed and mixed into the combustion gas upstream of the catalyst bed in greater than stoichiometric amounts to achieve maximum conversion of NO<sub>x</sub>. Excess NH<sub>3</sub> which is not reacted in the catalyst bed is subsequently emitted through the stack; this is called "ammonia slip."

An important factor that affects the performance of an SCR system is the operating temperature. The optimal temperature range for standard base metal catalysts is between 400°F and 800°F. Because the optimal temperature is below the CTG exhaust temperature but above the stack exhaust temperature, the catalyst needs to be located within the HRSG.

An undesirable side effect of the use of SCR systems is the potential for formation of ammonium bisulfate and ammonium sulfate, referred to as ammonium salts. These salts are reaction products of SO<sub>3</sub> and NH<sub>3</sub>. Ammonium salts are corrosive and can stick to the heat exchanger surfaces, duct work or the stack at low temperatures. In addition, ammonium salts are considered PM<sub>10</sub>/PM<sub>2.5</sub>, and, therefore, increase the emissions of these criteria pollutants. Use of low sulfur fuels such as natural gas minimizes the formation of SO<sub>3</sub> and the subsequent formation of these ammonium salts.

#### 4.3.2 Search of RBLC Determinations

##### 4.3.2.1 Combustion Turbine Generators and Duct Burners

The search of the RBLC and other available permits identified several natural gas-fired combined cycle combustion turbine projects. As described previously, representative projects were selected based upon recent decisions, local proximity, or stringent limits. Details for representative facilities are presented in Appendix C. The lowest permitted NO<sub>x</sub> limit for a natural gas-fired combined cycle turbine with duct burning was 2.0 ppm<sub>v</sub> at 15 percent O<sub>2</sub>. All of these projects use SCR systems in combination with combustion optimization technology such as low-NO<sub>x</sub> burners. It is our understanding that several of these projects have demonstrated compliance with the 2.0 ppm<sub>v</sub> emission limits under primary operating modes. Some of these projects have permit limits above 2.0 ppm<sub>v</sub> to accommodate alternative operating modes such as duct burning.

In general, BACT determinations have focused on the level that can be achieved in the primary operating mode (typically gas-fired 100 percent load), with NO<sub>x</sub> levels being set for alternative modes (duct burning, partial load, etc.) at the levels that result from application of the same degree of control used to achieve BACT in the primary mode.

##### 4.3.2.2 Auxiliary Boiler

The RBLC and recent air permit search for natural gas-fired boilers between 10 and 100 MMBtu/hr in size identified close to 100 installations. NO<sub>x</sub> emission limits for these boilers widely range from approximately 0.0035 lb/MMBtu to 0.37 lb/MMBtu. Details on the installations that were determined to be most representative for the proposed boiler are provided in Appendix C. The projects with emission limits less than 0.011 lb/MMBtu are generally industrial/commercial boilers less than 30 MMBtu/hr that are operated continuously to support industrial processes or other operations; these were not considered relevant to the Project. Beyond these projects, other determinations generally proposed NO<sub>x</sub> emission limits greater than 0.03 lb/MMBtu. The most recent determination for an auxiliary boiler in Ohio proposed a NO<sub>x</sub> emission limit of 0.035 lb/MMBtu.

#### 4.3.3 BACT Determinations

##### 4.3.3.1 Combustion Turbine Generators and Duct Burners

OCE is proposing a NO<sub>x</sub> emission limit of 2.0 ppm<sub>v</sub> at 15 percent O<sub>2</sub> (with and without duct burning) as BACT for the proposed Project. This level of emissions will be achieved through the application of DLN burners in combination with SCR. This emission level is

consistent with the most stringent level of control found during the RBLC search and has been demonstrated in practice.

#### *4.3.3.2 Auxiliary Boiler*

OCE is proposing a NO<sub>x</sub> emission limit of 0.02 lb/MMBtu. The auxiliary boiler will use flue gas recirculation in combination with low-NO<sub>x</sub> burners. These technologies, used in combination, are capable of reducing NO<sub>x</sub> emissions by 60 to 90 percent. This limit is consistent with the results from the RBLC database search.

#### *4.3.3.3 Diesel Engines*

OCE is proposing to utilize state-of-the-art combustion design to comply with the federal emission limitations for the current model years for the emergency fire pump and emergency generator. Thus, OCE proposes emission rates of 3.0 g/hp-hr (4.0 g/kW-hr) for the emergency fire pump and 4.8 g/hp-hr (6.4 g/kW-hr) for the emergency generator. The emission rates apply to NO<sub>x</sub> and VOCs combined. These limits are consistent with NSPS Subpart IIII. The NSPS emission limits were established recently, and are based on the USEPA's extensive analysis of the feasibility of controls. In addition, the NSPS implements standards in more stringent phases from 2007 to 2015 based upon their feasibility analysis for future years. As such, compliance with the applicable NSPS for the proposed emergency engines associated with the Project is considered BACT for NO<sub>x</sub>.

### **4.4 BACT Analysis for VOC**

Combustion turbines have inherently low VOC emission rates. Emissions of VOC from a combustion turbine occur as a result of incomplete combustion of organic compounds within the fuel. In an ideal combustion process, all carbon and hydrogen contained within the fuel are oxidized to form CO<sub>2</sub> and water. VOC emissions can be minimized by the use of good combustion controls and add-on controls as described below.

The turbines proposed for the Project will utilize good combustion controls and exhaust through an oxidation catalyst to further reduce VOC emissions. Emissions of VOC from the exhaust stack will be limited to 1.9 ppm<sub>v</sub> at 15 percent O<sub>2</sub> with duct burning and 1.0 ppm<sub>v</sub> at 15 percent O<sub>2</sub> without duct burning.

The Project will also utilize an auxiliary boiler, emergency diesel fire pump and emergency diesel generators. The auxiliary boiler will utilize combustion optimization technologies to minimize incomplete combustion and subsequent emissions of VOC. Using good combustion controls, emissions from the auxiliary boiler will be limited to 0.006 lb/MMBtu. As discussed in Section 3.2.4, the emergency diesel fire pump and the emergency

generator will meet the emission limitations for current model years under the NSPS for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60 Subpart IIII). The following discussion demonstrates that the proposed VOC emission rates for the combined cycle turbines and ancillary equipment are considered BACT.

#### 4.4.1 Identification of Control Options

There are only two practical methods for controlling VOC emissions from combustion processes: efficient combustion and add-on control equipment. The most stringent level of control is through the use of add-on control equipment. The only post-combustion control that can be practically implemented is catalytic oxidation. Oxidation catalyst systems consist of a passive reactor comprised of a grid of metal panels with a platinum catalyst. The optimal location for VOC control, in the 900°F to 1,100°F temperature range, would be upstream of the HRSG or in the front-end section of the HRSG. However, at the high temperatures necessary to make the oxidation catalyst optimized for VOC reduction, there is the undesirable result of causing substantially more conversion of SO<sub>2</sub> to SO<sub>3</sub>. As described previously, SO<sub>3</sub> may react with water and/or NH<sub>3</sub> to form H<sub>2</sub>SO<sub>4</sub> and/or ammonium salt (PM<sub>10</sub>/PM<sub>2.5</sub>). Therefore, the placement of the oxidation catalyst in the “cooler” section of the HRSG, which is necessary for CO control, is the optimal design.

VOC emissions from the auxiliary boiler will also occur due to incomplete combustion. As such, VOC emissions are minimized by combustion practices that promote high combustion temperatures, long residence times, and turbulent mixing of fuel and combustion air. In practice, post-combustion control methods are not routinely implemented for the reduction of VOC emissions from auxiliary boilers, as supported by the search of the RBLC determinations presented below.

#### 4.4.2 Search of RBLC Determinations

##### 4.4.2.1 *Combustion Turbine Generators and Duct Burners*

The search of the RBLC and other available permits identified many natural gas-fired combined cycle combustion turbine projects. Details for approximately 30 of these facilities have been included in Appendix C. Based on this search, use of an oxidation catalyst appears to be the most stringent level of VOC control for natural gas fired combined cycle turbines. VOC limits range from 0.3 ppm<sub>v</sub> to 34 ppm<sub>v</sub>. The variation in VOC concentrations between different projects is not unexpected due to differences in turbine and HRSG manufacturers and overall engineering design. Based on the review of the RBLC, BAT for VOC is utilization of an oxidation catalyst system to achieve an outlet VOC concentration of 2.0 ppm<sub>v</sub> or less.

#### *4.4.2.2 Auxiliary Boiler*

The RBLC and recent air permit search for natural gas-fired boilers between 10 and 100 MMBtu/hr in size identified close to 100 installations. VOC emission limits for these installations range from approximately 0.002 lb/MMBtu to 0.02 lb/MMBtu. Details on the installations that were determined to be most applicable to the proposed boiler are provided in Appendix C.

The most recent determination in the database is for a commercial boiler with a VOC BACT limit of 0.003 lb/MMBtu. Most of the boilers that operate in a similar manner to the proposed boiler also have operational restrictions on hours. There are several determinations for auxiliary boilers at energy generating facilities in the database. The majority of the installations have emission limits of 0.005 lb/MMBtu or greater. Based on the review of the RBLC, BAT for VOC is good combustion practices to achieve a VOC emission limit in the 0.004 to 0.006 lb/MMBtu range.

#### 4.4.3 BACT Determinations

##### *4.4.3.1 Combustion Turbine Generators and Duct Burners*

OCE is proposing a VOC emission limit of 1.9 ppm<sub>v</sub> at 15 percent O<sub>2</sub> with duct burning and 1.0 ppm<sub>v</sub> at 15 percent O<sub>2</sub> without duct burning as BACT for the proposed Project. This level of emissions will be achieved via good combustion control and an oxidation catalyst.

##### *4.4.3.2 Auxiliary Boiler*

OCE is proposing a VOC emission limit of 0.006 lb/MMBtu from the auxiliary boiler using good combustion practices as BACT/BAT.

##### *4.4.3.3 Diesel Engines*

OCE is proposing to utilize state-of-the-art combustion design to comply with the federal emission limitations for the current model years for the emergency fire pump and emergency generator. Thus, OCE proposes emission rates of 3.0 g/hp-hr (4.0 g/kW-hr) for the emergency fire pump and 4.8 g/hp-hr (6.4 g/kW-hr) for the emergency generator. The emission rates apply to NO<sub>x</sub> and VOCs combined. These limits are consistent with NSPS Subpart IIII. The NSPS emission limits were established recently, and are based on the USEPA's extensive analysis of the feasibility of controls. In addition, the NSPS implements standards in more stringent phases from 2007 to 2015 based upon a feasibility analysis for future years. As such, compliance with the applicable NSPS for the proposed emergency engines associated with the Project is considered BACT for VOC.

#### **4.5 BACT Analysis for CO**

Emissions of CO from combustion occur as a result of incomplete combustion of fuel. CO emissions are minimized by the use of proper combustor design, good combustion practices and add-on controls. The combined cycle turbines and the auxiliary boiler will be sources of CO emissions. Since the potential emissions from the Project exceed PSD significance thresholds, BACT is required for CO emissions. As indicated previously, pollutants that comply with BACT meet BAT requirements.

The turbines proposed for the Project will utilize good combustion controls and exhaust through an oxidation catalyst to reduce CO emissions. Emissions of CO from the exhaust stack will be limited to 2.0 ppm<sub>v</sub> at 15 percent O<sub>2</sub> with and without duct burning.

The auxiliary boiler will utilize good combustion practices to minimize incomplete combustion and subsequent emissions of CO. Using good combustion controls, emissions from the auxiliary boiler will be limited to 0.055 lb/MMBtu. The emergency diesel fire pump and the emergency diesel generator will meet the emission limitations for current model years under the NSPS for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60 Subpart IIII).

The following discussion demonstrates that the proposed CO emission rates for the combined cycle turbines and ancillary equipment are considered BACT.

##### 4.5.1 Identification of Control Options

There are only two practical methods for controlling CO emissions from combustion processes: efficient combustion and add-on control equipment. The most stringent level of control is the use of add-on equipment. The only post-combustion control that can be practically implemented is catalytic oxidation. Oxidation catalyst systems consist of a passive reactor comprised of a grid of metal panels with a platinum catalyst. CO reduction efficiencies in the range of 80 to 90 percent can be expected, although CO reduction may at times be less than these values due to the low inlet concentrations expected from the turbines.

CO emissions from the auxiliary boiler will also occur due to incomplete combustion. As such, combustion design that promotes high combustion temperatures, long residence times, and turbulent mixing of fuel and combustion air is the common practice used to minimize CO emissions. Although it is technologically feasible to control CO emissions from a boiler in the 10 to 100 MMBtu/hr size range using an oxidation catalyst, current combustion technology results in very low emissions of CO such that add-on control would

not be considered cost-effective for auxiliary boilers that are not operated continuously. The Project will limit operation of the auxiliary boiler to 2,000 hours per year.

#### 4.5.2 Search of RBLC Determinations

##### *4.5.2.1 Combustion Turbine Generators and Duct Burners*

The search of the RBLC available permits identified almost 300 natural gas-fired combined cycle combustion turbine projects. Based on this search, use of an oxidation catalyst appears to be the most stringent level of control for natural gas-fired combined cycle turbines.

CO emission limits from recently permitted projects generally ranged from 0.9 ppm<sub>v</sub> to 15 ppm<sub>v</sub> (or greater). The lowest CO limit found in a permit for a natural gas fired combined cycle turbine was 0.9 ppm<sub>v</sub> without duct burning and 1.8 ppm<sub>v</sub> with duct burning, issued to Kleen Energy Systems in Connecticut. While the duct burning limit is consistent with other determinations, the 0.9 ppm<sub>v</sub> limit is an outlier. It is important to note that Kleen Energy has a VOC BACT limit of 5.0 ppm<sub>v</sub>, which is significantly higher than the proposed VOC limit for the Project. This is indicative of the fact that it is difficult to design a system that provides a very high level of control for CO while simultaneously providing a very high level of control for VOC. As such, systems are more commonly designed to provide substantial control for both CO and VOC simultaneously. This is illustrated by two recent BACT/Lowest Achievable Emission Rate (LAER) determinations for proposed combined cycle power plants in New Jersey. PSD permits for the Woodbridge Energy Center and the Newark Energy Center were issued in 2012. Both facilities proposed CO BACT limits of 2.0 ppm<sub>v</sub> and VOC LAER limits of 1.0 ppm<sub>v</sub> (without duct burning). For these facilities, the turbine train was designed to optimize control of both CO and VOC. There are many facilities in the RBLC with recently permitted BACT CO emission limits of 2.0 ppm<sub>v</sub> (or greater). For example, the Empire Generating and Caithness Long Island Energy projects in New York State have permit limits of 2.0 ppm<sub>v</sub> for CO, which is considered representative of BACT. It is our understanding that several of these facilities are operating in compliance with their 2.0 ppm<sub>v</sub> limit.

##### *4.5.2.2 Auxiliary Boiler*

The RBLC and recent air permit search for natural gas-fired boilers between 10 and 100 MMBtu/hr in size identified close to 100 installations. CO emission limits for these installations range from approximately 0.0073 lb/MMBtu to 0.8 lb/MMBtu. Details on approximately 30 of the installations that were determined to be most applicable to the proposed boiler are provided in Appendix C.

The most stringent limit for an auxiliary boiler at an energy generating facility is 0.0164 lb/MMBtu at Emery Generating Station in Iowa, which was permitted in 2002. This installation is operational and it utilizes a catalytic oxidizer with an estimated control efficiency of 80 percent to achieve this emission rate. Since this installation, there have been many projects permitted without add-on controls that utilize good combustion practices to achieve CO control. The most recent auxiliary boiler installation listed in the RBLC has a CO limit of 0.15 lb/MMBtu. There are several other recent determinations with CO limits between 0.02 and 0.08 lb/MMBtu.

#### 4.5.3 BACT Determinations

##### *4.5.3.1 Combustion Turbine Generators and Duct Burners*

OCE is proposing a CO emission limit of 2.0 ppm<sub>v</sub> at 15 percent O<sub>2</sub> with and without duct burning as BACT for the proposed Project. This level of emissions will be achieved via good combustion control and an oxidation catalyst. This proposal is consistent with the limits and control technologies found in the RBLC and with recent BACT determinations in Ohio and in other states.

##### *4.5.3.2 Auxiliary Boiler*

OCE is proposing a CO emission limit of 0.055 lb/MMBtu from the auxiliary boiler using good combustion practices and a limitation of operation to 2,000 hours per year. This is consistent with BACT determinations for this type of equipment.

##### *4.5.3.1 Diesel Engines*

The proposed diesel engines for the Project will utilize state-of-the-art combustion design to comply with the federal emission limitations for the current model years. Thus, OCE proposes CO emission rates of 2.6 g/hp-hr (3.5 g/kW-hr) for the emergency fire pump and emergency generators as BACT, with limited annual hours of operation. These limits are consistent with NSPS Subpart IIII. The NSPS emission limits were established recently, and are based on the USEPA's extensive analysis of the feasibility of controls. In addition, the NSPS implements standards in more stringent phases from 2007 to 2015 based upon a feasibility analysis for future years. As such, compliance with the applicable NSPS for the proposed emergency engines associated with the Project is considered BACT for CO.

#### **4.6 BACT Analysis for Particulate Matter (PM<sub>10</sub>/PM<sub>2.5</sub>)**

Emissions of particulate matter from combustion occur as a result of inert solids contained in the fuel, unburned fuel hydrocarbons which agglomerate to form particles, and mineral

matter in water that may be injected for NO<sub>x</sub> or power augmentation in certain applications. Particulate emissions can also result from the formation of ammonium salts due to the conversion of SO<sub>2</sub> to SO<sub>3</sub>, which is then available to react with ammonia to form ammonium sulfates. All of the particulate matter emitted from the turbines is conservatively assumed to be less than 2.5 microns in diameter. Therefore, PM<sub>10</sub> and PM<sub>2.5</sub> emission rates are assumed to be the same.

The combustion of clean-burning fuels is the most effective means for controlling particulate emissions from combustion equipment. The Project is proposing to use natural gas as the only fuel for the turbines. Natural gas is a very clean-burning fuel with very low associated particulate emissions. OCE is not aware of any combustion turbine projects in existence that have add-on particulate control.

The turbines proposed for the Project will utilize natural gas as their only fuel to minimize particulate emissions. Emissions of PM<sub>10</sub>/PM<sub>2.5</sub> from the exhaust stack will be limited to 0.0047 lb/MMBtu without duct burning and 0.0055 lb/MMBtu with duct burning.

The Project will also utilize an auxiliary boiler, emergency diesel fire pump, emergency generator and cooling towers. The auxiliary boiler will combust only natural gas, resulting in a PM<sub>10</sub>/PM<sub>2.5</sub> emission limit of 0.008 lb/MMBtu. The cooling tower will also be a source of PM<sub>10</sub>/PM<sub>2.5</sub> emissions. The Project is proposing use of a high-efficiency drift eliminator (0.0005 percent). The emergency diesel fire pump and the diesel generator engines will meet the emission limitations for current model years under the NSPS for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60 Subpart IIII).

The following discussion demonstrates that the proposed PM<sub>10</sub>/PM<sub>2.5</sub> emission rates for the combined cycle turbines and ancillary equipment are considered BACT.

#### 4.6.1 Search of RBLC Determinations

##### 4.6.1.1 Combustion Turbine Generators and Duct Burners

The search of the RBLC and other available permits identified several natural gas-fired combined cycle combustion turbine projects. Based on this search, use of clean-burning fuels is the primary control for particulate emissions. Particulate matter emission limits in the RBLC database generally ranged from approximately 0.003 lb/MMBtu to 0.3 lb/MMBtu (or greater). The most recent PM<sub>10</sub>/PM<sub>2.5</sub> BACT determination for a large combined cycle turbine train is 0.0066 lb/MMBtu for the Sumpter Power Plant in Michigan. Beyond this example, there are many facilities in the RBLC with permitted BACT PM<sub>10</sub>/PM<sub>2.5</sub> emission limits in the range of 0.006 lb/MMBtu to 0.01 lb/MMBtu. Generally, all of these projects

utilize clean-burning fuel as their primary control technology and their emission limits are based upon the overall quality of their commercial natural gas source.

#### *4.6.1.2 Auxiliary Boiler*

A review of the RBLC indicates that good combustion practices and clean-burning fuels have typically been determined to be BACT for boilers.  $PM_{10}/PM_{2.5}$  emission limits for natural gas-fired boilers vary widely, ranging from 0.002 lb/MMBtu through 0.6 lb/MMBtu.  $PM_{10}/PM_{2.5}$  emission limits for gas-fired auxiliary boilers of similar size are as low as 0.003 lb/MMBtu. The most recent listing in the RBLC for an auxiliary boiler proposed a  $PM_{10}/PM_{2.5}$  limit of 0.008 lb/MMBtu.

#### *4.6.1.3 Cooling Tower*

A review of the RBLC provides several entries for cooling towers in power plants and other industrial applications, the most recent being in 2011. In the RBLC listings, BACT for  $PM_{10}$  and  $PM_{2.5}$  was determined to be utilization of high-efficiency drift eliminators with a drift rate of 0.0005 percent. A drift rate of 0.0005 is the most effective drift eliminator commercially available.

### 4.6.2 BACT Determinations

#### *4.6.2.1 Combustion Turbine Generators and Duct Burners*

OCE is proposing a  $PM_{10}/PM_{2.5}$  emission limit of 0.0047 lb/MMBtu without duct burning and 0.0055 lb/MMBtu with duct burning as BACT for the proposed Project. This level of emissions will be achieved by combusting only commercially available, pipeline quality natural gas in the turbines. This emission level is consistent with the limits and control technologies found in the RBLC for recent BACT determinations in Ohio and in other states.

#### *4.6.2.2 Auxiliary Boiler*

OCE is proposing the exclusive use of clean-burning pipeline quality natural gas in conjunction with good combustion practices as BACT for the auxiliary boiler. The Project proposes a  $PM_{10}/PM_{2.5}$  emission limit of 0.008 lb/MMBtu boiler using natural gas as the only fuel. This is consistent with other BACT determinations for this type of equipment.

#### *4.6.2.3 Diesel Engines*

The proposed engines for the Project will utilize state-of-the-art combustion design to comply with the federal emission limitations for the current model years. Thus, OCE proposes PM<sub>10</sub>/PM<sub>2.5</sub> emission rates of 0.15 g/hp-hr (0.2 g/kW-hr) for the emergency fire pump and emergency generator as BACT, with limited annual hours of operation. These limits are consistent with NSPS Subpart IIII. The NSPS emission limits were established recently, and are based on the USEPA's extensive analysis of the feasibility of controls. In addition, the NSPS implements standards in more stringent phases from 2007 to 2015 based upon a feasibility analysis for future years. As such, compliance with the applicable NSPS for the proposed emergency engines associated with the Project is considered BACT.

#### *4.6.2.4 Cooling Tower*

OCE is proposing use of 0.0005 percent high-efficiency drift eliminators as BACT and for PM<sub>10</sub> and PM<sub>2.5</sub>. This equates to hourly emission rates of 1.04 lb/hr for PM<sub>10</sub> and 0.004 lb/hr for PM<sub>2.5</sub>. Use of high-efficiency drift eliminators is consistent with recent BACT determinations in Ohio and in other states.

### **4.7 BAT/BACT Analysis for Sulfur Dioxide and Sulfuric Acid**

Emissions of SO<sub>2</sub> are formed from the oxidation of sulfur in the fuel. Normally, all sulfur compounds contained in the fuel will oxidize, and virtually all will oxidize to form SO<sub>2</sub>. A small percentage will oxidize to SO<sub>3</sub> and sulfate (SO<sub>4</sub>), dependent on a number of factors including: combustor design; temperature; pressure; oxygen level; and moisture level in the combustion zone and downstream in the combined cycle system, exhaust stack, and ambient air proximate to the stack. After being formed, the SO<sub>3</sub> and SO<sub>4</sub> will react to form H<sub>2</sub>SO<sub>4</sub> and sulfate particulate. SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> emissions can be controlled using pre- and post-combustion controls. Pre-combustion controls involve the use of low sulfur fuels such as natural gas or ULSD. Post-combustion controls involve the use of add-on control technology such as wet and dry flue gas desulfurization (FGD) processes. Installation of such systems is an established technology principally on coal-fired and high sulfur oil-fired steam electric generation stations. However, FGD systems are not practical for combustion turbines due to several factors including the large exhaust flow (and corresponding pressure drop) and the low inlet concentration in the flue gas. The use of natural gas and ULSD are the most common methods for controlling SO<sub>2</sub>/H<sub>2</sub>SO<sub>4</sub> emissions from combustion turbines.

The turbines proposed for the Project will utilize natural gas with a maximum sulfur content of 0.5 grains (gr) per 100 standard cubic feet (scf) as their only fuel to minimize SO<sub>2</sub> and

H<sub>2</sub>SO<sub>4</sub> emissions. Emissions of SO<sub>2</sub> from the exhaust stack will be limited to 0.0015 lb/MMBtu with and without duct burning. Emissions of H<sub>2</sub>SO<sub>4</sub> will be limited to 0.006 and 0.007 lb/MMBtu with and without duct burning, respectively.

The Project will also utilize an auxiliary boiler, emergency diesel fire pump, emergency generator. The auxiliary boiler will combust only natural gas, resulting in SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> emission limits of 0.0014 lb/MMBtu and 0.00011 lb/MMBtu, respectively. The diesel fire pump and the diesel generator engines will utilize ULSD. SO<sub>2</sub> emissions from the fire pump and generators will be limited to 0.0015 lb/MMBtu for both pieces of equipment. Emissions of H<sub>2</sub>SO<sub>4</sub> from both engines will be limited to 0.000132 g/kW-hr.

The following discussion demonstrates that the proposed SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> emission rates for the combined cycle turbines and auxiliary boiler are considered BAT/BACT.

#### 4.7.1 Search of RBLC Determinations

##### 4.7.1.1 Combustion Turbine Generators and Duct Burners

The search of the RBLC and other available permits identified more than 300 natural gas fired combined cycle projects. Based on this search, use of low sulfur fuels is the primary control for SO<sub>2</sub> emissions, with emission limits being dependent upon the sulfur content of the fuel and engine design. SO<sub>2</sub> emission limits in the RBLC generally ranged from 0.0003 lb/MMBtu to 0.01 lb/MMBtu (or greater), with a recent BACT determination having a sulfur content of 5 gr/100 scf.

Similarly, a search of permits for natural gas-fired combined cycle units indicated H<sub>2</sub>SO<sub>4</sub> emissions ranging from 0.0001 lb/MMBtu to 0.002 lb/MMBtu (or greater). Similar to SO<sub>2</sub>, BACT for these sources was the use of low sulfur fuels and emission limits are dependent upon the sulfur content of the fuel and engine design.

##### 4.7.1.2 Auxiliary Boiler

A review of the RBLC indicates that combustion of clean burning low-sulfur fuels has typically been determined to be BACT for SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub>. The most stringent SO<sub>2</sub> emission limit for an auxiliary boiler found the RBLC was 0.0006 lb/MMBtu. The most recent project listed in the RBLC proposes an SO<sub>2</sub> emission limit of 0.001 lb/MMBtu. In all cases, the BACT limit is based upon the assumed sulfur content of the pipeline quality natural gas.

A search of the RBLC for H<sub>2</sub>SO<sub>4</sub> emissions only identified two boilers of similar size to the proposed auxiliary boiler. Of these listings, only one was for an auxiliary boiler at an

energy facility. This project, CPV Saint Charles, proposed an H<sub>2</sub>SO<sub>4</sub> limit of 0.0001 lb/MMBtu.

#### 4.7.2 BAT/BACT Determinations

##### 4.7.2.1 Combustion Turbine Generators and Duct Burners

OCE is proposing an SO<sub>2</sub> emission limit of 0.0015 lb/MMBtu (with and without duct burning) as BAT and an H<sub>2</sub>SO<sub>4</sub> emission limit of 0.0006 and 0.007 lb/MMBtu, with and without duct burning, respectively, as BACT for the proposed Project. This level of emissions will be achieved by combusting commercially available, pipeline quality natural gas with a maximum sulfur content of 0.5 gr/100 scf in the combustion turbines. This emission level is consistent with the limits and control technologies found in the RBLC.

##### 4.7.2.2 Auxiliary Boiler

OCE is proposing an SO<sub>2</sub> emission limit of 0.0014 lb/MMBtu as BAT and an H<sub>2</sub>SO<sub>4</sub> emission limit of 0.00011 lb/MMBtu as BACT for the proposed Project. The proposed auxiliary boiler will combust natural gas with a maximum sulfur content of 0.5 gr/100 scf. This is consistent with other BACT determinations for this type of equipment.

##### 4.7.2.3 Diesel Engines

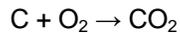
The proposed diesel engines for the Project will use ULSD with a maximum sulfur content of 15 parts per million by weight (ppm<sub>w</sub>) as a fuel. Thus, OCE proposes SO<sub>2</sub> emission rates of 0.0015 lb/MMBtu (0.005 g/hp-hr) as BAT and H<sub>2</sub>SO<sub>4</sub> emissions of 0.000132 g/kW-hr for the engines as BACT, with limited annual hours of operation.

## 4.8 BACT Analysis for Greenhouse Gases

The principal GHGs associated with the Project are CO<sub>2</sub>, methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Because these gases differ in their ability to trap heat, one ton of CO<sub>2</sub> in the atmosphere has a different effect on warming than one ton of CH<sub>4</sub> or one ton of N<sub>2</sub>O. For example, CH<sub>4</sub> and N<sub>2</sub>O have 21 times and 298 times the global warming potential of CO<sub>2</sub>, respectively. GHG emissions from the proposed Project are primarily attributable to combustion of fuels. The Project will not have any other industrial processes releasing GHGs. By far the greatest proportion of potential GHGs emissions are from CO<sub>2</sub>. Trace amounts of CH<sub>4</sub> and N<sub>2</sub>O, would be emitted in varying quantities depending on operating conditions. However, emissions of CH<sub>4</sub> and N<sub>2</sub>O are negligible when compared to total CO<sub>2</sub> emissions, and would not be considered significant to climate change issues. In addition, as presented previously, the Project is proposing to implement BACT for both

VOC (expressed as CH<sub>4</sub>) and NO<sub>x</sub>, such that these pollutants are being effectively controlled. As such, the remainder of this section will focus on BACT for CO<sub>2</sub>.

CO<sub>2</sub> is a product of combusting any carbon containing fuel, including natural gas. All fossil fuel contains significant amounts of carbon. During complete combustion, the fuel carbon is oxidized into CO<sub>2</sub> via the following reaction:



Full oxidation of carbon in fuel is desirable because CO, a product of partial combustion, has long been a regulated pollutant and because full combustion results in more useful energy. In fact, emission control technologies required for CO emissions (oxidation catalysts) increase CO<sub>2</sub> emission by oxidizing CO to CO<sub>2</sub>.

There are limited alternatives available for controlling CO<sub>2</sub>. The USEPA has indicated in the document, *PSD and Title V Permitting Guidance for Greenhouse Gases*, that carbon capture and sequestration (CCS) should be considered in BACT analyses as a technically feasible add-on control option for CO<sub>2</sub> (USEPA, 2010). Currently, there are no combined cycle power plants utilizing CCS, and although theoretically feasible, this technology is not commercially available.

CCS requires three distinct processes:

1. Isolation of CO<sub>2</sub> from the waste gas stream;
2. Transportation of the captured CO<sub>2</sub> to a suitable storage location; and
3. Safe and secure storage of the captured and delivered CO<sub>2</sub>.

The first step in the CCS process is capture of the CO<sub>2</sub> from the process in a form that is suitable for transport. There are several methods that may be used for capturing CO<sub>2</sub> from gas streams including chemical and physical absorption, cryogenic separation, and membrane separation. Only physical and chemical absorption would be considered technically implementable for a high volume, low concentration gas stream. Currently, there are no combined cycle power plants utilizing CO<sub>2</sub> absorption systems. As such, this technology, while theoretically feasible, has not been demonstrated in practice for combined cycle facilities. Even if it were commercially available, the cost for designing, installing and operating this type of capture system would be prohibitive. In addition, the costs of compressing the captured CO<sub>2</sub> to pressures needed for transportation would result in a large parasitic load to the facility, reducing its efficiency and increasing overall emissions of CO<sub>2</sub> and all other regulated pollutants on a per megawatt-hour basis.

The next step in the CCS process is transportation of the captured CO<sub>2</sub> to a suitable storage location. Currently CO<sub>2</sub> storage is available at only a very limited number of sites. Geologic conditions at the proposed Project site are not suitable for carbon sequestration. OCE does not own or control any other sites that would be appropriate for CO<sub>2</sub> sequestration. The closest commercially available CO<sub>2</sub> sequestration site is in Saskatchewan Canada, over 1,600 miles from the Project site. Accordingly, to remain a viable control technology, captured CO<sub>2</sub> would have to be transported to the storage site in order to achieve any environmental benefit. Pipelines are the most common method for transporting large quantities of CO<sub>2</sub> over long distances. There are currently approximately 3,600 miles of existing pipeline located in the United States. However, there is no existing CO<sub>2</sub> pipeline located near the Project site. As such, a CO<sub>2</sub> transportation pipeline would need to be constructed to tie into the existing pipeline structure. The cost for permitting and constructing this pressurized pipeline would be economically prohibitive.

Based upon the large costs associated with the capture, transportation and storage of CO<sub>2</sub>, in addition to the large parasitic load, CCS is considered cost prohibitive and economically infeasible for the Project.

Apart from CCS, the only other technology with the potential to reduce GHG from the proposed facility is pollution prevention or the use of inherently lower-emitting processes, practices and designs. Because emissions of CO<sub>2</sub> are directly related to the amount of fuel combusted, an effective means of reducing GHG emissions is through highly efficient combustion technologies. By utilizing more efficient technology, less fuel is required to produce the same amount of output electricity.

#### 4.8.1 Combustion Turbines

The Project is designed for baseload electricity generation and will utilize state-of-the-art combustion turbine technology in combined cycle mode. Combined cycle generation takes advantage of the waste heat from the combustion turbines, capturing that heat in the HRSG and generating steam which then powers a conventional steam turbine. Use of waste heat in this manner makes combined cycle projects considerably more efficient than conventional boiler technology.

The Project is proposing to use combustion turbines which utilize highly efficient combustion technology. In addition, the combustion turbines will combust natural gas as their only fuel source. Other fossil fuels generate a greater amount of CO<sub>2</sub> per megawatt-hour of power produced or MMBtu of fuel consumed. As such, using natural gas as the only fuel source effectively minimizes the production of CO<sub>2</sub> from combustion. The proposed Project has a "Design Base Heat Rate" of approximately 6,407 British thermal

units per kilowatt-hour (Btu/kW-hr), HHV full load at ISO conditions (59°F, 71 percent relative humidity) with no duct firing.

#### *4.8.1.1 Search of RBLC Determinations*

OCE is aware of several projects that have been issued draft or final permits incorporating GHG requirements. These projects include:

- Russell City Energy Center (final permit)
- Cricket Valley Energy Center (final permit)
- Lower Colorado River Authority (final permit)
- Woodbridge Energy Center (final permit)
- Newark Energy Center (final permit)

The GHG emissions limits in these permits are based upon engine efficiency expressed as HHV heat rate and range from 7,522 to 7,730 Btu/kW-hr (operating at 100 percent load, ISO conditions without duct firing). Several of these permits also incorporate emission limits for CO<sub>2</sub> in lbs CO<sub>2</sub> per MW-hr. These limits range from 887 lb CO<sub>2</sub>/MW-hr gross to 918 lb CO<sub>2</sub>/MW-hr net, while combusting natural gas.

The heat rate limits for the above referenced projects incorporate a margin over the design heat rate to account for degradation over the life of the equipment. Documentation associated with Russell City Energy Center provides a methodology for determining a reasonable estimate of degradation. The Bay Area Air Quality Management District (BAAQMD) in California issued a permit in February 2010 for the Russell City Energy Center that included a BACT limit. Russell City is a proposed combined cycle generating facility with a nominal capacity of 600 MW utilizing two Siemens F-class combustion turbines. In its analysis, the BAAQMD evaluated factors that could be reasonably expected to degrade the theoretical design efficiency of the turbines and increase the heat rate. They considered a number of factors including:

- A design margin to reflect that the equipment as constructed and installed may not fully achieve the assumptions that went into the design calculations;
- A reasonable performance degradation margin to reflect normal wear and tear; and
- A reasonable degradation margin based on normal wear and tear caused by variability in the operation of the auxiliary plant equipment.

Based on their analysis, BAAMD concluded that 12.8 percent was a reasonable compliance margin to add to the design base heat rate to develop a numerical BACT limit.

#### 4.8.1.2 BACT Determination

Based upon this design, and adding a reasonable margin of compliance consistent with the BAAQMD analysis for Russell City Energy Center (12.8 percent), OCE is proposing the following as BACT:

- 7,227 Btu/kW-hr HHV (ISO conditions without duct firing); and
- 833 lb CO<sub>2</sub> per MW-hr gross output (ISO conditions)

On March 27, 2012, the USEPA proposed an NSPS for carbon emissions from power plants. This NSPS would apply to new fossil-fuel-fired electric utility generating units (EGUs), which, under this rule, include stationary combined cycle turbine units larger than 25 MW. New EGUs would be required to meet an output-based standard of 1,000 pounds of CO<sub>2</sub> per MW-hr gross output. As presented above, the Project will meet the new proposed NSPS requirements. Since the NSPS has been only recently proposed, it can be presumed to be consistent with current BACT limits.

These limits are consistent with recently permitted projects and can reasonably be assured under all full load operating scenarios. This level of emissions will be achieved through utilization of high efficiency, state-of-the-art, combustion turbine technology and combusting only commercially available, pipeline quality natural gas in the turbines.

#### 4.8.2 Other Ancillary Sources

There are several other smaller sources associated with the Project that have the potential to emit GHGs. These include fugitive releases from the natural gas pipelines, sulfur hexafluoride (SF<sub>6</sub>) releases from circuit breakers, and the auxiliary boiler. BACT limits have not been established for equipment such as auxiliary boilers in recent permits. However, the boiler proposed for the Project will be state-of-the-art and, thus, have efficiency reflective of new equipment.

Methane is a GHG with a global warming potential of 21 times that of CO<sub>2</sub>. There is the potential for minor fugitive leaks of methane gas from connection points along the natural gas pipeline. These connection points include valves, flanges and compressors. The Project will have many of these piping components incorporated into its design. The Project will implement best management practices and routine monitoring to minimize fugitive leaks from the piping components. While BACT for fugitive emissions have not been included in recent permits, this is consistent with BACT determinations for other projects.

SF<sub>6</sub> is a dielectric fluid used in circuit breakers with a global warming potential of 23,900 times that of CO<sub>2</sub>. There is the potential for negligible leakage of SF<sub>6</sub> from circuit breakers and the Project will have several circuit breakers incorporated into its design. The Project will use state-of-the-art enclosed pressure SF<sub>6</sub> circuit breakers with leak detection, which is consistent with BACT for other similar projects.

#### **4.9 Emission Limit and Control Technology Summaries**

Tables 4-1 and 4-2 summarize the proposed emission limits and associated control technology for the Project.

**Table 4-1: Summary of Proposed BACT/BAT Emission Limits and Associated Control Technologies for the Combustion Turbines**

Pollutant	Emission Rate (lb/MMBtu)	Emission Rate (ppm <sub>v</sub> ) at 15% O <sub>2</sub>	Control Technology	Represents
NO <sub>x</sub> CT only CT w/ DB	0.0077 0.0077	2.0 2.0	DLN and SCR	BACT/BAT
VOC CT only CT w/ DB	0.0013 0.0026	1.0 1.9	Good combustion controls and oxidation catalyst	BACT/BAT
CO CT only CT w/ DB	0.0047 0.0047	2.0 2.0	Good combustion controls and oxidation catalyst	BACT/BAT
PM <sub>10</sub> /PM <sub>2.5</sub> CT only CT w/ DB	0.0047 0.0055	n/a n/a	Low sulfur fuel	BACT/BAT
SO <sub>2</sub> CT only CT w/ DB	0.0015 0.0015	n/a n/a	Low sulfur fuel	BACT/BAT
H <sub>2</sub> SO <sub>4</sub> CT only CT w/ DB	0.0006 0.0007	n/a n/a	Low sulfur fuel	BACT/BAT
GHG <sup>a</sup>	833 <sup>a</sup>	n/a	High efficient combustion technology	BACT/BAT
a. BACT/BAT for GHGs is expressed as lbs CO <sub>2</sub> per MW-hr gross output on an annual basis.				

**Table 4-2: Summary of Proposed BACT/BAT Emission Limits and Associated Control Technologies for the Auxiliary Boiler**

Pollutant	Emission Rate (lb/MMBtu)	Control Technology	Represents
NO <sub>x</sub>	0.020	LNB <sup>a</sup> and FGR	BACT/BAT
VOC	0.006	Good combustion controls	BACT/BAT
CO	0.055	Good combustion controls	BACT/BAT
PM <sub>10</sub> /PM <sub>2.5</sub>	0.008	Low sulfur fuel	BACT/BAT
SO <sub>2</sub>	0.0014	Low sulfur fuel	BACT/BAT
H <sub>2</sub> SO <sub>4</sub>	0.00011	Low sulfur fuel	BACT/BAT
CO <sub>2</sub> e (GHG)	n/a	Good Combustion Controls and Natural gas Combustion	BACT/BAT
a. Low-NO <sub>x</sub> Burner			

**Table 4-3: Summary of Proposed BACT/BAT Emission Limits and Associated Control Technologies for the Emergency Fire Pump**

Pollutant	Emission Rate (g/kW-hr)	Emission Rate (g/hp-hr)	Control Technology	Represents
NO <sub>x</sub>	4.0 <sup>a</sup>	3.0	State-of-the-art Combustion design	BACT/BAT
VOC			State-of-the-art Combustion design	BACT/BAT
CO	3.5	2.6	State-of-the-art Combustion design	BACT/BAT
PM <sub>10</sub> /PM <sub>2.5</sub>	0.2	0.15	State-of-the-art Combustion design	BACT/BAT
SO <sub>2</sub>	--	0.0015 lb/MMBtu	Low sulfur fuel	BACT/BAT
H <sub>2</sub> SO <sub>4</sub>	--	0.000132 g/kW-hr	Low sulfur fuel	BACT/BAT
a. NO <sub>x</sub> limit is 3.5 g/kW-hr; VOC limit is 0.50 g/kW-hr				

**Table 4-4: Summary of Proposed BACT/BAT Emission Limits and Associated Control Technologies for the Emergency Generator**

Pollutant	Emission Rate (g/kW-hr)	Emission Rate (g/hp-hr)	Control Technology	Represents
NO <sub>x</sub>	6.4 <sup>a</sup>	4.8	State-of-the-art Combustion design	BACT/BAT
VOC			State-of-the-art Combustion design	BACT/BAT
CO	3.5	2.6	State-of-the-art Combustion design	BACT/BAT
PM <sub>10</sub> /PM <sub>2.5</sub>	0.2	0.15	State-of-the-art Combustion design	BACT/BAT
SO <sub>2</sub>	--	0.0015 lb/MMBtu	Low sulfur fuel	BACT/BAT
H <sub>2</sub> SO <sub>4</sub>	--	0.000132 g/kW-hr	Low sulfur fuel	BACT/BAT
a. NO <sub>x</sub> limit is 5.61 g/kW-hr; VOC limit is 0.79 g/kW-hr				

## **5. REFERENCES**

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USEPA, 2000. *Compilation of Air Pollutant Emission Factors AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources.*

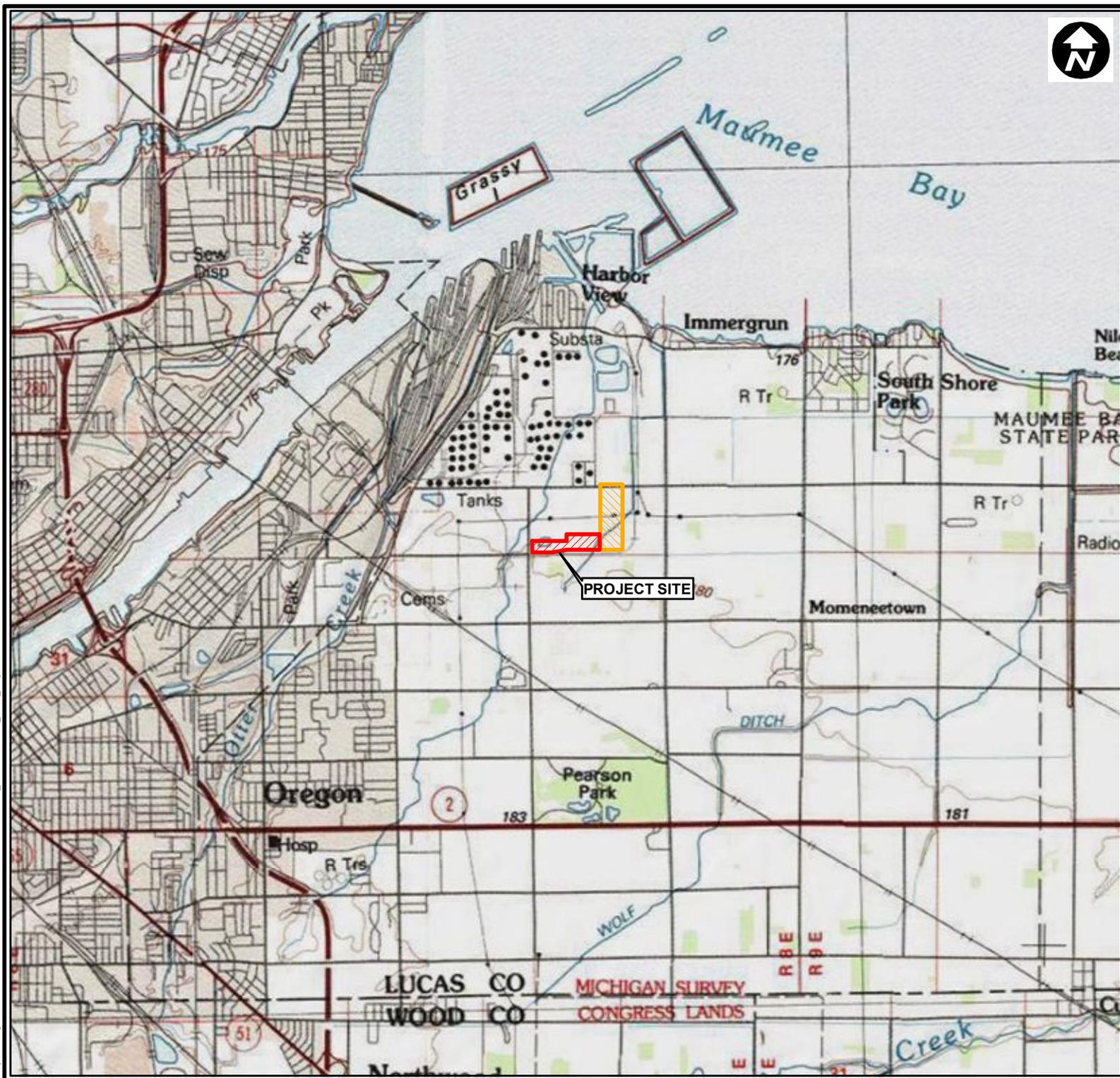
USEPS, 2010. "PSD and Title V Permitting Guidance for Greenhouse Gases," Office of Air Quality Planning and Standards, November 2010.

VCAPCD, 2001. AB2588 Combustion Emission Factors, 2001.

**PSD Permit Application**  
Oregon Clean Energy Center  
Lucas County, OH  
Siemens Turbines, Volume 2

**Figures**

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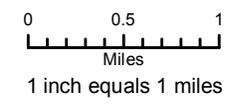


LUCAS COUNTY, OHIO

**Legend**

-  Project Site
-  Construction Laydown Parcel

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**OREGON CLEAN ENERGY CENTER, LLC**

**FIGURE 1  
SITE LOCATION**

**PSD Permit Application**  
Oregon Clean Energy Center  
Lucas County, OH  
Siemens Turbines, Volume 2

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**Appendix A: Printout of Ohio EPA Permit Forms**

Electronic files have not been revised

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**Appendix B: Supporting Calculations**

**Summary of Annual Emissions  
Oregon Clean Energy**

3/12/2013

**Max Annual Emissions - facility wide (including startup and shutdown)**

<i>number of CTs</i>	2	NOx	CO	VOC	SO2	PM10	PM2.5	NH3	H2SO4	Pb	CO2	CO2e
combustion turbines	tpy	183.96	144.32	57.13	36.79	122.64	122.64	166.44	13.14	0.00	2867849.74	2871693.83
ancillary equipment	tpy	9.36	10.21	1.64	0.15	1.06	1.06	0.00	0.01	0.00008	12608.12	12635.79
cooling tower	tpy	0.00	0.00	0.00	0.00	4.51	0.02	0.00	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>TPY</b>	<b>193.32</b>	<b>154.53</b>	<b>58.77</b>	<b>36.94</b>	<b>128.22</b>	<b>123.72</b>	<b>166.44</b>	<b>13.15</b>	<b>0.00008</b>	<b>2,880,457.86</b>	<b>2,884,329.63</b>

91.98 72.16083333 28.56433333 18.396 61.32 61.32 83.22 6.57 0 1433924.871 1435846.916

# Summary of Annual Emissions Oregon Clean Energy

3/12/2013

## Overall Assumptions

number of CTs	2	
duct burning hours	8760	hrs/yr
steady state hours per unit	8760	

## Steady State Emissions Data

*Emissions from Siemens issued on 12/21/12*  
*Emissions without DuctBurning Case 14 (100% load, 59 F)*  
*Emissions with DuctBurning Case 12 (100% load, 90 F)*  
*NOx emissions assume SCR*  
*CO and VOC assume oxidation catalyst*  
*SO2 emissions assume no conversion to SO3 and 0.5 grains/100 SCF*  
*H2SO4 emissions provided by vendor and assume 0.5 grains/100 SCF*

### Each Turbine

		NOx	CO	VOC	SO2	PM10/PM2.5	NH3	H2SO4	CO2	CO2e
Emissions - (Case 14) - No DB	lb/hr	20	12	3.4	3.90	11.8	18	1.4	301814	302110
Emissions - (Case 12) - w/DB	lb/hr	21	13	5.2	4.20	14.0	19	1.5	327380	327819
Emissions from DB	lb/hr	1	1	1.8	0.3	2.2	1	0.1	25566.5	25709.3
Facility operating hours	hr/yr	8760	8760	8760	8760	8760	8760	8760	8760	8760
operating hours no DB	hrs/yr	0	0	0	0	0	0	0	0	0
operating hours with DB	hrs/yr	8760	8760	8760	8760	8760	8760	8760	8760	8760
steady state emissions per turbine	tpy	91.98	56.94	22.776	18.396	61.32	83.22	6.57	1433925	1435847

### Both Turbines

number of turbines		2	2	2	2	2	2	2	2	2
total plant emissions emissions - steady state	tpy	183.96	113.88	45.55	36.79	122.64	166.44	13.14	2867849.7	2871693.8

Plant gross output (case 14)	MW								817.3	
Plant net output (case 14)	MW								797.5	
lbs CO2 per MW-hr gross (case 14)	lb/MW hr								739	
lbs CO2 per MW-hr gross (case 14) + 12.8% marg	lb/MW hr								833.1	

# Summary of Annual Emissions Oregon Clean Energy

3/12/2013

## Overall Assumptions

SU/SD information from Siemens Total Startup & Shutdown Emissions and Fuel Use, Exhaust Mass flow and Temperature dated 1/9/2013

cold starts/unit	50	number/yr	3.00	hours/event	64	minimum hours downtime with event	180	minutes per event
hot starts/unit	0	number/yr	1.37	hours/event	0	minimum hours downtime with event	82	minutes per event
warm starts/unit	250	number/yr	1.63	hours/event	16	minimum hours downtime with event	98	minutes per event

## Emissions

		NOx	CO	VOC	SO2	PM10/PM2.5
Emissions per cold start	lbs	188	546	168	3.6	56
Emissions per hot start	lbs	105	289	114	1.9	22
Emissions per warm start	lbs	129	351	138	2.3	26
cold start - duration of event (include downtime)	hrs	67.00	67.00	67.00	67.00	67.00
hot start - duration of event (include downtime)	hrs	1.37	1.37	1.37	1.37	1.37
warm start - duration of event (include downtime)	hrs	17.63	17.63	17.63	17.63	17.63
cold start - avg hourly emissions (including downtime)	lb/hr	2.81	8.15	2.51	0.05	0.836
hot start - avg hourly emissions (including downtime)	lb/hr	76.83	211.46	83.41	1.4	16.098
warm start - avg hourly emissions (including downtime)	lb/hr	7.32	19.91	7.83	0.13	1.47
steady state average hourly		21.00	13.00	5.20	4.20	14.00
cold start - self correcting?	-	yes	yes	yes	yes	yes
hot start - self correcting?	-	no	no	no	yes	no
warm start - self correcting?	-	yes	no	no	yes	yes
		62.67	182.00	56.00	1.20	18.67
		76.83	211.46	83.41	1.39	16.10
		78.98	214.90	84.49	1.41	15.92

## Dispersion Modeling Parameters (per turbine)

	Exhaust Flow	Exhaust Flow	Temp	Temp	Stack Diameter	Exit Velocity	Exit Velocity
	lbm/hr	acfm	F	K	ft	ft/min	m/s
Cold Start	3,780,292	1,020,973	169.00	349.1	22	2686	13.64
Hot Start	4,240,615	1,152,579	173.00	351.3	22	3032	15.40
Warm Start	4,297,602	1,169,913	174.00	351.9	22	3078	15.63

## Dispersion Modeling Emissions (per turbine)

		NOx	CO
Cold Start	g/s	7.90	22.95
Hot Start	g/s	9.69	26.67
Warm Start	g/s	9.96	27.10

**Emissions From Ancillary Equipment**  
**Oregon Clean Energy**

**Total Emissions form Ancillary Equipment (tpy)**

		NOx	CO	VOC	TSP	SO2	PM10/ PM2.5	lead (Pb)	H2SO4	CO2	CO2e
Auxilliary Boiler	tpy	1.98	5.45	0.59	0.52	0.14	0.79	0.00	0.011	11647.06	11671.00324
Emergency Generator	tpy	6.95	4.34	0.98	0.22	0.008	0.25	0.00007391	1.64E-04	874.81	878.0
Emergency Fire Pump	tpy	0.43	0.43	0.06	0.022	0.0008	0.025	0.00000735	1.63E-05	86.25	86.8
<b>TOTAL</b>	tpy	<b>9.36</b>	<b>10.21</b>	<b>1.64</b>	<b>0.77</b>	<b>0.15</b>	<b>1.06</b>	<b>0.0000813</b>	<b>1.10E-02</b>	<b>12,608.12</b>	<b>12,635.79</b>

**Emissions (lb/hr)**

		NOx	CO	VOC	TSP	SO2	PM10/ PM2.5	lead (Pb)
Auxilliary Boiler		1.980	5.445	0.594	0.792	0.141	0.79	0.00E+00
Emergency Generator		27.791	17.346	3.927	0.882	0.032	0.99	2.96E-04
Emergency Fire Pump		1.727	1.725	0.244	0.088	0.003	0.10	2.94E-05

**Emissions for Modeling (g/s) - annual average**

		NOx	CO	VOC	SO2	PM10/ PM2.5								
Auxilliary Boiler		0.057	0.157	0.0171	0.004072	0.022804	diameter:	4.0 ft	exhaust flow:	12,634 acfm	temperature:	200 F	stack height:	same as HRSG stack

**Emissions for Modeling (g/s) - hourly average**

		NOx	CO	VOC	SO2	PM10/ PM2.5								
Auxilliary Boiler		0.25	0.69	0.07	0.01784	0.10	diameter:	4.0 ft	exhaust flow:	12,634 acfm	temperature:	200 F	stack height:	same as HRSG stack

**Auxilliary Boiler**

		NOx	CO	VOC	TSP	SO2	PM10/ PM2.5		H2SO4	CO2	CH4	N2O	CO2e
Maximum Input Capacity	MMBtu/hr	99	99	99	99	99	99		99	99	99	99	
Emission Factor	lb/MMscf					0.714				120000	2.3	0.64	
Emission Factor	lb/MMBtu	0.020	0.055	0.006	0.008	0.0014	0.008		0.00011	117.65	0.0023	0.0006	
Operating Hours per Years	hrs/yr	2000	2000	2000	2000	2000	2000		2000	2000	2000	2000	
<b>Potential Emissions</b>	lb/hr	1.98	5.45	0.59	0.79	0.14	0.79		0.011	11647.059	0.223	0.062	
<b>Potential Emissions</b>	tpy	<b>1.98</b>	<b>5.45</b>	<b>0.59</b>	<b>0.79</b>	<b>0.14</b>	<b>0.79</b>		<b>0.011</b>	<b>11647.1</b>	<b>0.223</b>	<b>0.062</b>	<b>11671.0032</b>

emission factors for NOx, CO, VOC, PM10/PM2.5 based on emission factors from recent permit (NEC)

emissions of SO2 assume a sulfur content in NG of 0.5 gr/100 dscf

emissions of H2SO4 assumes a 5% conversion of SO2 --> SO3 (on a molar basis)

CO2 Emission Factor from AP-42 Table 1.4-2 (provided in lb/MMscf and converted to lb/MMBtu)

## Emissions From Ancillary Equipment Oregon Clean Energy

### Emergency Generator

		NOx	CO	VOC	TSP	SO2	PM10/ PM2.5	lead (Pb)	H2SO4	CO2	CH4	N2O	CO2e
Power rating	kW	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250.0	2250.0	
Power rating	hp	3016.6	3016.6	3016.6	3016.6	3016.6	3016.6	3016.6	3016.6	3016.6	3016.5750	3016.5750	
emission factor	g/kW hr	5.61	3.5	0.79	0.18		0.2		1.32E-04				
emission factor	lb/MMBtu							1.40E-05				0.0013216	
emission factor	g/bhp hr					0.0048		4.45E-05		5.27E+02	2.88E-02	4.20E-03	
emissions	lb/hr	27.791	17.346	3.927	0.882	0.032	0.991	0.0003	6.54E-04	3499.227	0.191	0.028	3511.894
operating hours per year	hrs/yr	500	500	500	500	500	500	500	500.00	500.00	500.00	500.00	
<b>Potential Emissions</b>	<b>tpy</b>	<b>6.95</b>	<b>4.34</b>	<b>0.98</b>	<b>0.22</b>	<b>0.0079</b>	<b>0.25</b>	<b>7.39E-05</b>	<b>0.0001635</b>	<b>874.8</b>	<b>0.0478</b>	<b>0.0070</b>	<b>878.0</b>

emission factors for NOx, CO, VOC and PM10/PM2.5 based on Tier 2 emission standards provided in 40 CFR 89 Subpart B - Table 1.

The Tier 2 emission factor for NOx and VOC (non methane hydrocarbons (NMHC)) provided in Subpart B - Table 1 is provided as a combined factor (NOx+NMHC). The breakdown of NOx and NMHC in this total factor was estimated using the Tier 1 factors provided in 40 CFR 89 Subpart B Table 1. For example, the NOx emission factor was determined via the following equation:  $6.4 * (9.2/(9.2+1.3))$

TSP emission factor = 89% of PM-10 emission factor, based on AP-42, Table 3.4-2 distribution of particulate emissions for stationary diesel engines.

emission factor for SO2 based on ULSD fuel oil (sulfur content of 15 ppmw or 0.0015 lb/MMBtu) and fuel input ratio of 7000 Btu/hp hr (AP-42 Section 3.3)

emission factor for Pb based on AP-42 Section 3.1 (1.4e-5 lb/MMBtu) and fuel input of 7000 Btu/hp hr (AP-42 Section 3.3)

emission factor for H2SO4 (1.32e-4 g/kW hr) converted from Page 276 of Toxic air pollutant emission factors - a compilation for selected compounds and sources (EPA, 1990) and fuel input ratio of 7000 Btu/hp

emission factor for CO2 (1.16 lb/bhp hr) from AP-42 Table 3.4-1

emission factor for CH4 (6.345e-5 lb/bhp hr) from AP-42 Table 3.4-1

emission factor for N2O (0.6 g/MMBtu) from Climate Registry General Reporting Protocol (GRP) (Emission Factors by Fuel Type and Sector)

### Emergency Fire Pump

		NOx	CO	VOC	TSP	SO2	PM10/ PM2.5	lead (Pb)	H2SO4	CO2	CH4	N2O	CO2e
Power rating	hp	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	
Power rating	kW	223.8	223.8	223.8	223.8	223.8	223.8	223.8	223.8	223.8	223.8	223.8	
emission factor	g/kW hr	3.50	3.5	0.50	0.18		0.2		1.32E-04				
emission factor	lb/MMBtu							1.40E-05				0.0013216	
emission factor	g/bhp hr					0.0048		4.45E-05		5.22E+02	1.01E-01	4.20E-03	
emissions	lb/hr	1.727	1.725	0.244	0.088	0.003	0.099	2.94E-05	6.51E-05	3.45E+02	6.69E-02	2.78E-03	347.265252
operating hours per year	hrs/yr	500	500	500	500	500	500	500	500	500	500	500	
<b>Potential Emissions</b>	<b>tpy</b>	<b>0.43</b>	<b>0.43</b>	<b>0.06</b>	<b>0.022</b>	<b>0.0008</b>	<b>0.025</b>	<b>7.35E-06</b>	<b>1.63E-05</b>	<b>86.25</b>	<b>0.016725</b>	<b>0.0006938</b>	<b>86.8</b>

emission factors for NOx, CO, VOC and PM10/PM2.5 based on post -2009 emission standards provided in 40 CFR 60 Subpart IIII - Table 4

The post-2009 emission factor for NOx and VOC (non methane hydrocarbons (NMHC)) provided in Subpart IIII - Table 4 is provided as a combine factor (NOx+NMHC). The breakdown of NOx and NMHC in this total factor was estimated using the Tier 1 factors provided in 40 CFR 89 Subpart B Table 1. For example, the NOx emission factor was determined via the following equation:  $0.4 * (9.2/(9.2+1.3))$

TSP emission factor = 89% of PM-10 emission factor, based on AP-42, Table 3.4-2 distribution of particulate emissions for stationary diesel engines.

emission factor for SO2 based on ULSD fuel oil (sulfur content of 15 ppmw or 0.0015 lb/MMBtu) and fuel input ratio of 7000 Btu/hp hr (AP-42 Section 3.3)

emission factor for Pb based on AP-42 Section 3.1 (1.4e-5 lb/MMBtu) and fuel input of 7000 Btu/hp hr (AP-42 Section 3.3)

emission factor for H2SO4 (1.32e-4 g/kW hr) converted from Page 276 of Toxic air pollutant emission factors - a compilation for selected compounds and sources (EPA, 1990) and fuel input ratio of 7000 Btu/hp

emission factor for CO2 (1.15 lb/bhp hr) from AP-42 Table 3.3-1

emission factor for CH4 (2.47e-3 lb/hp hr) from AP-42 Table 3.3-1

emission factor for N2O (0.6 g/MMBtu) from Climate Registry General Reporting Protocol (GRP) (Emission Factors by Fuel Type and Sector)

Fuel Type	Sector	CO <sub>2</sub> Emission Factor	CH <sub>4</sub> Emission Factor	N <sub>2</sub> O Emission Factor
Natural Gas	Industrial	0.054 kg/scf	1 g/MMBtu	0.1 g/MMBtu
Coal	Industrial	2.054.32 kg/short ton	11 g/MMBtu	1.6 g/MMBtu
Distillate Fuel	Commercial	10.13 kg/gallon	11 g/MMBtu	0.6 g/MMBtu

# Estimated Emissions from Cooling Tower Oregon Clean Energy

based on NTE Energy information (12/15/12)

## Emissions

		<b>PM10</b>	<b>PM2.5</b>
recirculating water flow	gpm	322000	322000
drift eliminator efficiency	%	0.0005%	0.0005%
TDS in recirculating water	mg/l	2030.5	2030.5
particle size distribution	%	63.00%	0.21%
estimated emissions	lb/hr	1.031	0.0034
estimated emissions	tpy	4.51	0.015
number of cells	-	16	16
estimated emissions per cell	lb/hr	0.06	0.00021
estimated emissions per cell	g/s	0.0081	0.0000271

<b>Dispersion Modeling Parameters (per cell)</b>		
diameter	m	10
diameter	ft	33.0
exhaust temperature	K	ambient + 10 K
exhaust flow rate	acfm	1422426.25
exit velocity	ft/min	1663.1
exit velocity	m/s	8.45

SITE CONDITIONS:	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5	CASE 6	CASE 7	CASE 8	CASE 9	CASE 10	CASE 11	CASE 12	CASE 13	CASE 14	CASE 15	CASE 16	CASE 17	CASE 18	CASE 19	CASE 20	CASE 21
FUEL TYPE	natural gas	natural gas																			
LOAD LEVEL	100%	75%	60%	100%	87%	75%	60%	100%	94%	75%	60%	100%	100%	100%	100%	75%	60%	100%	100%	100%	100%
NET FUEL HEATING VALUE, Btu/lbm (LHV)	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981
GROSS FUEL HEATING VALUE, Btu/lbm (HHV)	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299
EVAPORATIVE COOLER STATUS	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF										
DUCT BURNER STATUS	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF										
AMBIENT DRY BULB TEMPERATURE, °F	-8	-8	-8	0	0	0	0	30	30	30	30	59	59	59	59	59	59	90	90	90	90
AMBIENT RELATIVE HUMIDITY, %	187	171	166	188	179	171	166	185	181	170	165	176	175	184	183	171	166	176	172	185	183
BAROMETRIC PRESSURE, psia	14.387	14.387	14.387	14.387	14.387	14.387	14.387	14.387	14.387	14.387	14.387	14.387	14.387	14.387	14.387	14.387	14.387	14.387	14.387	14.387	14.387
GT FUEL FLOW, lb m/hr	125,657	99,067	84,796	125,823	110,626	98,933	84,596	118,669	111,909	93,955	80,447	110,899	109,337	110,922	109,360	87,312	75,019	104,121	99,132	<b>104132</b>	99164
DUCT BURNER FUEL FLOW, lb m/hr	0	0	0	0	0	0	0	0	0	0	0	8,397	8,725	0	0	0	9918	11271	0	0	0
Net Power kW	888,300	689,400	571,200	891,000	783,800	690,200	571,700	848,200	799,100	657,100	544,900	844,700	835,200	797,500	786,200	609,400	506,300	800,500	769,700	744,700	706,600
Gross Power kW	908,700	708,600	589,600	911,500	803,500	709,400	590,100	868,400	819,000	676,100	563,200	865,000	855,500	817,300	805,900	628,000	524,300	820,500	789,600	764,000	725,700

HRSG STACK EXHAUST GAS	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5	CASE 6	CASE 7	CASE 8	CASE 9	CASE 10	CASE 11	CASE 12	CASE 13	CASE 14	CASE 15	CASE 16	CASE 17	CASE 18	CASE 19	CASE 20	CASE 21
EXHAUST FLOW, lb m/hr	5,301,328	4,116,166	3,626,793	5,334,977	4,635,244	4,127,854	3,635,469	5,101,704	4,807,998	4,024,805	3,557,036	4,800,442	4,749,089	4,792,045	4,740,363	3,852,114	3,428,001	4,516,209	4,354,679	4,506,292	4,343,417
HRSG STACK TEMPERATURE, °F	187	171	166	188	179	171	166	185	181	170	165	176	175	184	183	171	166	176	172	185	183
OXYGEN, Vol. %	11.83	11.69	11.95	11.87	11.76	11.73	11.98	11.93	11.93	11.9	12.17	11.18	11.21	11.82	11.88	12.03	12.32	10.82	10.88	11.62	11.82
CARBON DIOXIDE, Vol. %	4.15	4.21	4.1	4.13	4.18	4.19	4.08	4.07	4.07	4.08	3.96	4.33	4.33	4.04	4.02	3.96	3.83	4.37	4.39	4.01	3.96
WATER, Vol. %	8.29	8.42	8.19	8.29	8.39	8.42	8.19	8.51	8.51	8.54	8.29	9.89	9.73	9.31	9.13	9	8.74	11.23	10.78	10.52	9.94
NITROGEN, Vol. %	74.85	74.8	74.89	74.83	74.79	74.78	74.87	74.61	74.61	74.6	74.7	73.74	73.86	74.09	74.14	74.14	74.25	72.72	73.09	73	73.42
ARGON, Vol. %	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.87	0.87	0.87	0.88	0.86	0.87	0.87	0.87	0.87	0.87	0.85	0.86	0.86	0.86
MOLECULAR WEIGHT	28.42	28.41	28.43	28.42	28.41	28.41	28.43	28.39	28.39	28.39	28.41	28.26	28.28	28.3	28.32	28.33	28.34	28.12	28.17	28.17	28.23

HRSG EXHAUST STACK EMISSIONS WITH 0.2 GRAINS S PER 100 SCF (Based on USEPA Test Methods):	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5	CASE 6	CASE 7	CASE 8	CASE 9	CASE 10	CASE 11	CASE 12	CASE 13	CASE 14	CASE 15	CASE 16	CASE 17	CASE 18	CASE 19	CASE 20	CASE 21
NOX, ppmvd @ 15% O2	2	2	2	2	2	2	2	2	2	2	2	2.0	2.0	2.0	2	2	2	2	2	2	2
NOX, lbm/hr as NO2	22	17	15	22	19	17	15	21	20	17	14	21.0	21.0	20.0	19	15	13	20	19	18	17
NH3, ppmvd @ 15% O2	5	5	5	5	5	5	5	5	5	5	5	5.0	5.0	5.0	5	5	5	5	5	5	5
NH3, lbm/hr	20	16	14	20	18	16	14	19	18	15	13	19.0	19.0	18.0	18	14	12	19	18	17	16
CO, ppmvd @ 15% O2	2	2	2	2	2	2	2	2	2	2	2	2.0	2.0	2.0	2	2	2	2	2	2	2
CO, lbm/hr	13	11	9	13	12	11	9	13	12	10	9	13.0	13.0	12.0	12	9	8	12	12	11	11
VOC, ppmvd @ 15% O2 as CH4	1	1	1	1	1	1	1	1	1	1	1	1.9	1.9	1	1	1	1.9	1.9	1.9	1	1
VOC, lbm/hr as CH4	3.9	3.1	2.6	3.9	3.4	3.1	2.6	3.7	3.5	2.9	2.5	5.2	5.3	3.4	3.4	2.7	2.3	5.6	5.9	3.2	3.1
SO2, lbm/hr	1.8	1.4	1.2	1.8	1.6	1.4	1.2	1.7	1.6	1.4	1.2	1.7	1.7	1.6	1.6	1.3	1.1	1.6	1.6	1.5	1.4
H2SO2, lbm/hr	0.7	0.5	0.5	0.7	0.6	0.5	0.5	0.6	0.6	0.5	0.4	0.6	0.6	0.6	0.5	0.4	0.6	0.6	0.6	0.6	0.5
PARTICULATES, lbm/hr	11.9	9.3	8.2	12	10.4	9.3	8.2	11.5	10.8	9.1	8	12.8	12.8	10.7	10.6	8.6	8	12.4	12.5	10	9.7

HRSG EXHAUST STACK EMISSIONS WITH 0.3 GRAINS S PER 100 SCF (Based on USEPA Test Methods):	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5	CASE 6	CASE 7	CASE 8	CASE 9	CASE 10	CASE 11	CASE 12	CASE 13	CASE 14	CASE 15	CASE 16	CASE 17	CASE 18	CASE 19	CASE 20	CASE 21
SO2, lbm/hr	2.7	2.1	1.8	2.7	2.4	2.1	1.8	2.5	2.4	2	1.7	2.5	2.5	2.4	2.3	1.9	1.6	2.4	2.4	2.2	2.1
H2SO2, lbm/hr	1	0.8	0.7	1	0.9	0.8	0.7	0.9	0.9	0.7	0.6	0.9	0.9	0.9	0.7	0.6	0.9	0.9	0.9	0.8	0.8
PARTICULATES, lbm/hr	12.4	9.6	8.5	12.4	10.8	9.6	8.5	11.9	11.2	9.4	8.3	13.2	13.2	11.1	11	8.9	8	12.8	12.8	10.3	10

HRSG EXHAUST STACK EMISSIONS WITH 0.5 GRAINS S PER 100 SCF (Based on USEPA Test Methods):	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5	CASE 6	CASE 7	CASE 8	CASE 9	CASE 10	CASE 11	CASE 12	CASE 13	CASE 14	CASE 15	CASE 16	CASE 17	CASE 18	CASE 19	CASE 20	CASE 21
SO2, lbm/hr	4.4	3.5	3	4.4	3.9	3.5	3	4.2	3.9	3.3	2.8	4.2	4.2	3.9	3.9	3.1	2.7	4	3.9	3.7	3.5
H2SO2, lbm/hr	1.6	1.3	1.1	1.6	1.4	1.3	1.1	1.5	1.4	1.2	1	1.5	1.5	1.4	1.4	1.1	1	1.5	1.4	1.3	1.3
PARTICULATES, lbm/hr	13.2	10.3	9	13.3	11.6	10.3	9.1	12.7	11.9	10	8.8	14	13.9	11.8	11.7	9.5	8.4	13.6	13.6	11	10.7

ARCADIS ADDED CALCULATIONS	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5	CASE 6	CASE 7	CASE 8	CASE 9	CASE 10	CASE 11	CASE 12	CASE 13	CASE 14	CASE 15	CASE 16	CASE 17	CASE 18	CASE 19	CASE 20	CASE 21
GT Heat Input (MMBtu/hr)	2927.7	2308.162033	1975.662004	2931.550077	2577.475174	2305.039967	1971.002204	2764.869031	2607.367791	2189.057545	1874.334653	2583.835801	2547.442763	2584.371678	2547.97864	2034.282288	1747.867681	2425.915179	2309.676468	2426.171468	2310.422036
Duct Burner Heat Input (MMBtu/hr)	0	0	0	0	0	0	0	0	0	0	0	195.641703	203.283775	0	0	0	0	231.079482	262.603029	0	0
NOx (lb/MMBtu)	0.007514476	0.007365168	0.007592392	0.007504562	0.007371555	0.007375143	0.007610342	0.007595296	0.007670571	0.007765899	0.007469317	0.0076	0.007634347	0.0077	0.007456891	0.007373608	0.007437634	0.007527302	0.007386445	0.007419096	0.007357963
CO (lb/MMBtu)	0.004440372	0.004765697	0.004555435	0.004434514	0.004655719	0.004772152	0.004566205	0.00470185	0.004602343	0.004568176	0.004801704	0.0047	0.004726024	0.0046	0.004709616	0.004424165	0.004577006	0.004516381	0.004665123	0.004533892	0.004761035
VOC (lb/MMBtu)	0.001332112	0.00134306	0.001316015	0.001330354	0.00131912	0.001344879	0.001319126	0.001338219	0.00134235	0.001324771	0.001333807	0.0019	0.001926764	0.0013	0.001334391	0.001327249	0.001315889	0.001327249	0.002293685	0.00131895	0.001341746
SO2 (lb/MMBtu)	0.001502895	0.001516358	0.001518478	0.001500912	0.001513109	0.001518412	0.001522068	0.001519059	0.001495761	0.001507498	0.001493863	0.0015	0.001526869	0.0015	0.001530625	0.001523879	0.001544739	0.00150546	0.001516165	0.001525036	0.001514875
H2SO4 (lb/MMBtu)	0.000546507	0.000563219	0.000556775	0.000545786	0.000543167	0.000563982	0.000558092	0.000542521	0.00053694	0.000548181	0.000533523	0.0005	0.00054531	0.0005	0.000549455	0.000540731					

SITE CONDITIONS:	CASE 22	CASE 23	CASE 24	CASE 25	CASE 26	CASE 27	CASE 28
FUEL TYPE	natural gas						
LOAD LEVEL	75%	60%	100%	100%	100%	75%	60%
NET FUEL HEATING VALUE, Btu/lbm (LHV)	20981	20981	20981	20981	20981	20981	20981
GROSS FUEL HEATING VALUE, Btu/lbm (HHV)	23299	23299	23299	23299	23299	23299	23299
EVAPORATIVE COOLER STATUS	OFF	OFF	ON	OFF	OFF	OFF	OFF
DUCT BURNER STATUS	OFF	OFF	ON	ON	OFF	OFF	OFF
AMBIENT DRY BULB TEMPERATURE, °F	90	90	105	105	105	105	105
AMBIENT RELATIVE HUMIDITY, %	174	169	176	171	183	175	171
BAROMETRIC PRESSURE, psia	14.387	14.387	14.387	14.387	14.387	14.387	14.387
GT FUEL FLOW, lb m/hr	79716	68714	101504	92775	92823	75032	65085
DUCT BURNER FUEL FLOW, lb m/hr	0	0	10602	12895	0	0	0
Net Power kW	548,800	455,800	781,000	725,800	654,000	509,300	422,900
Gross Power kW	566,900	473,300	800,900	745,400	672,700	527,200	440,200

HRSG STACK EXHAUST GAS	CASE 22	CASE 23	CASE 24	CASE 25	CASE 26	CASE 27	CASE 28
EXHAUST FLOW, lb m/hr	3,637,630	3,259,137	4,397,117	4,164,435	4,151,557	3,504,193	3,146,213
HRSG STACK TEMPERATURE, °F	174	169	176	171	183	175	171
OXYGEN, Vol. %	12.16	12.46	10.62	10.81	11.92	12.27	12.54
CARBON DIOXIDE, Vol. %	3.81	3.67	4.4	4.38	3.87	3.71	3.59
WATER, Vol. %	9.64	9.36	11.97	11.23	10.23	9.92	9.68
NITROGEN, Vol. %	73.53	73.64	72.16	72.73	73.11	73.23	73.32
ARGON, Vol. %	0.86	0.86	0.85	0.85	0.86	0.86	0.86
MOLECULAR WEIGHT	28.25	28.26	28.04	28.12	28.19	28.2	28.22

HRSG EXHAUST STACK EMISSIONS WITH 0.2 GRAINS S I	CASE 22	CASE 23	CASE 24	CASE 25	CASE 26	CASE 27	CASE 28
NOX, ppmvd @ 15% O 2	2	2	2	2	2	2	2
NOX, lbm/hr as NO2	14	12	20	19	16	13	11
NH3, ppmvd @ 15% O 2	5	5	5	5	5	5	5
NH3, lbm/hr	13	11	18	17	15	12	11
CO, ppmvd @ 15% O 2	2	2	2	2	2	2	2
CO, lbm/hr	9	7	12	11	10	8	7
VOC, ppmvd @ 15% O 2 as CH4	1	1	1.9	1.9	1	1	1
VOC, lbm/hr as CH4	2.5	2.1	5.8	6.4	2.9	2.3	2
SO2, lbm/hr	1.2	1	1.6	1.5	1.3	1.1	1
H2SO2, lbm/hr	0.4	0.4	0.6	0.6	0.5	0.4	0.4
PARTICULATES, lbm/hr	8.1	8	12.3	12.4	9.2	8	8

HRSG EXHAUST STACK EMISSIONS WITH 0.3 GRAINS S I	CASE 22	CASE 23	CASE 24	CASE 25	CASE 26	CASE 27	CASE 28
SO2, lbm/hr	1.7	1.5	2.4	2.3	2	1.6	1.4
H2SO2, lbm/hr	0.6	0.6	0.9	0.8	0.7	0.6	0.5
PARTICULATES, lbm/hr	8.4	8	12.7	12.8	9.5	8	8

HRSG EXHAUST STACK EMISSIONS WITH 0.5 GRAINS S I	CASE 22	CASE 23	CASE 24	CASE 25	CASE 26	CASE 27	CASE 28
SO2, lbm/hr	2.8	2.4	3.9	3.7	3.3	2.7	2.3
H2SO2, lbm/hr	1	0.9	1.4	1.4	1.2	1	0.9
PARTICULATES, lbm/hr	8.9	8	13.4	13.5	10.1	8.5	8

ARCADIS ADDED CALCULATIONS							
GT Heat Input (MMBtu/hr)	1857.303084	1600.967486	2364.941696	2161.564725	2162.683077	1748.170568	1516.415415
Duct Burner Heat Input (MMBtu/hr)	0	0	247.015998	300.440605	0	0	0
<b>NOx (lb/MMBtu)</b>	0.007537811	0.007495468	0.007657092	0.007717286	0.007398218	0.007436345	0.007253949
<b>CO (lb/MMBtu)</b>	0.004845736	0.004372356	0.004594255	0.004467903	0.004623886	0.004576212	0.004616149
<b>VOC (lb/MMBtu)</b>	0.001346038	0.001311707	0.002220557	0.002599507	0.001340927	0.001315661	0.0013189
<b>SO2 (lb/MMBtu)</b>	0.001507562	0.001499094	0.001493133	0.00150284	0.001525882	0.001544472	0.001516735
<b>H2SO4 (lb/MMBtu)</b>	0.000538415	0.00056216	0.000535996	0.000568642	0.000554866	0.000572027	0.000593505
<b>PM10/PM2.5 (lb/MMBtu)</b>	0.004791894	0.004996978	0.005130252	0.005483335	0.004670125	0.004862226	0.005275599
<b>NH3 (lb/MMBtu)</b>	0.006999396	0.006870845	0.006891383	0.00690494	0.006935829	0.006864319	0.007253949

CO2 Emission Factor- turbine - lb/MMBtu (40 cfr 98)	116.784141	116.784141	116.784141	116.784141	116.784141	116.784141	116.784141
CO2 Emission Factor- duct burner - lb/MMBtu (AP-42)	141	142	143	144	145	146	147
CH4 Emission Factor - turbine - lb/MMBtu (40 CFR 98)	0.002202643	0.002202643	0.002202643	0.002202643	0.002202643	0.002202643	0.002202643
CH4 Emission Factor - duct burner - lb/MMBtu (AP-42)	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023
N2O Emission Factor - turbine - lb/MMBtu (40 CFR 98)	0.000220264	0.000220264	0.000220264	0.000220264	0.000220264	0.000220264	0.000220264
N2O Emission Factor - duct burner - lb/MMBtu (AP-42)	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
<b>CO2 Emissions lb/hr</b>	<b>216904</b>	<b>186968</b>	<b>311511</b>	<b>295700</b>	<b>252567</b>	<b>204159</b>	<b>177093</b>
CH4 Emissions lb/hr	4.1	3.5	5.8	5.5	4.8	3.9	3.3
N2O Emissions lb/hr	0.4	0.4	1.1	1.1	0.5	0.4	0.3
<b>CO2e Emissions lb/hr</b>	<b>217116</b>	<b>187151</b>	<b>311962</b>	<b>296167</b>	<b>252815</b>	<b>204359</b>	<b>177267</b>

formaldehyde emission factor - turbine (lb/MMBtu) (CARB- CATEF)	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
formaldehyde emission factor - DB (lb/MMBtu) (AP-42, 1.4-3)	7.89E-05						
toluene emission factor - turbine (lb/MMBtu) (AP-42, 3.1-3)	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013
toluene emission factor - DB (lb/MMBtu) (AP-42, 1.4-3)	3.58E-06						
xylene emission factor - turbine (lb/MMBtu) (AP-42, 3.1-3)	0.000064	0.000064	0.000064	0.000064	0.000064	0.000064	0.000064
xylene emission factor - DB (lb/MMBtu) (AP-42, 1.4-3)	0	0	0	0	0	0	0
<b>formaldehyde emissions (lb/hr)</b>	<b>0.204</b>	<b>0.176</b>	<b>0.280</b>	<b>0.261</b>	<b>0.238</b>	<b>0.192</b>	<b>0.167</b>
<b>toluene emissions (lb/hr)</b>	<b>0.241</b>	<b>0.208</b>	<b>0.308</b>	<b>0.282</b>	<b>0.281</b>	<b>0.227</b>	<b>0.197</b>
<b>xylene emissions (lb/hr)</b>	<b>0.119</b>	<b>0.102</b>	<b>0.151</b>	<b>0.138</b>	<b>0.138</b>	<b>0.112</b>	<b>0.097</b>

Oregon Clean Energy  
Dispersion Modeling Parameters (per turbine)

developed by ARCADIS based on Siemens Data (as provided below)

SITE CONDITIONS:	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5	CASE 6	CASE 7	CASE 8	CASE 9	CASE 10	CASE 11	CASE 12	CASE 13	CASE 14	CASE 15	CASE 16	CASE 17	CASE 18	CASE 19	CASE 20	CASE 21	CASE 22	CASE 23
LOAD LEVEL	100%	75%	60%	100%	87%	75%	60%	100%	94%	75%	60%	100%	100%	100%	100%	75%	60%	100%	100%	100%	100%	75%	60%
AMBIENT DRY BULB TEMPERATURE, °F	-8	-8	-8	0	0	0	0	30	30	30	30	59	59	59	59	59	59	90	90	90	90	90	90
EVAPORATIVE COOLER STATUS	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
DUCT BURNER STATUS	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
exhaust flow rate (scfm) (@77 F)	1,221,494	948,751	835,366	1,229,247	1,068,396	951,445	837,364	1,176,740	1,108,995	928,347	819,875	1,112,346	1,099,668	1,108,831	1,096,097	890,396	792,085	1,051,694	1,012,279	1,047,522	1,007,515	843,200	755,199
stack gas temperature (K)	359.3	350.4	347.6	359.8	354.8	350.4	347.6	358.2	355.9	349.8	347.0	353.2	352.6	357.6	357.0	350.4	347.6	353.2	350.9	358.2	357.0	352.0	349.3
stack gas temperature (F)	187	171	166	188	179	171	166	185	181	170	165	176	175	184	183	171	166	176	172	185	183	174	169
exhaust flow rate (acfm)	1,471,707	1,114,827	973,816	1,483,338	1,271,331	1,117,993	976,145	1,413,403	1,323,773	1,089,122	954,231	1,317,415	1,300,353	1,329,771	1,312,459	1,046,257	923,362	1,245,582	1,191,360	1,258,197	1,206,391	995,510	884,581
stack diameter (ft)	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
stack exit velocity (ft/min)	3872	2933	2562	3902	3344	2941	2568	3718	3482	2865	2510	3466	3421	3498	3453	2752	2429	3277	3134	3310	3174	2619	2327
stack exit velocity (m/s)	19.67	14.90	13.01	19.82	16.99	14.94	13.04	18.89	17.69	14.55	12.75	17.61	17.38	17.77	17.54	13.98	12.34	16.65	15.92	16.81	16.12	13.30	11.82
NOx emissions (g/s)	2.77	2.14	1.89	2.77	2.40	2.14	1.89	2.65	2.52	2.14	1.77	2.65	2.65	2.52	2.40	1.89	1.64	2.52	2.40	2.27	2.14	1.77	1.51
CO emissions (g/s)	1.64	1.39	1.14	1.64	1.51	1.39	1.14	1.64	1.51	1.26	1.14	1.64	1.64	1.51	1.51	1.14	1.01	1.51	1.51	1.39	1.39	1.14	0.88
SO2 emissions (g/s)	0.55	0.44	0.38	0.55	0.49	0.44	0.38	0.53	0.49	0.42	0.35	0.53	0.53	0.49	0.49	0.39	0.34	0.50	0.49	0.47	0.44	0.35	0.30
PM10/PM2.5 emissions (g/s)	1.66	1.30	1.14	1.68	1.46	1.30	1.15	1.60	1.50	1.26	1.11	1.77	1.75	1.49	1.48	1.20	1.06	1.72	1.72	1.39	1.35	1.12	1.01
formaldehyde emissions (g/s)	0.0406	0.0320	0.0274	0.0407	0.0358	0.0320	0.0273	0.0384	0.0362	0.0304	0.0260	0.0378	0.0374	0.0359	0.0353	0.0282	0.0242	0.0360	0.0347	0.0337	0.0321	0.0258	0.0222
toluene emissions (g/s)	0.0480	0.0378	0.0324	0.0481	0.0423	0.0378	0.0323	0.0453	0.0427	0.0359	0.0307	0.0424	0.0419	0.0424	0.0418	0.0334	0.0287	0.0399	0.0380	0.0398	0.0379	0.0304	0.0262
xylene emissions (g/s)	0.0236	0.0186	0.0159	0.0237	0.0208	0.0186	0.0159	0.0223	0.0210	0.0177	0.0151	0.0209	0.0206	0.0209	0.0206	0.0164	0.0141	0.0196	0.0186	0.0196	0.0186	0.0150	0.0129

Oregon Clean Energy  
Dispersion Modeling Parameters (per tu

SITE CONDITIONS:		CASE 24	CASE 25	CASE 26	CASE 27	CASE 28
LOAD LEVEL		100%	100%	100%	75%	60%
AMBIENT DRY BULB TEMPERATURE, °F		105	105	105	105	105
EVAPORATIVE COOLER STATUS		ON	OFF	OFF	OFF	OFF
DUCT BURNER STATUS		ON	ON	OFF	OFF	OFF
exhaust flow rate (scfm) (@77 F)		1,026,883	969,776	964,377	813,710	730,066
stack gas temperature (K)		353.2	350.4	357.0	352.6	350.4
stack gas temperature (F)		176	171	183	175	171
exhaust flow rate (acfm)		1,216,196	1,139,532	1,154,738	962,208	857,861
stack diameter (ft)		22	22	22	22	22
stack exit velocity (ft/min)		3199	2998	3038	2531	2257
stack exit velocity (m/s)		16.25	15.23	15.43	12.86	11.46
NOx emissions (g/s)		2.52	2.40	2.02	1.64	1.39
CO emissions (g/s)		1.51	1.39	1.26	1.01	0.88
SO2 emissions (g/s)		0.49	0.47	0.42	0.34	0.29
PM10/PM2.5 emissions (g/s)		1.69	1.70	1.27	1.07	1.01
formaldehyde emissions (g/s)		0.0353	0.0330	0.0300	0.0243	0.0210
toluene emissions (g/s)		0.0389	0.0356	0.0355	0.0287	0.0249
xylene emissions (g/s)		0.0191	0.0174	0.0175	0.0141	0.0122

**PSD Permit Application**  
Oregon Clean Energy Center  
Lucas County, OH  
Siemens Turbines, Volume 2

**Appendix C: RBLC Tables**

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## RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: NOx

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
*TX-0618	CHANNEL ENERGY CENTER LLC	TX	PSDTX955M1	10/15/2012	Combined Cycle Turbine	180	MW	Selective catalytic reduction	2	PPMVD	LAER	0	
*TX-0619	DEER PARK ENERGY CENTER	TX	PSDTX979M2	9/26/2012	Combined Cycle Turbine	180	MW	Selective Catalytic Reduction	2	PPMVD	LAER	0	
*TX-0620	ES JOSLIN POWER PLANT	TX	PSDTX1256	9/12/2012	Combined cycle gas turbine	195	MW	Selective catalytic reduction	2	PPMVD	BACT-PSD	0	
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP03)	40	MW	SCR		PPMV AT 15% 5 O2	BACT-PSD	36	TONS
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Combined Cycle Turbine (EP01)	40	MW	SCR		PPMV AT 15% 3 O2	BACT-PSD	25.5	TONS
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Combined Cycle Turbine (EP02)	40	MW	SCR		PPMV AT 15% 3 O2	BACT-PSD	25.5	TONS
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP04)	40	MW	SCR		PPMV AT 15% 5 O2	BACT-PSD	36	TONS
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP05)	40	MW	SCR		PPMV AT 15% 5 O2	BACT-PSD	36	TONS
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Generation Turbines (2)	286	MMBTU/H	water injection	28.68	LB/H	BACT-PSD	25	PPMV
*MI-0402	SUMPTER POWER PLANT	MI	81-11	11/17/2011	Combined cycle combustion turbine w/ HRSG	130	MW electrical output	Low NOx burners	9	PPM	BACT-PSD	0	
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	COMBUSTION TURBINE GENERATOR	154	MW	DRY LOW NOX (DLN) COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	2	PPMVD	BACT-PSD	0	
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	COMBUSTION TURBINE GENERATOR	154	MW	DRY LOW NOX (DLN) COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	2	PPMVD	BACT-PSD	0	
TX-0600	THOMAS C. FERGUSON POWER PLANT	TX	PSDTX1244	9/1/2011	Natural gas-fired turbines	390	MW	Dry low NOx burners and Selective Catalytic Reduction	2	PPMVD	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	COMBUSTION TURBINE GENERATOR	180	MW	SCR	2	PPMVD	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	COMBUSTION TURBINE GENERATOR	180	MW	SCR	2	PPMVD	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	COMBUSTION TURBINE GENERATOR	180	MW	SCR	160	LB/HR	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	COMBUSTION TURBINE GENERATOR	180	MW	SCR	2	PPMVD	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	COMBUSTION TURBINE GENERATOR	180	MW	SCR	2	PPMVD	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	COMBUSTION TURBINE GENERATOR	180	MW	SCR	160	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	DRY LOW NOX BURNERS (LNB), SELECTIVE CATALYTIC REDUCTION (SCR)	333.3	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	DRY LOW NOX BURNERS (LNB), SELECTIVE CATALYTIC REDUCTION (SCR)	249.9	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	DRY LOW NOX BURNERS (LNB), SELECTIVE CATALYTIC REDUCTION (SCR)	152	LB/HR	BACT-PSD	0	

## RBLC REVIEW FOR COMBINED CYCLE COMBUSTION TURBINES: NOx

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	DRY LOW NOX BURNERS (LNB), SELECTIVE CATALYTIC REDUCTION (SCR)	115	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	DRY LOW NOX BURNERS (LNB), SELECTIVE CATALYTIC REDUCTION (SCR)	2	PPMVD	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	DRY LOW NOX BURNERS (LNB), SELECTIVE CATALYTIC REDUCTION (SCR)	333.3	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	DRY LOW NOX BURNERS (LNB), SELECTIVE CATALYTIC REDUCTION (SCR)	249.9	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	DRY LOW NOX BURNERS (LNB), SELECTIVE CATALYTIC REDUCTION (SCR)	152	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	DRY LOW NOX BURNERS (LNB), SELECTIVE CATALYTIC REDUCTION (SCR)	115	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	DRY LOW NOX BURNERS (LNB), SELECTIVE CATALYTIC REDUCTION (SCR)	2	PPMVD	BACT-PSD	0	
OR-0048	CARTY PLANT	OR	25-0016-ST-02	12/29/2010	COMBINED CYCLE NATURAL GAS-FIRED ELECTRIC GENERATING UNIT	2866	MMBTU/H	SELECTIVE CATALYTIC REDUCTION (SCR)	2	PPM@15%O2	BACT-PSD	0	
AK-0071	INTERNATIONAL STATION POWER PLANT	AK	AQ0164CPT01	12/20/2010	GE LM6000PF-25 Turbines (4)	59900	hp ISO	Selective Catalytic Reduction and Dry Low Nox Combustion	5	PPMDV	BACT-PSD	0	
*VA-0315	WARREN COUNTY POWER PLANT - DOMINION	VA	81391-007	12/17/2010	Combined cycle turbine and duct burner, 3	2996	MMBTU/H	Two-stage, lean pre-mix dry low-NOx combustor and a selective catalytic reduction (SCR) control system using ammonia injection.	2	PPMVD@15%O	BACT-PSD	0	
TX-0590	KING POWER STATION	TX	PSDTX1125	8/5/2010	Turbine	1350	MW	DLN burners and SCR	2	PPMVD AT 15% O2	LAER	0	
ID-0018	LANGLEY GULCH POWER PLANT	ID	P-2009.0092	6/25/2010	COMBUSTION TURBINE, COMBINED CYCLE W/ DUCT BURNER	2375.28	MMBTU/H	SELECTIVE CATALYTIC REDUCTION (SCR), DRY LOW NOX (DLN), GOOD COMBUSTION PRACTICES (GCP)	2	PPMVD	BACT-PSD	0	
GA-0138	LIVE OAKS POWER PLANT	GA	4911-127-0075-P-02-0	4/8/2010	COMBINED CYCLE COMBUSTION TURBINE - ELECTRIC GENERATING PLANT	600	MW	DRY LOW NOx BURNERS, SELECTIVE CATALYTIC REDUCTION	2.5	PPM@15%O2	BACT-PSD	0	
*CA-1209	HIGH DESERT POWER PROJECT	CA	SE 98-01	3/11/2010	COMBUSTION TURBINE GENERATOR	190	MW	DRY LOW NOX BURNERS (LNB), SELECTIVE CATALYTIC REDUCTION (SCR)	2.5	PPMVD	BACT-PSD	0	
*CA-1209	HIGH DESERT POWER PROJECT	CA	SE 98-01	3/11/2010	COMBUSTION TURBINE GENERATOR	190	MW	DRY LOW NOX BURNERS (LNB), SELECTIVE CATALYTIC REDUCTION (SCR)	2.5	PPMVD	BACT-PSD	0	
*CA-1209	HIGH DESERT POWER PROJECT	CA	SE 98-01	3/11/2010	COMBUSTION TURBINE GENERATOR	190	MW	DRY LOW NOX BURNERS (LNB), SELECTIVE CATALYTIC REDUCTION (SCR)	2.5	PPMVD	BACT-PSD	0	
CA-1177	OTAY MESA ENERGY CENTER LLC	CA	978379	7/22/2009	Gas turbine combined cycle	171.7	MW	SCR	2	PPMVD@15% OXYGEN	OTHER CASE-BY-CASE	0	
CA-1178	APPLIED ENERGY LLC	CA	987494	3/20/2009	Gas turbine combined cycle	0		SCR	2	PPM	BACT-PSD	0	
OK-0129	CHOUTEAU POWER PLANT	OK	2007-115-C(M-1)PSD	1/23/2009	COMBINED CYCLE COGENERATION >25MW	1882	MMBTU/H	SCR AND DRY LOW-NOX	2	PPM	BACT-PSD	0	

## RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: NOx

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
FL-0304	CANE ISLAND POWER PARK	FL	PSD-FL-400 (0970043-014-AC)	9/8/2008	300 MW COMBINED CYCLE COMBUSTION TURBINE	1860	MMBTU/H	SCR	2	PPMVD	BACT-PSD	0	
LA-0136	PLAQUEMINE COGENERATION FACILITY	LA	PSD-LA-659(M2)	7/23/2008	(4) GAS TURBINES/DUCT BURNERS	2876	MMBTU/H	DRY LOW NOX BURNERS, SELECTIVE CATALYTIC REDUCTION	240	LB/H	BACT-PSD	5	PPMVD @ 15% O2
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	TWO COMBINED CYCLE GAS TURBINES	2110	MMBTU/H	LOW NOX TURBINES, DUCT BURNERS COMBINED WITH SCR	30.15	LB/H	BACT-PSD	4	PPMVD@15% O2
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	SCN-3 COLD STARTUP CTG-1 SCN-7 COLD STARTUP CTG-2	2110	MMBTU/H	COMPLETE EVENTS AS QUICKLY AS POSSIBLE ACCORDING TO MANUFACTURE <sub>2</sub> S RECOMMENDED PROCEDURES.	400	LB/H	BACT-PSD	0	
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	SCN-4 HOT STARTUP CTG-1 SCN-8 HOT STARTUP CTG-2	2110	MMBTU/H	COMPLETE EVENTS AS QUICKLY AS POSSIBLE ACCORDING TO MANUFACTURE <sub>2</sub> S RECOMMENDED PROCEDURES.	400	LB/H	BACT-PSD	0	
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	SCN-5 SHUTDOWN CTG-1 / SCN-9 SHUTDOWN CTG-2	2110	MMBTU/H	COMPLETE EVENTS AS QUICKLY AS POSSIBLE ACCORDING TO MANUFACTURE <sub>2</sub> S RECOMMENDED PROCEDURES.	400	LB/H	BACT-PSD	0	
CT-0151	KLEEN ENERGY SYSTEMS, LLC	CT	104-0131 AND 104-0133	2/25/2008	SIEMENS SGT6-5000F COMBUSTION TURBINE #1 AND #2 (NATURAL GAS FIRED) WITH 445 MMBTU/HR NATURAL GAS DUCT BURNER	2.1	MMCF/H	LOW NOX BURNER AND SELECTIVE CATALYTIC REDUCTION	15.5	LB/H	LAER	2	PPM @ 15% O2
MN-0071	FAIRBAULT ENERGY PARK	MN	13100071-003	6/5/2007	COMBINED CYCLE COMBUSTION TURBINE W/DUCT BURNER	1758	MMBTU/H	DRY LOW NOX COMBUSTION FOR NG; WATER INJECTION FOR NO.2 OIL; SCR W/NH3 INJECTION IN HRSG FOR BOTH NG & NO. 2 OIL.	3	PPMVD	BACT-PSD	4.5	PPMVD
CA-1144	BLYTHE ENERGY PROJECT II	CA	SE 02-01	4/25/2007	2 COMBUSTION TURBINES	170	MW	SELECTIVE CATALYTIC REDUCTION	2	PPMVD	BACT-PSD	0	
FL-0285	PROGRESS BARTOW POWER PLANT	FL	PSD-FL-381 AND 1030011-010-AC	1/26/2007	COMBINED CYCLE COMBUSTION TURBINE SYSTEM (4-ON-1)	1972	MMBTU/H	WATER INJECTION	15	PPMVD UNCORRECTED	BACT-PSD	0	
FL-0285	PROGRESS BARTOW POWER PLANT	FL	PSD-FL-381 AND 1030011-010-AC	1/26/2007	SIMPLE CYCLE COMBUSTION TURBINE (ONE UNIT)	1972	MMBTU/H	WATER INJECTION DRY LOW NOX	15	PPMVD	BACT-PSD	0	
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	COMBINED CYCLE COMBUSTION GAS TURBINES - 6 UNITS	2333	MMBTU/H	DRY LOW NOX AND SCR WATER INJECTION	2	PPMVD @15%O2	BACT-PSD	0	
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO 99.8 MMBTU/H GAS-FUELED AUXILIARY BOILERS	99.8	MMBTU/H		0.05	LB/MMBTU	BACT-PSD	0	
TX-0497	INEOS CHOCOLATE BAYOU FACILITY	TX	PSD-TX 983 AND 46192	8/29/2006	COGENERATION TRAIN 2 AND 3 (TURBINE AND DUCT BURNER EMISSIONS)	35	MW	BP AMOCO PROPOSES TO USE SCR TO CONTROL NOX EMISSIONS FROM BOTH TURBINES AND DUCT BURNERS AFTER CONSIDERING ALTERNATIVE NOX CONTROL METHODS. THE TURBINES AND DUCT BURNERS WILL ALSO USE LOW NOX COMBUSTORS. BP AMOCO PROPOSES	11.43	LB/H	BACT-PSD	0	

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: NOx

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TX-0502	NACOGDOCHES POWER STERNE GENERATING FACILITY	TX	PSD-TX 1015 AND 49293	6/5/2006	WESTINGHOUSE/SIEMENS MODEL SW501F GAS TURBINE W/ 416.5 MMBTU DUCT BURNERS	190	MW	STEAG POWER LLC IS PROPOSING THE USE OF DRY LOW NOX (DLN) COMBUSTORS FOR THE TURBINES AND LOW NOX BURNERS IN THE DUCT BURNERS ALONG WITH SELECTIVE CATALYST REDUCTION (SCR) SYSTEM FOR THE CONTROL OF NOX EMISSIONS FROM THE COMB	45.4	LB/H	BACT-PSD	0	
NY-0095	CAITHNES BELLPORT ENERGY CENTER	NY	PSD-NY-0001	5/10/2006	COMBUSTION TURBINE	2221	MMBUT/H	SCR	2	PPMVD@15%O2	BACT-PSD	0	
CO-0056	ROCKY MOUNTAIN ENERGY CENTER, LLC	CO	05WE0524	5/2/2006	NATURAL-GAS FIRED, COMBINED-CYCLE TURBINE	300	MW	LOW NOX BURNERS AND SCR	3	PPM @ 15% O2	BACT-PSD	3	PPM @ 15% O2
*CA-1213	MOUNTAINVIEW POWER COMPANY LLC	CA	SE 04-01	4/21/2006	COMBUSTION TURBINE GENERATOR	175.7	MW	1991 MMBTU/HR DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	2	PPMVD	BACT-PSD	0	
*CA-1213	MOUNTAINVIEW POWER COMPANY LLC	CA	SE 04-01	4/21/2006	COMBUSTION TURBINE GENERATOR	175.7	MW	1991 MMBTU/HR DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	160	LB/HR	BACT-PSD	400	LB/STARTUP
*CA-1213	MOUNTAINVIEW POWER COMPANY LLC	CA	SE 04-01	4/21/2006	COMBUSTION TURBINE GENERATOR	175.7	MW	1991 MMBTU/HR DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	80	LB/HR	BACT-PSD	0	
*CA-1213	MOUNTAINVIEW POWER COMPANY LLC	CA	SE 04-01	4/21/2006	COMBUSTION TURBINE GENERATOR	175.7	MW	1991 MMBTU/HR DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	2	PPMVD	BACT-PSD	0	
*CA-1213	MOUNTAINVIEW POWER COMPANY LLC	CA	SE 04-01	4/21/2006	COMBUSTION TURBINE GENERATOR	175.7	MW	1991 MMBTU/HR DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	160	LB/HR	BACT-PSD	400	LB/STARTUP
*CA-1213	MOUNTAINVIEW POWER COMPANY LLC	CA	SE 04-01	4/21/2006	COMBUSTION TURBINE GENERATOR	175.7	MW	1991 MMBTU/HR DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	80	LB/HR	BACT-PSD	0	
*CA-1213	MOUNTAINVIEW POWER COMPANY LLC	CA	SE 04-01	4/21/2006	COMBUSTION TURBINE GENERATOR	175.7	MW	1991 MMBTU/HR DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	2	PPMVD	BACT-PSD	0	
*CA-1213	MOUNTAINVIEW POWER COMPANY LLC	CA	SE 04-01	4/21/2006	COMBUSTION TURBINE GENERATOR	175.7	MW	1991 MMBTU/HR DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	160	LB/HR	BACT-PSD	400	LB/STARTUP
*CA-1213	MOUNTAINVIEW POWER COMPANY LLC	CA	SE 04-01	4/21/2006	COMBUSTION TURBINE GENERATOR	175.7	MW	1991 MMBTU/HR DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	80	LB/HR	BACT-PSD	0	
*CA-1213	MOUNTAINVIEW POWER COMPANY LLC	CA	SE 04-01	4/21/2006	COMBUSTION TURBINE GENERATOR	175.7	MW	1991 MMBTU/HR DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	2	PPMVD	BACT-PSD	0	
*CA-1213	MOUNTAINVIEW POWER COMPANY LLC	CA	SE 04-01	4/21/2006	COMBUSTION TURBINE GENERATOR	175.7	MW	1991 MMBTU/HR DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	160	LB/HR	BACT-PSD	400	LB/STARTUP
*CA-1213	MOUNTAINVIEW POWER COMPANY LLC	CA	SE 04-01	4/21/2006	COMBUSTION TURBINE GENERATOR	175.7	MW	1991 MMBTU/HR DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	80	LB/HR	BACT-PSD	0	
*CA-1195	ELK HILLS POWER LLC	CA	SJ 99-02	1/12/2006	COMBUSTION TURBINE GENERATOR	166	MW	SCR OR SCONOX, DRY LOW NOX COMBUSTORS	2.5	PPMVD	BACT-PSD	0	
*CA-1195	ELK HILLS POWER LLC	CA	SJ 99-02	1/12/2006	COMBUSTION TURBINE GENERATOR	166	MW	SCR OR SCONOX, DRY LOW NOX COMBUSTORS	2.5	PPMVD	BACT-PSD	0	
NC-0101	FORSYTH ENERGY PLANT	NC	00986R1	9/29/2005	TURBINE, COMBINED CYCLE, NATURAL GAS, (3)	1844.3	MMBTU/H	DRY LOW-NOX COMBUSTORS AND SELECTIVE CATALYTIC REDUCTION (SCR)	2.5	PPM @ 15% O2	BACT-PSD	3	PPM @ 15% O2

## RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: NOx

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NV-0035	TRACY SUBSTATION EXPANSION PROJECT	NV	AP4911-1504	8/16/2005	TURBINE, COMBINED CYCLE COMBUSTION #2 WITH HRSG AND DUCT BURNER.	306	MW	SELECTIVE CATALYTIC REDUCTION WITH AMMONIA INJECTION	2	PPM @ 15% O2	BACT-PSD	2	PPM @ 15% O2
NV-0035	TRACY SUBSTATION EXPANSION PROJECT	NV	AP4911-1504	8/16/2005	TURBINE, COMBINED CYCLE COMBUSTION #1 WITH HRSG AND DUCT BURNER.	306	MW	SELECTIVE CATALYST REDUCTION W/ AMMONIA INJECTION	2	PPM @ 15% O2	BACT-PSD	2	PPM @ 15% O2
OR-0041	WANAPA ENERGY CENTER	OR	R10PSD-OR-05-01	8/8/2005	COMBUSTION TURBINE & HEAT RECOVERY STEAM GENERATOR	2384.1	MMBTU/H	DRY LOW-NOX BURNERS AND SCR.	2	PPMDV @ 15% O2	BACT-PSD	0	
NY-0100	EMPIRE POWER PLANT	NY	4381400052	6/23/2005	FUEL COMBUSTION (NATURAL GAS)	2099	MMBTU/H	DRY LOW NOX COMBUSTION TECHNOLOGY IN COMBINATION WITH SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM	2	PPMVD AT 15% O2	LAER	2	PPMVD AT 15% O2
NY-0100	EMPIRE POWER PLANT	NY	4381400052	6/23/2005	FUEL COMBUSTION (NATURAL GAS) DUCT BURNING	646	MMBTU/H	DRY LOW NOX COMBUSTION TECHNOLOGY IN COMBINATION WITH SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM	3	PPMVD AT 15% O2	LAER	3	PPMVD AT 15% O2
FL-0265	HINES POWER BLOCK 4	FL	PSD-FL-342 AND 1050234-010-AC	6/8/2005	COMBINED CYCLE TURBINE	530	MW	SCR	2.5	PPM	BACT-PSD	2.5	PPM @ 15% O2
MI-0366	BERRIEN ENERGY, LLC	MI	323-01A	4/13/2005	3 COMBUSTION TURBINES AND DUCT BURNERS	1584	MMBTU/H	DRY LOW NOX BURNERS AND SELECTIVE CATALYTIC REDUCTION.	2.5	PPMDV @ 15% O2	BACT-PSD	2.5	PPM @ 15% O2
WA-0328	BP CHERRY POINT COGENERATION PROJECT	WA	EFSEC/2002-01	1/11/2005	GE 7FA COMBUSTION TURBINE & HEAT RECOVERY STEAM GENERATOR	174	MW	LEAN PRE-MIX DRY LOW-NOX BURNERS ON CT. LOW-NOX DUCT BURNERS. SCR.	2.5	PPMDV	BACT-PSD	0	
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	TURBINES (4) (MODEL GE 7FA), DUCT BURNERS ON	172	MW	DRY LOW NOX (DLN) BURNERS AND SELECTIVE CATALYTIC REDUCTION (SCR)	27.8	LB/H	BACT-PSD	3	PPM @ 15% O2
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	TURBINES (4) (MODEL GE 7FA), DUCT BURNERS OFF	172	MW	DRY LOW NOX (DLN) BURNERS AND SELECTIVE CATALYTIC REDUCTION(SCR)	21.1	LB/H	BACT-PSD	3	PPM @ 15% O2
CA-1142	PASTORIA ENERGY FACILITY	CA	SJ 99-03	12/23/2004	3 COMBUSTION TURBINES	168	MW	XONON CATALYTIC COMBUSTORS OR DRY LOW NOX BURNERS WITH SCR	2.5	PPMVD	BACT-PSD	0	
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	COMBUSTION TURBINE GENERATORS AND HEAT RECOVERY STEAM GENERATORS - SW501F TURBINES OPTION	180	MW	LOW NOX BURNERS AND SELECTIVE CATALYTIC REDUCTION	2	PPM @ 15% O2	BACT-PSD	2	PPM @ 15% O2
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	COMBUSTION TURBINE GENERATORS AND HEAT RECOVERY STEAM GENERATORS - GE7FA TURBINES OPTION	170	MW	LOW NOX BURNERS AND SELECTIVE CATALYTIC REDUCTION	2	PPM AT 15% O2	BACT-PSD	2	PPM AT 15% O2
LA-0194	SABINE PASS LNG TERMINAL	LA	PSD-LA-703	11/24/2004	30 MW GAS TURBINE GENERATORS (4) LOW LOAD OPERATIONS	30	mw each	DRY LOW NOX BURNER	50	PPMVD @ 15% O2	BACT-PSD	0	
MS-0073	RELIANT ENERGY CHOCTAW COUNTY, LLC	MS	0444-00018	11/23/2004	EMISSION POINT AA-001 GEN. ELEC. COMBUST. TURBINE	230	MW	SCR	3.5	PPMV @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
NV-0033	EL DORADO ENERGY, LLC	NV	A-00652	8/19/2004	COMBUSTION TURBINE, COMBINED CYCLE & COGEN(2)	475	MW	LOW NOX BURNER + SCR	3.5	PPM @ 15% O2	BACT-PSD	3.7	PPM @ 15% O2
CA-1143	SUTTER POWER PLANT	CA	SAC 98-01	8/16/2004	2 COMBUSTION TURBINES	170	MW	DRY LOW NOX BURNERS & SCR	2.5	PPMVD	BACT-PSD	0	

## RBLC REVIEW FOR COMBINED CYCLE COMBUSTION TURBINES: NOx

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
UT-0066	CURRENT CREEK	UT	DAQE-2524002-04	5/17/2004	NATURAL GAS FIRED TURBINES AND HEAT RECOVERY STEAM GENERATORS			CONVENTIONAL SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AMMONIA INJECTION	2.25	PPMVD	BACT-PSD	2.25	PPM @ 15% O2
NV-0037	COPPER MOUNTAIN POWER	NV	15347	5/14/2004	LARGE COMBUSTION TURBINES, COMBINED CYCLE & COGENERATION	600	MW	DRY LOW-NOX COMBUSTOR, STEAM INJECTION, AND SELECTIVE CATALYTIC REDUCTION	2	PPMVD	BACT-PSD	2	PPM @ 15% O2
VA-0289	DUKE ENERGY WYTHE, LLC	VA	11382	2/5/2004	TURBINE, COMBINED CYCLE, NATURAL GAS	170	MW	SCR AND LOW NOX BURNERS. GOOD COMBUSTION PRACTICES.	2.5	PPMVD	BACT-PSD	2.5	PPM @ 15% O2
VA-0289	DUKE ENERGY WYTHE, LLC	VA	11382	2/5/2004	TURBINE, COMBINED CYCLE, DUCT BURNER, NATURAL GAS	170	MW	SCR AND LOW NOX BURNERS. GOOD COMBUSTION PRACTICES	2.5	PPMVD	BACT-PSD	2.5	PPM @ 15% O2
OR-0039	COB ENERGY FACILITY, LLC	OR	18-0029	12/30/2003	TURBINE, COMBINED CYCLE, DUCT BURNER, NAT GAS, (4)	1150	MW	DLN COMBUSTORS, AND SCR	2.5	PPMVD @ 15% O2	BACT-PSD	2.5	PPM @ 15% O2
NV-0038	IVANPAH ENERGY CENTER, L.P.	NV	1616	12/29/2003	LARGE COMBUSTION TURBINES, COMBINED CYCLE & COGENERATION	500	MW	DRY LOW NOX COMBUSTION CONTROL IN COMBINATION WITH SELECTIVE CATALYTIC REDUCTION	2	PPMVD	BACT-PSD	2	PPM @ 15% O2
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	COMBUSTION TURBINE, LARGE 2 EACH	1827	MMBTU/H	WATER INJECTION AND SCR	5.5	PPMVD @ 15% O2	BACT-PSD	5.5	PPM @ 15% O2
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	COMBUSTION TURBINE, LARGE, 2 EACH	1916	MMBTU/H	LEAN PRE-MIX COMBUSTION & SCR	3	PPMVD 15% O2	BACT-PSD	3	PPM @ 15% O2
VA-0287	JAMES CITY ENERGY PARK	VA	61442	12/1/2003	TURBINE, COMBINED CYCLE, NATURAL GAS, DUCT BURNER	1973	MMBTU/H	DRY LOW NOX BURNERS, SCR WITH AMMONIA INJECTION AND CEM DEVICES	2.5	PPM	BACT-PSD	2.5	PPM @ 15% O2
VA-0287	JAMES CITY ENERGY PARK	VA	61442	12/1/2003	TURBINE, COMBINED CYCLE, NATURAL GAS	1973	MMBTU/H	DRY LOW NOX BURNERS SCR WITH AMMONIA INJECTION AND CEM DEVICES.	2.5	PPM	BACT-PSD	2.5	PPM @ 15% O2
AZ-0043	DUKE ENERGY ARLINGTON VALLEY (AVEFII)	AZ	S01-004	11/12/2003	TURBINE, COMBINED CYCLE & DUCT BURNER	325	MW	SCR	2	PPM @ 15% O2	BACT-PSD	2	PPM @ 15% O2
AZ-0043	DUKE ENERGY ARLINGTON VALLEY (AVEFII)	AZ	S01-004	11/12/2003	TURBINE, COMBINED CYCLE	325	MW	SCR	2	PPM @ 15% O2	BACT-PSD	2	PPM @ 15% O2
FL-0256	HINES ENERGY COMPLEX, POWER BLOCK 3	FL	PSD-FL-330 AND 1050234-006-AC	9/8/2003	COMBUSTION TURBINES, COMBINED CYCLE, NATURAL GAS, 2	1830	MMBTU/H	DRY LOW NOX COMBUSTORS & SELECTIVE CATALYTIC REDUCTION	2.5	PPMVD @ 15% O2	BACT-PSD	2.5	PPMVD @ 15% O2
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	SIEMENS WESTINGHOUSE COMBUSTION TURBINES AND HEAT RECOVERY STEAM GENERATORS	1080	MW	LOW NOX BURNERS AND SELECTIVE CATALYTIC REDUCTION	2	PPMVD	BACT-PSD	2	PPM @ 15% O2
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	GE COMBUSTION TURBINES AND HEAT RECOVERY STEAM GENERATORS	1040	MW	LOW NOX BURNERS WITH SELECTIVE CATALYTIC REDUCTION	2	PPMVD	BACT-PSD	2	PPM @ 15 O2
CA-0997	SACRAMENTO MUNICIPAL UTILITY DISTRICT	CA	16006	9/1/2003	GAS TURBINES, (2)	1611	MMBTU/H	SCR	2	PPM @ 15% O2	LAER	2	PPM @ 15% O2
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	TURBINES (2) (MODEL GE 7FA), DUCT BURNERS ON	170	MW	DRY LOW-NOX (DLN) COMBUSTION BURNERS AND SELECTIVE CATALYTIC REDUCTION (SCR)	32.3	LB/H	BACT-PSD	3.5	PPM @ 15% O2
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	TURBINES (2) (MODEL GE 7FA), DUCT BURNERS OFF	170	MW	DRY LOW-NOX (DLN) COMBUSTION BURNERS AND SELECTIVE CATALYTIC REDUCTION (SCR)	24.7	LB/H	BACT-PSD	3.5	PPM @ 15% O2

## RBLC REVIEW FOR COMBINED CYCLE COMBUSTION TURBINES: NOx

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
OK-0096	REDBUD POWER PLANT	OK	2000-090-C M-3 PSD	6/3/2003	COMBUSTION TURBINE AND DUCT BURNERS	1832	MMBTU/H	SELECTIVE CATALYTIC REDUCTION (SCR) WITH DRY LOW NOX BURNERS (DLN)	3.5	PPMVD @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
NE-0017	BEATRICE POWER STATION	NE	76739	5/29/2003	TURBINE, COMBINED CYCLE, (2)	80	MW	LOW-NOX BURNERS AND SELECTIVE CATALYTIC REDUCTION. EMISSION LIMITS SPECIFIED, NOT CONTROL DEVICES.	3.5	PPM @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
CA-1096	VERNON CITY LIGHT & POWER	CA	394164	5/27/2003	GAS TURBINE: COMBINED CYCLE < 50 MW	43	MW GAS TURBINE, 55 M	SCR SYSTEM, AND OXIDATION CATALYST	2	PPMVD @ 15% O2	BACT-PSD	2	PPM @ 15% O2
CA-1097	MAGNOLIA POWER PROJECT, SCPPA	CA	386305	5/27/2003	GAS TURBINE: COMBINED CYCLE >= 50 MW	181	NET MW (GAS TURBINE	SCR SYSTEM AND OXIDATION CATALYST	2	PPMVD @ 15% O2	BACT-PSD	2	PPM @ 15% O2
GA-0105	MCINTOSH COMBINED CYCLE FACILITY	GA	4911-103-0014-V-01-0	4/17/2003	TURBINE, COMBINED CYCLE, NATURAL GAS, (4)	140	MW	DRY LOW NOX COMBUSTORS, SCR	2.5	PPM @ 15% O2	BACT-PSD	2.5	PPM @ 15% O2
WA-0315	SUMAS ENERGY 2 GENERATION FACILITY	WA	EFSEC 2001-02	4/17/2003	TURBINES, COMBINED CYCLE, (2)	660	MW	DRY LOW NOX BURNERS, SCR	2	PPMVD	BACT-PSD	2	PPM @ 15% O2
FL-0244	FPL MARTIN PLANT	FL	PSD-FL-327	4/16/2003	TURBINE, SIMPLE CYCLE, NATURAL GAS, (4)	170	MW	DRY LOW NOX COMBUSTORS	9	PPMVD @ 15% O2	BACT-PSD	9	PPM @ 15% O2
FL-0244	FPL MARTIN PLANT	FL	PSD-FL-327	4/16/2003	TURBINE, COMBINED CYCLE WITH DUCT BURNER, NAT GAS	170	MW	DRY LOW NOX COMBUSTORS AND SCR	2.5	PPM @ 15% O2	BACT-PSD	2.5	PPM @ 15% O2
FL-0244	FPL MARTIN PLANT	FL	PSD-FL-327	4/16/2003	TURBINE, COMBINED CYCLE, NATURAL GAS, (4)	170	MW	DRY LOW NOX COMBUSTORS AND SCR	2.5	PPMVD @ 15% O2	BACT-PSD	2.5	PPM @ 15% O2
FL-0245	FPL MANATEE PLANT - UNIT 3	FL	PSD-FL-328 AND 0810010-006-AC	4/15/2003	TURBINE, COMBINED CYCLE, NATURAL GAS (4)	170	MW	DRY LOW NOX COMBUSTORS WITH SCR	2.5	PPMVD @ 15% O2	BACT-PSD	2.5	PPM @ 15% O2
FL-0245	FPL MANATEE PLANT - UNIT 3	FL	PSD-FL-328 AND 0810010-006-AC	4/15/2003	TURBINE, SIMPLE CYCLE, NATURAL GAS, (4)	170	MW	DRY LOW NOX COMBUSTORS	9	PPMVD @ 15% O2	BACT-PSD	9	PPM @ 15% O2
WY-0061	BLACK HILLS CORP./NEIL SIMPSON TWO	WY	MD-850	4/4/2003	TURBINE, COMBINED CYCLE, & DUCT BURNER	40	MW	DRY LOW NOX BURNERS AND SCR	2.5	PPM @ 15% O2	Other Case-by-Case	2.5	PPM @ 15% O2
OK-0090	DUKE ENERGY STEPHENS, LLC STEPHENS ENERGY	OK	2001-157-C M-1 PSD	3/21/2003	TURBINES, COMBINED CYCLE (2)	1701	MMBTU/H	SCR, DRY LOW NOX COMBUSTORS	3.5	PPM @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
OR-0040	KLAMATH GENERATION, LLC	OR	18-0026	3/12/2003	TURBINE, COMBINED CYCLE, DUCT BURNER, NAT GAS (2)	480	MW	DRY LOW NOX COMBUSTION, SCR	2.5	PPMVD @ 15% O2	BACT-PSD	2.5	PPM @ 15% O2
AZ-0039	SALT RIVER PROJECT/SANTAN GEN. PLANT	AZ	V95-008 S01-014	3/7/2003	TURBINE, COMBINED CYCLE, DUCT BURNER, NATURAL GAS	175	MW	SCR	2	PPM @ 15% O2	LAER	2	PPM @ 15% O2
TX-0365	TEXAS CITY OPERATIONS	TX	PSD-TX-841	1/23/2003	GAS TURBINES 501-2&601-2 COMBINED STARTUP LIMITS	14.2	MW	LOW NOX COMBUSTORS	48	LB/H	Other Case-by-Case	0	
WA-0291	WALLULA POWER PLANT	WA	EFSEC/2001-03	1/3/2003	TURBINE, COMBINED CYCLE, NATURAL GAS (4)	1300	MW	SCR	2.5	PPMDV @15%O2	Other Case-by-Case	2.5	PPM @ 15% O2
TX-0352	BRAZOS VALLEY ELECTRIC GENERATING FACILITY	TX	PSD-TX-966	12/31/2002	(2) HRSG/TURBINES, HRSG-003 & -004	175	MW	SELECTIVE CATALYTIC REDUCTION	32.4	LB/H	BACT-PSD	3.5	PPM @ 15% O2
TX-0352	BRAZOS VALLEY ELECTRIC GENERATING FACILITY	TX	PSD-TX-966	12/31/2002	(2) HRSG/TURBINES, HRSG-001 & -002	175	MW, EA	SELECTIVE CATALYTIC REDUCTION	32.4	LB/H	BACT-PSD	3.5	PPM @ 15% O2
TX-0391	OXY COGENERATION FACILITY	TX	PSD-276	12/20/2002	COMBINED-CYCLE GAS TURBINES (2)	87	MW (EACH)	SCR AND NH3 INJECTION.	55.3	LB/H	BACT-PSD	4	PPM @ 15% O2
TX-0391	OXY COGENERATION FACILITY	TX	PSD-276	12/20/2002	HRSG UNIT NO. 3	255	MMBTU/H	SCR AND NH3 INJECTION.	16.9	LB/H	Other Case-by-Case	0	

## RBLC REVIEW FOR COMBINED CYCLE COMBUSTION TURBINES: NOx

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TX-0391	OXY COGENERATION FACILITY	TX	PSD-276	12/20/2002	HRSG UNITS 1 & 2 (2)	255	MMBTU/H	SCR AND NH3 INJECTION.	115	LB/H	BACT-PSD	0	
TX-0428	HOUSTON OPERATIONS -- BATTLEGROUND SITE	TX	PSD-TX-276	12/19/2002	TURBINE, COMBINED CYCLE & DUCT BURNER	87	mw	SCR	4	PPMVD @ 15% O2	BACT-PSD	4	PPM @ 15% O2
TX-0407	STERNE ELECTRIC GENERATING FACILITY	TX	PSD-TX-1015	12/6/2002	TURBINES, COMBINED CYCLE, AND DUCT BURNERS (3)	190	MW	DRY LOW NOX COMBUSTORS FOR THE TURBINES AND LOW NOX BURNERS IN THE DUCT BURNERS. SELECTIVE CATALYTIC REDUCTION.	45.4	LB/H	BACT-PSD	5	PPMVD @ 15% O2
VA-0262	MIRANT AIRSIDE INDUSTRIAL PARK	VA	32008	12/6/2002	TURBINE, SIMPLE CYCLE, (4)	84	MW	LEAN PRE-MIX LOW NOX BURNERS AND GOOD COMBUSTION PRACTICES. SELECTIVE CATALYTIC REDUCTION SYSTEM AND A CONTINUOUS EMISSION MONITORING DEVICE.	9	PPMVD @ 15% O2	BACT-PSD	9	PPM @ 15% O2
GA-0101	MURRAY ENERGY FACILITY	GA	4911-213-0034-P-01-1	10/23/2002	TURBINE, COMBINED CYCLE, (4)	173	MW	DRY LOW NOX BURNERS AND SELECTIVE CATALYTIC REDUCTION	3	PPM @ 15% O2	BACT-PSD	3	PPM @ 15% O2
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE AA-001 W/DUCT BURNER	2168	MMBTU/H	DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	3.5	PPMV @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE, AA-002 W /DUCT BURNER	2168	MMBTU/H	DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	3.5	PPMV @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE, AA-003 /DUCT BURNER	2168	MMBTU/H	DRY LOW NOX COMBUSTORS, SELECTIVE CATALYTIC REDUCTION (SCR)	3.5	PPMV @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE AA-004 W/ DUCT BURNER	2168	MMBTU/H	DRY LOW NOX COMBUSTORS , SELECTIVE CATALYTIC REDUCTION (SCR)	3.5	PPMV @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	TURBINES (3), COMBINED CYCLE, DUCT BURNERS OFF	180	MW	DRY LOW NOX BURNERS (DLN) & LOW NOX BURNERS (LNB) & SELECTIVE CATALYTIC REDUCTION (SCR).	24.1	LB/H	BACT-PSD	3	PPM @ 15% O2
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	TURBINES (3), COMBINED CYCLE, DUCT BURNERS ON	180	MW	DRY LOW NOX BURNERS (DLN)& LOW NOX BURNERS(LNB)& SELECTIVE CATALYTIC REDUCTION (SCR)	30.5	LB/H	BACT-PSD	3	PPM @ 15% O2
WA-0299	SUMAS ENERGY 2 GENERATION FACILITY	WA	EFSEC/2001-02	9/6/2002	TURBINES, COMBINED CYCLE, (2)	334.5	MW	SCR	0.008	LB/MMBTU	BACT-PSD	27	PPM @ 15% O2
VA-0261	CPV CUNNINGHAM CREEK	VA	81382	9/6/2002	TURBINE, COMBINED CYCLE, (2)	2132	MMBTU/H	LOW NOX BURNERS AND GOOD COMBUSTION PRACTICE. SELECTIVE CATALYTIC REDUCTION USING AMMONIA INJECTION. CONTINUOUS EMISSION MONITORING DEVICE.	20	LB/H	BACT-PSD	2.5	PPM @ 15% O2
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	TURBINE, COMBINED CYCLE, (2), (MHI)	170	MW	DRY LOW NOX COMBUSTOR/SCR	3.5	PPMVD @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	TURBINE, COMBINED CYCLE, (2), (GE )	170	MW	DRY LOW NOX COMBUSTOR/SCR	3.5	PPMVD @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	TURBINE, COMBINED CYCLE, (2), (SWH)	170	MW	DRY LOW NOX COMBUSTOR/SCR	3.5	PPMVD @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINE, COMBINED CYCLE, NATURAL GAS (4)	1490.5	MMBTU/H	DRY LOW NOX BURNERS AND SCR. NATURAL GAS IS ONLY FUEL.	3	PPMVD @ 15% O2	BACT-PSD	3	PPM @ 15% O2
IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINE, COMBINED CYCLE AND DUCT BURNER, NAT GAS	1490.5	MMBTU/H	LOW NOX BURNERS, SCR, NATURAL GAS FUEL	3	PPMVD @ 15% O2	BACT-PSD	3	PPM @ 15% O2

## RBLC REVIEW FOR COMBINED CYCLE COMBUSTION TURBINES: NOx

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IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINES, SIMPLE CYCLE, NATURAL GAS, (4)	1490.5	MMBTU/H	DRY LOW NOX COMBUSTORS, GOOD COMBUSTION PRACTICES, CLEAN FUEL -- NATURAL GAS		PPMVD @ 15% 9 O2	BACT-PSD	9	PPM @ 15% O2
AL-0185	BARTON SHOALS ENERGY	AL	X001, X002	7/12/2002	FOUR (4) COMBINED CYCLE COMBUSTION TURBINE UNITS	173	MW	DRY LOW NOX + SCR	0.0092	LB/MMBTU	BACT-PSD	2.5	PPM @ 15% O2
TX-0437	HARTBURG POWER, LP	TX	PSD-TX-1009	7/5/2002	TURBINE, COMBINED CYCLE & DUCT BURNER	277	mw	SCR FOR BOTH TURBINE AND DUCT BURNER, TURBINES USE STEAM INJECTION IN THE COMBUSTORS AND THE DUCT BURNERS WILL USE LOW-NOX BURNERS.		PPMVD @ 15% 5 O2	BACT-PSD	5	PPM @ 15% O2
NM-0044	CLOVIS ENERGY FACILITY	NM	PSD-NM-2605	6/27/2002	TURBINES, COMBINED CYCLE, NATURAL GAS (4)	1515	MMBTU/H	THIS FACILITY WILL ONLY COMBUST PIPELINE QUALITY NATURAL GAS. THE COMBUSTION GAS FROM THE DUCT BURNERS AND COMBUSTION TURBINES SHALL BE DUCTED TO A SCR SYSTEM.	24.6	LB/H	BACT-PSD	3.5	PPMV @ 15% O2
MS-0055	EL PASO MERCHANT ENERGY CO.	MS	0540-00080	6/24/2002	TURBINE, COMBINED CYCLE, DUCT BURNER, NAT GAS, (2)	1737	MMBTU/H	LOW NOX BURNERS AND SELECTIVE CATALYTIC REDUCTION UNIT		PPMV @ 15% 3.5 O2	BACT-PSD	3.5	PPM @ 15% O2
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	GE COMBUSTION TURBINE & DUCT BURNERS	1705	MMBTU/H	SELECTIVE CATALYTIC REDUCTION (SCR) WITH DRY LOW-NOX COMBUSTORS		PPMVD @ 15% 3.5 O2	BACT-PSD	3.5	PPM @ 15% O2
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	SW COMBUSTION TURBINE	1872	MMBTU/H	SELECTIVE CATALYTIC REDUCTION (SCR) WITH DRY LOW-NOX COMBUSTORS		3.5 PPM @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	MHI COMBUSTION TURBINE & DUCT BURNERS	1767	MMBTU/H	SELECTIVE CATALYTIC REDUCTION (SCR) WITH DRY LOW-NOX COMBUSTOR		3.5 PPM @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
MT-0019	CONTINENTAL ENERGY SERVICES, INC., SILVER BOW GEN	MT	3165-00	6/7/2002	TURBINE, COMBINED CYCLE 2	500	MW	SCR		25.2 LB/H	BACT-PSD	3	PPM @ 15% O2
MT-0019	CONTINENTAL ENERGY SERVICES, INC., SILVER BOW GEN	MT	3165-00	6/7/2002	TURBINE, COMBINED CYCLE 1	500	MW	SCR		25.2 LB/H	BACT-PSD	3	PPM @ 15% O2
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, GE, DUCT BURNERS	175	MW	DRY LOW NOX AND SCR		2.5 PPMVD	BACT-PSD	3.5	PPM @ 15% O2
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, MHI/SW, DUCT BURNERS	175	MW	DRY-LOW NOX AND SCR		2.5 PPMVD	BACT-PSD	3.5	PPM @ 15% O2
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, MHI/SW	175	MW	DRY LOW NOX AND SCR		2.5 PPMVD	BACT-PSD	3.5	PPM @ 15 % O2
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, GE	175	MW	DRY LOW NOX AND SCR		2.5 PPMVD	BACT-PSD	3.5	PPM @ 15% O2
OH-0264	NORTON ENERGY STORAGE, LLC	OH	16-02110	5/23/2002	COMBUSTION TURBINE (9), COMB CYCLE W/O DUCT BURNER	300	MW	SELECTIVE CATALYTIC REDUCTION (SCR) AND DRY LOW NOX (DLN) BURNERS		14.5 LB/H	BACT-PSD	3.5	PPM @ 15% O2
OH-0264	NORTON ENERGY STORAGE, LLC	OH	16-02110	5/23/2002	COMBUSTION TURBINES (9), COMB CYCLE W DUCT BURNER	300	MW	SELECTIVE CATALYTIC REDUCTION (SCR) AND DRY LOW NOX(DLN)BURNERS		16 LB/H	BACT-PSD	3.5	PPM @ 15% O2
AZ-0038	GILA BEND POWER GENERATING STATION	AZ	V00-001	5/15/2002	TURBINE, COMBINED CYCLE, DUCT BURNER, NATURAL GAS	170	MW	SCR AND LOW NOX COMBUSTORS		2 PPM @ 15% O2	BACT-PSD	2	PPM @ 15% O2
IA-0058	GREATER DES MOINES ENERGY CENTER	IA	77-13-002	4/10/2002	COMBUSTION TURBINES - SIMPLE CYCLE	350	MW			0.09 LB/MMBTU	BACT-PSD	24.4	PPM @ 15% O2

## RBLC REVIEW FOR COMBINED CYCLE COMBUSTION TURBINES: NOx

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
IA-0058	GREATER DES MOINES ENERGY CENTER	IA	77-13-002	4/10/2002	COMBUSTION TURBINES - COMBINED CYCLE	350	MW	SELECTIVE CATALYTIC REDUCTION WITH DRY LOW NOX COMBUSTION	0.011	LB/MMBTU	BACT-PSD	3	PPM @ 15% O2
PA-0226	LIMERICK POWER STATION	PA	PA-46-0203	4/9/2002	TURBINE, COMBINED CYCLE	550	MW	LOW NOX BURNERS	2	PPM @15% O2	LAER	2	PPM @ 15% O2
AR-0051	DUKE ENERGY- JACKSON FACILITY	AR	1998-AOP-R0 (34-0259)	4/1/2002	TURBINES, COMBINED CYCLE, NATURAL GAS, (2)	170	MW	SELECTIVE CATALYTIC REDUCTION (SCR) AND DRY LOW- NOX COMBUSTORS. 10 PPM ALLOWABLE AMMONIA SLIP.	3.5	PPM @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	DUCT BURNER (3)	256	MMBTU/H	SCR	0.2	LB/MMBTU	Other Case-by-Case	0.2	LB/MMBTU
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	COMBINED CYCLE TURBINE WITH DUCT BURNER	3202	MMBTU/H	SCR	0.011	LB/MMBTU	Other Case-by-Case	2.5	PPMVD @ 15% O2
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	COMBINED CYCLE TURBINE (3)	2964	MMBTU/H	SCR- AMMONIA FLOW RTE AT 11.46 GAL/H	2.5	PPMVD @ 15% O2	Other Case-by-Case	2.5	PPMVD @ 15% O2
PA-0188	FAIRLESS ENERGY LLC	PA	PA-09-0124B	3/28/2002	TURBINE, COMBINED CYCLE	1190	MW	SCR, DRY LOW NOX COMBUSTION	2.5	PPMV @ 15% O2	LAER	2.5	PPM @ 15% O2
FL-0239	JEA/BRANDY BRANCH	FL	PSD-FL-310	3/27/2002	TURBINES, COMBINED CYCLE, (2)	1911	MMBTU/H	DRY LOW NOX BURNERS FOR NATURAL GAS, SCR & WATER INJECTION WHEN FIRING FUEL OIL	3.5	PPMVD	BACT-PSD	3.5	PPM @ 15% O2
OH-0268	LIMA ENERGY COMPANY	OH	03-13445	3/26/2002	COMBUSTION TURBINE (2), COMBINED CYCLE	170	MW	USE OF DILUTION PRIOR TO COMBUSTION AND DILUTION INJECTION INTO THE COMBUSTION ZONE AT CONCENTRATIONS OF THE LIMIT. SCR PROVED NOT TO BE COST EFFECTIVE.	178	LB/H	BACT-PSD	25	PPM @ 15% O2
TX-0411	AMELIA ENERGY CENTER	TX	PSD-TX-982	3/26/2002	TURBINE, COMBINED CYCLE, & DUCT BURNER (3)	180	MW	SELECTIVE CATALYTIC REDUCTION	36.8	LB/H	LAER	3.5	PPM @ 15% O2
TX-0351	WEATHERFORD ELECTRIC GENERATION FACILITY	TX	PSD-TX-933	3/11/2002	(2) GE 7241FA GAS TURBINES (TEMP STACK), S-1&2	1910	MMBTU/H	NONE INDICATED	63	LB/H	N/A	9	PPM @ 15% O2
TX-0351	WEATHERFORD ELECTRIC GENERATION FACILITY	TX	PSD-TX-933	3/11/2002	(2) GE7121EA GAS TURBINES, S-3&4	1079	MMBTU/H	NONE INDICATED	35	LB/H	N/A	9	PPM @ 15% O2
LA-0157	PERRYVILLE POWER STATION	LA	PSD-LA-655 (M-1)	3/8/2002	TURBINE, SIMPLE CYCLE, NAT GAS, EPN 2-1	170	MW	USE OF NATURAL GAS AS FUEL AND GOOD OPERATING PRACTICES. LOW NOX BURNERS AND/OR SELECTIVE CATALYTIC REDUCTION.	58	LB/H	BACT-PSD	9	PPMV @ 15% O2
LA-0157	PERRYVILLE POWER STATION	LA	PSD-LA-655 (M-1)	3/8/2002	TURBINE, COMBINED CYCLE, HRSG, NAT GAS, (2) EPNS 1-1, 1-2	183	MW	GOOD OPERATING PRACTICES AND USE OF NATURAL GAS AS FUEL. LOW NOX BURNERS AND/OR SELECTIVE CATALYTIC REDUCTION.	62.7	LB/H	BACT-PSD	0	
LA-0157	PERRYVILLE POWER STATION	LA	PSD-LA-655 (M-1)	3/8/2002	TURBINES, COMBINED CYCLE, GAS, (2) EPNS 1-1, 1-2	170	MW	LOW NOX BURNERS, AND/OR SELECTIVE CATALYTIC REDUCTION, GOOD OPERATING PRACTICES, AND USE OF NATURAL GAS AS FUEL.	4.5	PPM @ 15% O2	BACT-PSD	4.5	PPM @ 15% O2
LA-0120	GEISMAR PLANT	LA	PSD-LA-647 (M-2)	2/26/2002	(2) COGENERATION UNITS POINT # 720-99 AND 721-99	40	MW EACH	LOW NOX BURNERS AND A SELECTIVE CATALYTIC REDUCTION SYSTEM.	14.5	LB/H	BACT-PSD	5	PPM @ 15% O2
WA-0289	TRANSALTA CENTRALIA GENERATION LLC	WA	PSD-01-01	2/22/2002	(4) TURBINE/HRSG			WATER INJECTION AND SELECTIVE CATALYTIC REDUCTION	6.33	LB/H	BACT-PSD	3	PPM @ 15% O2
TX-0388	SAND HILL ENERGY CENTER	TX	P1012	2/12/2002	COMBINED CYCLE GAS TURBINE	164	MW		46	LB/H	BACT-PSD	5	PPM @ 15% O2

## RBLC REVIEW FOR COMBINED CYCLE COMBUSTION TURBINES: NOx

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
OK-0056	HORSESHOE ENERGY PROJECT	OK	2001-156-C PSD	2/12/2002	TURBINES AND DUCT BURNERS	310	MW TOTAL	SCR	12.5	PPM @ 15% O2	BACT-PSD	12.5	PPM @ 15% O2
TX-0388	SAND HILL ENERGY CENTER	TX	P1012	2/12/2002	GAS TURBINES, SIMPLE CYCLE (4)	48	MW (EACH)	DRY, LOW NOX BURNERS	5	PPM @ 15% O2	BACT-PSD	5	PPM @ 15% O2
TN-0144	HAYWOOD ENERGY CENTER, LLC	TN	954078F	2/1/2002	TURBINE, COMBINED CYCLE, W/ DUCT FIRING	1990	MMBTU/H	DRY LOW NOX BURNERS, SCR	28.5	LB/H	BACT-PSD	3.5	PPM @ 15% O2
TN-0144	HAYWOOD ENERGY CENTER, LLC	TN	954078F	2/1/2002	TURBINE, COMBINED CYCLE, W/O DUCT FIRING	1990	MMBTU/H	DRY LOW NOX BURNERS, SCR	24.1	LB/H	BACT-PSD	3.5	PPM @ 15% O2
LA-0164	ACADIA POWER STATION, ACADIA POWER PARTNERS LLC	LA	PSD-LA-645 (M-2)	1/31/2002	GAS TURBINE UNITS 1, 2, 3, 4	183	MW EACH	USE OF DRY LOW NOX BURNERS AND SELECTIVE CATALYTIC REDUCTION.	190	LB/H	BACT-PSD	4.5	PPM @ 15% O2
TX-0350	ENNIS TRACTEBEL POWER	TX	PSD-TX-927	1/31/2002	COMBUSTION TURBINE W/HEAT RECOVERY STEAM GENERATOR	350	MW	NONE INDICATED	91.67	LB/H	Other Case-by-Case	9	PPM @ 15% O2
PA-0223	DUKE ENERGY FAYETTE, LLC	PA	PA-26-00535A	1/30/2002	TURBINE, COMBINED CYCLE, (2)	280	MW	LO NOX BURNERS, SCR	2.5	PPMVD @ 15% O2	LAER	2.5	PPM @ 15% O2
FL-0241	CPV CANA	FL	PSD-FL-323	1/17/2002	TURBINE, COMBINED CYCLE, NATURAL GAS	1680	MMBTU/H	DRY LOW NOX, SCR, WET INJECTION	2.5	PPMVD @ 15% O2	BACT-PSD	2.5	PPM @ 15% O2
PA-0189	CONECTIV BETHLEHEM, INC.	PA	48-328-006	1/16/2002	TURBINE, COMBINED CYCLE, (6)	122	MW	LAER FOR COMBINED CYCLE IS SCR,DLN COMBUSTERS, CLEAN FUEL, WATER INJECTION NG DIFFUSION MODE	2.5	PPMVD @ 15% O2	LAER	0	
OR-0035	PORT WESTWARD PLANT	OR	05-0008	1/16/2002	(2) COMBUSTION TURBINES, WITH DUCT BURNER	325	MW, EACH	SELECTIVE CATALYTIC REDUCTION, DRY LOW NOX COMBUSTION, AND GOOD COMBUSTION PRACTICES.	2.5	PPM @ 15% O2	BACT-PSD	2.5	PPM @ 15% O2

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: VOC

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
*TX-0618	CHANNEL ENERGY CENTER LLC	TX	PSDTX955M1	10/15/2012	Combined Cycle Turbine	180	MW	Good combustion	2	PPMVD		0	
*TX-0619	DEER PARK ENERGY CENTER	TX	PSDTX979M2	9/26/2012	Combined Cycle Turbine	180	MW	good combustion, use of natural gas	2	PPMVD	BACT-PSD	0	
*TX-0620	ES JOSLIN POWER PLANT	TX	PSDTX1256	9/12/2012	Combined cycle gas turbine	195	MW	good combustion and natural gas as fuel	2	PPMVD	BACT-PSD	0	
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP03)	40	MW	Oxidation Catalyst	3	PPMV AT 15% O2	BACT-PSD	14	TONS
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Combined Cycle Turbine (EP01)	40	MW	Oxidation Catalyst	3	PPMV AT 15% O2	BACT-PSD	14.7	TONS
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Combined Cycle Turbine (EP02)	40	MW	Oxidation Catalyst	3	PPMV AT 15% O2	BACT-PSD	14.7	TONS
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP04)	40	MW	Oxidation Catalyst	3	PPMV AT 15% O2	BACT-PSD	14	TONS
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP05)	40	MW	Oxidation Catalyst	3	PPMV AT 15% O2	BACT-PSD	14	TONS
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Refrigeration Compressor Turbines (16)	286	MMBTU/H	Good combustion practices and fueled by natural gas	0.66	LB/H	BACT-PSD	0	
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Generation Turbines (2)	286	MMBTU/H	Good combustion practices and fueled by natural gas	0.66	LB/H	BACT-PSD	0	
TX-0600	THOMAS C. FERGUSON POWER PLANT	TX	PSDTX1244	9/1/2011	Natural gas-fired turbines	390	MW	Natural gas, good combustion practices and oxidation catalyst	2	PPMVD	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW		2	PPMVD	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW		2	PPMVD	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW		23.9	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW		23.9	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW		27.7	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW		27.7	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW		27.7	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW		27.7	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW		27.7	LB/HR	BACT-PSD	0	

## RBLC REVIEW FOR COMBINED CYCLE COMBUSTION TURBINES: VOC

*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW		27.7	LB/HR	BACT-PSD		0
*VA-0315	WARREN COUNTY POWER PLANT - DOMINION	VA	81391-007	12/17/2010	Combined cycle turbine and duct burner, 3	2996	MMBTU/H	Oxidation catalyst and good combustion practices.	2.6	LB/H	BACT-PSD		0
TX-0590	KING POWER STATION	TX	PSDTX1125	8/5/2010	Turbine	1350	MW	DLN burners in combination with an oxidation catalyst	1.8	O2	LAER		0
ID-0018	LANGLEY GULCH POWER PLANT	ID	P-2009.0092	6/25/2010	COMBUSTION TURBINE, COMBINED CYCLE W/ DUCT BURNER	2375.28	MMBTU/H	CATALYTIC OXIDATION (CATOX), DRY LOW NOX (DLN), GOOD COMBUSTION PRACTICES (GCP)	2	PPMVD	BACT-PSD		0
GA-0138	LIVE OAKS POWER PLANT	GA	4911-127-0075-P-02-0	4/8/2010	COMBINED CYCLE COMBUSTION TURBINE - ELECTRIC GENERATING PLANT	600	MW	GOOD COMBUSTION PRACTICES, CATALYTIC OXIDATION	2	PPM@15%O2	BACT-PSD		0
CA-1177	OTAY MESA ENERGY CENTER LLC	CA	978379	7/22/2009	Gas turbine combined cycle	171.7	MW		2	PPMVD@15% OXYGEN	OTHER CASE-BY-CASE		0
CA-1178	APPLIED ENERGY LLC	CA	987494	3/20/2009	Gas turbine combined cycle	0		Oxidation catalyst	2	PPM	BACT-PSD		0
OK-0129	CHOUTEAU POWER PLANT	OK	2007-115-C(M-1)PSD	1/23/2009	COMBINED CYCLE COGENERATION >25MW	1882	MMBTU/H	GOOD COMBUSTION	0.3	PPM	BACT-PSD		0
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	TWO COMBINED CYCLE GAS TURBINES	2110	MMBTU/H	PROPER OPERATING PRACTICES	12.06	LB/H	BACT-PSD		4.9 PPMVD@15%O2
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	SCN-3 COLD STARTUP CTG-1 SCN-7 COLD STARTUP CTG-2	2110	MMBTU/H	COMPLETE EVENTS AS QUICKLY AS POSSIBLE ACCORDING TO MANUFACTURER'S RECOMMENDED PROCEDURES.	214.07	LB/H	BACT-PSD		0
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	SCN-4 HOT STARTUP CTG-1 SCN-8 HOT STARTUP CTG-2	2110	MMBTU/H	COMPLETE EVENTS AS QUICKLY AS POSSIBLE ACCORDING TO MANUFACTURER'S RECOMMENDED PROCEDURES.	214.07	LB/H	BACT-PSD		0
CT-0151	KLEEN ENERGY SYSTEMS, LLC	CT	104-0131 AND 104-0133	2/25/2008	SIEMENS SGT6-5000F COMBUSTION TURBINE #1 AND #2 (NATURAL GAS FIRED) WITH 445 MMBTU/HR NATURAL GAS DUCT BURNER	2.1	MMCF/H	SOME REDUCTIONS OF VOC ARE GAINED FROM CO CATALYST BUT ARE NOT GUARANTEED. EMISSION RATES DO NOT INCORPORATE THIS POTENTIAL REDUCTION.	10	LB/H	BACT-PSD		5 PPMVD @ 15% O2
MN-0071	FAIRBAULT ENERGY PARK	MN	13100071-003	6/5/2007	COMBINED CYCLE COMBUSTION TURBINE W/DUCT BURNER	1758	MMBTU/H		1.5	PPMVD	BACT-PSD		3.5 PPMVD
FL-0285	PROGRESS BARTOW POWER PLANT	FL	PSD-FL-381 AND 1030011-010-AC	1/26/2007	COMBINED CYCLE COMBUSTION TURBINE SYSTEM (4-ON-1)	1972	MMBTU/H	GOOD COMBUSTION	1.2	PPMVD	BACT-PSD		0
FL-0285	PROGRESS BARTOW POWER PLANT	FL	PSD-FL-381 AND 1030011-010-AC	1/26/2007	SIMPLE CYCLE COMBUSTION TURBINE (ONE UNIT)	1972	MMBTU/H	GOOD COMBUSTION	1.2	PPMVD	BACT-PSD		0
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	COMBINED CYCLE COMBUSTION GAS TURBINES - 6 UNITS	2333	MMBTU/H		1.5	PPMVD @ 15% O2	BACT-PSD		0
TX-0497	INEOS CHOCOLATE BAYOU FACILITY	TX	PSD-TX 983 AND 46192	8/29/2006	COGENERATION TRAIN 2 AND 3 (TURBINE AND DUCT BURNER EMISSIONS)	35	MW	BP AMOCO PROPOSES PROPER COMBUSTION CONTROL AS BACT FOR CO AND VOC EMISSIONS FROM THE TURBINES AND DUCT BURNERS.	6.14	LB/H	BACT-PSD		0
TX-0502	NACOGDOCHES POWER STERNE GENERATING FACILITY	TX	PSD-TX 1015 AND 49293	6/5/2006	WESTINGHOUSE/SIEMENS MODEL SW501F GAS TURBINE W/ 416.5 MMBTU DUCT BURNERS	190	MW	STEAG POWER LLC REPRESENTS GOOD COMBUSTION PRACTICES FOR THE CONTROL OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THE COMBUSTION TURBINES AND DUCT FIRED HRSG. VOC EMISSIONS FROM THE COMBUSTION TURBINE WILL BE 4.3 PPMVD	13.8	LB/H	BACT-PSD		0

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: VOC

CO-0056	ROCKY MOUNTAIN ENERGY CENTER, LLC	CO	05WE0524	5/2/2006	NATURAL-GAS FIRED, COMBINED-CYCLE TURBINE	300 MW	NATURAL GAS QUALITY GAS ONLY FUEL, GOOD COMBUSTION PRATICES AND OXIDATION CATALYST.	0.0029 LB/MMBTU	BACT-PSD	0
NV-0035	TRACY SUBSTATION EXPANSION PROJECT	NV	AP4911-1504	8/16/2005	TURBINE, COMBINED CYCLE COMBUSTION #2 WITH HRSG AND DUCT BURNER.	306 MW	OXIDATION CATALYST FOR CO ALSO MINIMIZES VOC EMISSIONS.	4 PPM @ 15% O2	BACT-PSD	0
NV-0035	TRACY SUBSTATION EXPANSION PROJECT	NV	AP4911-1504	8/16/2005	TURBINE, COMBINED CYCLE COMBUSTION #1 WITH HRSG AND DUCT BURNER.	306 MW	OXIDATION CATALYST FOR CO ALSO MINIMIZES VOC EMISSIONS.	4 PPM @ 15% O2	BACT-PSD	0
MI-0366	BERRIEN ENERGY, LLC	MI	323-01A	4/13/2005	3 COMBUSTION TURBINES AND DUCT BURNERS	1584 MMBTU/H	CATALYTIC OXIDIZER PROVIDES SOME CONTROL FOR VOCS.	3.2 LB/H	BACT-PSD	0
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	TURBINES (4) (MODEL GE 7FA), DUCT BURNERS OFF	172 MW		3.2 LB/H	BACT-PSD	0
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	TURBINES (4) (MODEL GE 7FA), DUCT BURNERS ON	172 MW		20.4 LB/H	BACT-PSD	0
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	COMBUSTION TURBINE GENERATORS AND HEAT RECOVERY STEAM GENERATORS - SW501F TURBINES OPTION	180 MW	OXIDATION CATALYST	3 PPM @ 15% O2	BACT-PSD	0
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	COMBUSTION TURBINE GENERATORS AND HEAT RECOVERY STEAM GENERATORS - GE7FA TURBINES OPTION	170 MW	OXIDATION CATALYST	3 PPM @ 15% O2	BACT-PSD	0
MS-0073	RELIANT ENERGY CHOCTAW COUNTY, LLC	MS	0444-00018	11/23/2004	EMISSION POINT AA-001 GEN. ELEC. COMBUST. TURBINE	230 MW	SCR	3.64 PPMV @ 15% O2	BACT-PSD	40.86 T/YR
NV-0033	EL DORADO ENERGY, LLC	NV	A-00652	8/19/2004	COMBUSTION TURBINE, COMBINED CYCLE & COGEN(2)	475 MW	THE FIRING OF NATURAL GAS ONLY, IN THE CTG/HRSGS AND THE USE OF GOOD COMBUSTION CONTROL	5.2 LB/H	BACT-PSD	0
NV-0037	COPPER MOUNTAIN POWER	NV	15347	5/14/2004	LARGE COMBUSTION TURBINES, COMBINED CYCLE & COGENERATION	600 MW	GOOD COMBUSTION CONTROL AND OXIDATION CATALYST	4 PPMVD	LAER	0
VA-0289	DUKE ENERGY WYTHE, LLC	VA	11382	2/5/2004	TURBINE, COMBINED CYCLE, NATURAL GAS	170 MW	GOOD COMBUSTION PRACTICES.	3 LB/H	BACT-PSD	0
VA-0289	DUKE ENERGY WYTHE, LLC	VA	11382	2/5/2004	TURBINE, COMBINED CYCLE, DUCT BURNER, NATURAL GAS	170 MW	GOOD COMBUSTION PRACTICES	21 LB/H	BACT-PSD	0
OR-0039	COB ENERGY FACILITY, LLC	OR	18-0029	12/30/2003	TURBINE, COMBINED CYCLE, DUCT BURNER, NAT GAS, (4)	1150 MW	CATALYTIC OXIDATION AND GOOD COMBUSTION CONTROLS	7.1 LB/H	BACT-PSD	0
NV-0038	IVANPAH ENERGY CENTER, L.P.	NV	1616	12/29/2003	LARGE COMBUSTION TURBINES, COMBINED CYCLE & COGENERATION	500 MW	GOOD COMBUSTION CONTROL AND CATALYTIC OXIDATION	2.3 PPMVD	BACT-PSD	0
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	COMBUSTION TURBINE, LARGE 2 EACH	1827 MMBTU/H	OXIDATION CATALYST AND GOOD COMBUSTION	7.1 PPMVD @15% O2	BACT-PSD	0
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	COMBUSTION TURBINE, LARGE, 2 EACH	1916 MMBTU/H	OXIDATION CATALYST AND GOOD COMBUSTION PRACTICS	34 PPMVD @15% O2	BACT-PSD	0
VA-0287	JAMES CITY ENERGY PARK	VA	61442	12/1/2003	TURBINE, COMBINED CYCLE, NATURAL GAS	1973 MMBTU/H	GOOD COMBUSTION/DESIGN AND CLEAN FUEL	1.4 PPM	BACT-PSD	0
VA-0287	JAMES CITY ENERGY PARK	VA	61442	12/1/2003	TURBINE, COMBINED CYCLE, NATURAL GAS, DUCT BURNER	1973 MMBTU/H	GOOD COMBUSTION/DESIGN AND CLEAN FUEL	4 PPM	BACT-PSD	0

## RBLC REVIEW FOR COMBINED CYCLE COMBUSTION TURBINES: VOC

AZ-0043	DUKE ENERGY ARLINGTON VALLEY (AVEFII)	AZ	S01-004	11/12/2003	TURBINE, COMBINED CYCLE	325 MW			1 PPM	BACT-PSD	0
AZ-0043	DUKE ENERGY ARLINGTON VALLEY (AVEFII)	AZ	S01-004	11/12/2003	TURBINE, COMBINED CYCLE & DUCT BURNER	325 MW			4 PPM	BACT-PSD	0
FL-0256	HINES ENERGY COMPLEX, POWER BLOCK 3	FL	PSD-FL-330 AND 1050234-006-AC	9/8/2003	COMBUSTION TURBINES, COMBINED CYCLE, NATURAL GAS, 2	1830 MMBTU/H		COMBUSTION DESIGN, GOOD COMBUSTION PRACTICES.	2 PPMVD @ 15% O2	BACT-PSD	0
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	SIEMENS WESTINGHOUSE COMBUSTION TURBINES AND HEAT RECOVERY STEAM GENERATORS	1080 MW		OXIDATION CATALYST	2.5 LB/MMBTU	BACT-PSD	0
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	GE COMBUSTION TURBINES AND HEAT RECOVERY STEAM GENERATORS	1040 MW		OXIDATION CATALYST	4.5 PPMVD	BACT-PSD	0
CA-0997	SACRAMENTO MUNICIPAL UTILITY DISTRICT	CA	16006	9/1/2003	GAS TURBINES, (2)	1611 MMBTU/H			1.4 PPM @ 15% O2	LAER	0
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	TURBINES (2) (MODEL GE 7FA), DUCT BURNERS OFF	170 MW		SCR HAS SOME CONTROL OF VOC	3 LB/H	BACT-PSD	0
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	TURBINES (2) (MODEL GE 7FA), DUCT BURNERS ON	170 MW		SCR HAS SOME CONTROL OF VOC	19.6 LB/H	BACT-PSD	0
CA-1096	VERNON CITY LIGHT & POWER	CA	394164	5/27/2003	GAS TURBINE: COMBINED CYCLE < 50 MW	MW GAS TURBINE, 55 43 M		SCR SYSTEM, AND OXIDATION CATALYST	PPMVD @ 15% 2 O2	BACT-PSD	0
CA-1097	MAGNOLIA POWER PROJECT, SCPPA	CA	386305	5/27/2003	GAS TURBINE: COMBINED CYCLE >= 50 MW	NET MW (GAS TURBINE) 181		SCR SYSTEM AND OXIDATION CATALYST	PPMVD @ 15% 2 O2	BACT-PSD	0
GA-0105	MCINTOSH COMBINED CYCLE FACILITY	GA	4911-103-0014-V-01-0	4/17/2003	TURBINE, COMBINED CYCLE, NATURAL GAS, (4)	140 MW		CATALYTIC OXIDATION	2 PPM @ 15% O2	BACT-PSD	0
FL-0244	FPL MARTIN PLANT	FL	PSD-FL-327	4/16/2003	TURBINE, SIMPLE CYCLE, NATURAL GAS, (4)	170 MW		GOOD COMBUSTION PRACTICES	PPMVD @ 15% 1.3 O2	BACT-PSD	0
FL-0244	FPL MARTIN PLANT	FL	PSD-FL-327	4/16/2003	TURBINE, COMBINED CYCLE WITH DUCT BURNER, NAT GAS	170 MW		GOOD COMBUSTION PRACTICES	PPMVD @ 15% 4 O2	BACT-PSD	0
FL-0245	FPL MANATEE PLANT - UNIT 3	FL	PSD-FL-328 AND 0810010-006-AC	4/15/2003	TURBINE, COMBINED CYCLE, NATURAL GAS (4)	170 MW		GOOD COMBUSTION PRACTICE	PPMVD @ 15% 1.3 O2	Other Case-by-Case	0
FL-0245	FPL MANATEE PLANT - UNIT 3	FL	PSD-FL-328 AND 0810010-006-AC	4/15/2003	TURBINE, SIMPLE CYCLE, NATURAL GAS, (4)	170 MW		GOOD COMBUSTION	PPMVD @ 15% 1.3 O2	BACT-PSD	0
OK-0090	DUKE ENERGY STEPHENS, LLC	OK	2001-157-C M-1 PSD	3/21/2003	TURBINES, COMBINED CYCLE (2)	1701 MMBTU/H		GOOD COMBUSTION AND DLN TECHNOLOGY	45.6 LB/H	BACT-PSD	0
OR-0040	KLAMATH GENERATION, LLC	OR	18-0026	3/12/2003	TURBINE, COMBINED CYCLE, DUCT BURNER, NAT GAS (2)	480 MW		CATALYTIC OXIDATION	7.2 LB/H	BACT-PSD	0
AZ-0039	SALT RIVER PROJECT/SANTAN GEN. PLANT	AZ	V95-008 S01-014	3/7/2003	TURBINE, COMBINED CYCLE, DUCT BURNER, NATURAL GAS	175 MW		CATALYTIC OXIDIZER	4 PPM @ 15% O2	LAER	0
MI-0357	KALKASKA GENERATING, INC	MI	119-02	2/4/2003	TURBINE, COMBINED CYCLE, (2)	605 MW		OXIDATION CATALYST ALSO CONTROL VOC, MOST OF WHICH IS FORMALDEHYDE.	3.5 PPM	BACT-PSD	0

## RBLC REVIEW FOR COMBINED CYCLE COMBUSTION TURBINES: VOC

MI-0361	SOUTH SHORE POWER LLC	MI	342-01	1/30/2003	TURBINE, COMBINED CYCLE, (2)	172 MW	OXIDATION CATALYST USED FOR CO CONTROL CAN ALSO ACHIEVE 1.1 PPMVD @ 15% O2 AND 2.5 PPMVD @ 15% O2 (WITH DUCT FIRING) FOR VOC.	7.3 LB/H	Other Case-by-Case	0
MI-0365	MIRANT WYANDOTTE LLC	MI	279-98B	1/28/2003	TURBINE, COMBINED CYCLE, (2)	2200 MMBTU/H	CATALYTIC OXIDIZER PROVIDES SOME CONTROL FOR VOC EMISSIONS, AS WELL AS GOOD COMBUSTION TECHNIQUES.	10 PPM	Other Case-by-Case	0
NY-0100	EMPIRE POWER PLANT	NY	4381400052	6/23/2005	FUEL COMBUSTION (NATURAL GAS)	2099 MMBTU/H	OXIDATION CATALYST	1 PPMVD AT 15% O2	LAER	0
WA-0291	WALLULA POWER PLANT	WA	EFSEC/2001-03	1/3/2003	TURBINE, COMBINED CYCLE, NATURAL GAS (4)	1300 MW	GOOD COMBUSTION PRACTICES	5 PPMVD @ 15% O2	Other Case-by-Case	0
TX-0352	BRAZOS VALLEY ELECTRIC GENERATING FACILITY	TX	PSD-TX-966	12/31/2002	(2) HRSG/TURBINES, HRSG-001 & -002	175 MW, EA	GOOD COMBUSTION CONTROLS	9.5 LB/H	LAER	0
TX-0352	BRAZOS VALLEY ELECTRIC GENERATING FACILITY	TX	PSD-TX-966	12/31/2002	(2) HRSG/TURBINES, HRSG-003 & -004	175 MW	GOOD COMBUSTION CONTROLS	10.3 LB/H	LAER	0
TX-0391	OXY COGENERATION FACILITY	TX	PSD-276	12/20/2002	COMBINED-CYCLE GAS TURBINES (2)	87 MW (EACH)		2.4 LB/H	Other Case-by-Case	0
TX-0391	OXY COGENERATION FACILITY	TX	PSD-276	12/20/2002	HRSG UNITS 1 & 2 (2)	255 MMBTU/H		2.4 LB/H	Other Case-by-Case	0
TX-0391	OXY COGENERATION FACILITY	TX	PSD-276	12/20/2002	HRSG UNIT NO. 3	255 MMBTU/H		3.4 LB/H	Other Case-by-Case	0
TX-0428	HOUSTON OPERATIONS -- BATTLEGROUND SITE	TX	PSD-TX-276	12/19/2002	TURBINE, COMBINED CYCLE & DUCT BURNER	87 mw	GOOD COMBUSTION DESIGN AND OPERATIONS	4 PPMVD @ 15% O2	BACT-PSD	0
VA-0262	MIRANT AIRSIDE INDUSTRIAL PARK	VA	32008	12/6/2002	TURBINE, SIMPLE CYCLE, (4)	84 MW	GOOD COMBUSTION PRACTICES.	2.6 PPMVD @ 15% O2	BACT-PSD	0
VA-0262	MIRANT AIRSIDE INDUSTRIAL PARK	VA	32008	12/6/2002	TURBINE, COMBINED CYCLE, (2)	170 MW	GOOD COMBUSTION PRACTICES.	2.7 PPMVD @ 15% O2	BACT-PSD	0
TX-0407	STERNE ELECTRIC GENERATING FACILITY	TX	PSD-TX-1015	12/6/2002	TURBINES, COMBINED CYCLE, AND DUCT BURNERS (3)	190 MW	GOOD COMBUSTION PRACTICES.	13.8 LB/H	BACT-PSD	0
GA-0101	MURRAY ENERGY FACILITY	GA	4911-213-0034-P-01-1	10/23/2002	TURBINE, COMBINED CYCLE, (4)	173 MW	GOOD COMBUSTION PRACTICE	4.5 PPM @ 15% O2	BACT-PSD	0
OH-0248	LAWRENCE ENERGY PIKE GENERATION FACILITY	OH	07-00505	9/24/2002	TURBINES (3), COMBINED CYCLE, DUCT BURNERS OFF	180 MW	COMBUSTION CONTROL AND OXIDATION CATALYST	4.2 LB/H	BACT-PSD	0
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE AA-001 W/DUCT BURNER	2168 MMBTU/H	EFFICIENT COMBUSTION PRACTICES	22.8 PPMV @ 15% O2	BACT-PSD	0
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE, AA-002 W /DUCT BURNER	2168 MMBTU/H	EFFICIENT COMBUSTION PRACTICES	22.8 PPMV @ 15% O2	BACT-PSD	0
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE, AA-003 /DUCT BURNER	2168 MMBTU/H	EFFICIENT COMBUSTION PRACTICES	22.8 PPMV @ 15% O2	BACT-PSD	0
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE AA-004 W/ DUCT BURNER	2168 MMBTU/H	EFFICIENT COMBUSTION PRACTICES	22.8 PPMV @ 15% O2	BACT-PSD	0
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	TURBINES (3), COMBINED CYCLE, DUCT BURNERS ON	180 MW	COMBUSTION CONTROLS AND OXIDATION CATALYST	30.7 LB/H	BACT-PSD	0
WA-0299	SUMAS ENERGY 2 GENERATION FACILITY	WA	EFSEC/2001-02	9/6/2002	TURBINES, COMBINED CYCLE, (2)	334.5 MW	CLEAN FUEL -- NATURAL GAS ONLY	0.0085 LB/MMBTU	BACT-PSD	0
VA-0261	CPV CUNNINGHAM CREEK	VA	81382	9/6/2002	TURBINE, COMBINED CYCLE, (2)	2132 MMBTU/H	GOOD COMBUSTION PRACTICES.	1.8 PPMVD @ 15% O2	BACT-PSD	2 PPMVD @ 15% O2
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	TURBINE, COMBINED CYCLE, (2), (GE)	170 MW	GOOD COMBUSTION PRACTICE	1.4 PPMVD @ 15% O2	BACT-PSD	0
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	TURBINE, COMBINED CYCLE, (2), (SWH)	170 MW	GOOD COMBUSTION PRACTICE	3 PPMVD @ 15% O2	BACT-PSD	0
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	TURBINE, COMBINED CYCLE, (2), (MHI)	170 MW	GOOD COMBUSTION PRACTICE/CO OXIDATION CATALYST	8.4 PPMVD @ 15% O2	BACT-PSD	0

## RBLC REVIEW FOR COMBINED CYCLE COMBUSTION TURBINES: VOC

IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINES, SIMPLE CYCLE, NATURAL GAS, (4)	1490.5	MMBTU/H	CLEAN FUEL: NATURAL GAS, GOOD COMBUSTION PRACTICE	0.0024	LB/MMBTU	BACT-PSD	0
IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINE, COMBINED CYCLE, NATURAL GAS (4)	1490.5	MMBTU/H	GOOD COMBUSTION PRACTICE, NATURAL GAS FUEL	0.0025	LB/MMBTU	BACT-PSD	0
IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINE, COMBINED CYCLE AND DUCT BURNER, NAT GAS	1490.5	MMBTU/H	GOOD COMBUSTION PRACTICE, NATURAL GAS FUEL	5.3	LB/H	BACT-PSD	0
AL-0185	BARTON SHOALS ENERGY	AL	X001, X002	7/12/2002	FOUR (4) COMBINED CYCLE COMBUSTION TURBINE UNITS	173	MW	GOOD COMBUSTION PRACTICES	0.0072	LB/MMBTU	BACT-PSD	5.3 PPM
TX-0437	HARTBURG POWER, LP	TX	PSD-TX-1009	7/5/2002	TURBINE, COMBINED CYCLE & DUCT BURNER	277	mw	GOOD COMBUSTION DESIGN, PROPER DESIGN, CLEAN FUEL	4	PPM	BACT-PSD	0
NM-0044	CLOVIS ENERGY FACILITY	NM	PSD-NM-2605	6/27/2002	TURBINES, COMBINED CYCLE, NATURAL GAS (4)	1515	MMBTU/H	THIS FACILITY SHALL ONLY USE PIPELINE QUALITY NATURAL GAS, GOOD ENGINEERING PRACTICE	2.8	LB/H	BACT-PSD	0
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	GE COMBUSTION TURBINE & DUCT BURNERS	1705	MMBTU/H	GOOD COMBUSTION PRACTICES AND DRY LOW-NOX COMBUSTOR	4.1	PPM @ 15% O2	BACT-PSD	0
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	SW COMBUSTION TURBINE	1872	MMBTU/H	GOOD COMBUSTION PRACTICES AND DRY LOW-NOX COMBUSTOR	4.2	PPM @ 15% O2	BACT-PSD	0
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	MHI COMBUSTION TURBINE & DUCT BURNERS	1767	MMBTU/H	CATALYTIC OXIDATION	8.4	PPM @ 15%O2	BACT-PSD	0
MT-0019	CONTINENTAL ENERGY SERVICES, INC., SILVER BOW GEN	MT	3165-00	6/7/2002	TURBINE, COMBINED CYCLE 2	500	MW		17	LB/H	Other Case-by-Case	0
MT-0019	CONTINENTAL ENERGY SERVICES, INC., SILVER BOW GEN	MT	3165-00	6/7/2002	TURBINE, COMBINED CYCLE 1	500	MW		17	LB/H	Other Case-by-Case	0
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, MHI/SW	175	MW	GOOD COMBUSTION PRACTICES	1	PPMVD	BACT-PSD	0
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, GE	175	MW	GOOD COMBUSTION PRACTICES	1.3	PPMVD	BACT-PSD	1.3 PPM @ 15% O2
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, MHI/SW, DUCT BURNERS	175	MW	GOOD COMBUSTION PRACTICES	4.6	PPMVD	BACT-PSD	0
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, GE, DUCT BURNERS	175	MW	GOOD COMBUSTION PRACTICES	4.9	PPMVD	BACT-PSD	0
OH-0264	NORTON ENERGY STORAGE, LLC	OH	16-02110	5/23/2002	COMBUSTION TURBINE (9), COMB CYCLE W/O DUCT BURNER	300	MW		4	LB/H	BACT-PSD	0
OH-0264	NORTON ENERGY STORAGE, LLC	OH	16-02110	5/23/2002	COMBUSTION TURBINES (9), COMB CYCLE W DUCT BURNER	300	MW		7	LB/H	BACT-PSD	0
AZ-0038	GILA BEND POWER GENERATING STATION	AZ	V00-001	5/15/2002	TURBINE, COMBINED CYCLE, DUCT BURNER, NATURAL GAS	170	MW	OXIDATION CATALYST AND GOOD COMBUSTION PRACTICE	1.4	PPM @ 15% O2	BACT-PSD	0
PA-0226	LIMERICK POWER STATION	PA	PA-46-0203	4/9/2002	TURBINE, COMBINED CYCLE	550	MW		2.4	PPM @ 15% O2	LAER	0
AR-0051	DUKE ENERGY-JACKSON FACILITY	AR	1998-AOP-R0 (34-0259)	4/1/2002	TURBINES, COMBINED CYCLE, NATURAL GAS, (2)	170	MW	GOOD COMBUSTION CONTROL	8.4	PPMVD	BACT-PSD	0
PA-0188	FAIRLESS ENERGY LLC	PA	PA-09-0124B	3/28/2002	TURBINE, COMBINED CYCLE	1190	MW	OXIDATION CATALYST	0.002	LB/MMBTU	LAER	0
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	COMBINED CYCLE TURBINE (3)	2964	MMBTU/H	CO CATALYST	1	PPMVD @ 15% O2	Other Case-by-Case	1 PPMVD @ 15% O2

## RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: VOC

NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	COMBINED CYCLE TURBINE WITH DUCT BURNER	3202	MMBTU/H	CO CATALYST	1.7	PPMVD @ 15% O2	Other Case-by-Case	1.7	PPMVD @ 15% O2
OH-0268	LIMA ENERGY COMPANY	OH	03-13445	3/26/2002	COMBUSTION TURBINE (2), COMBINED CYCLE TURBINE, COMBINED CYCLE, & DUCT BURNER (3)	170	MW		15	LB/H	BACT-PSD	0	
TX-0411	AMELIA ENERGY CENTER	TX	PSD-TX-982	3/26/2002	(2) GE7121EA GAS TURBINES, S-3&4	180	MW	GOOD COMBUSTION DESIGN AND OPERATION	23	LB/H	BACT-PSD	0	
TX-0351	WEATHERFORD ELECTRIC GENERATION FACILITY	TX	PSD-TX-933	3/11/2002	(2) GE 7241FA GAS TURBINES (TEMP STACK), S-1&2	1079	MMBTU/H	NONE INDICATED	2	LB/H	Other Case-by-Case	0	
TX-0351	WEATHERFORD ELECTRIC GENERATION FACILITY	TX	PSD-TX-933	3/11/2002	TURBINES, COMBINED CYCLE, GAS, (2) EPNS 1-1, 1-2	1910	MMBTU/H	NONE INDICATED	3	LB/H	Other Case-by-Case	0	
LA-0157	PERRYVILLE POWER STATION	LA	PSD-LA-655 (M-1)	3/8/2002	TURBINE, SIMPLE CYCLE, NAT GAS, EPN 2-1	170	MW	GOOD OPERATING PRACTICES AND USE OF NATURAL GAS AS FUEL	1.4	PPMV @ 15% O2	BACT-PSD	0	
LA-0157	PERRYVILLE POWER STATION	LA	PSD-LA-655 (M-1)	3/8/2002	TURBINE, COMBINED CYCLE, HRSG, NAT GAS, (2) EPNS 1-1, 1-2	183	MW	GOOD OPERATING PRACTICES AND USE OF NATURAL GAS AS FUEL.	2.8	LB/H	BACT-PSD	0	
LA-0157	PERRYVILLE POWER STATION	LA	PSD-LA-655 (M-1)	3/8/2002	TURBINES AND DUCT BURNERS	310	MW TOTAL	GOOD OPERATING PRACTICES AND USE OF NATURAL GAS AS FUEL.	9	LB/H	BACT-PSD	0	
OK-0056	HORSESHOE ENERGY PROJECT	OK	2001-156-C.PSD	2/12/2002	GAS TURBINES, SIMPLE CYCLE (4)	48	MW (EACH)	CATALYTIC OXIDATION	6	PPM	BACT-PSD	0	
TX-0388	SAND HILL ENERGY CENTER	TX	P1012	2/12/2002	COMBINED CYCLE GAS TURBINE	164	MW	GOOD COMBUSTION PRACTICE	8	PPM @ 15% O2	Other Case-by-Case	0	
TX-0388	SAND HILL ENERGY CENTER	TX	P1012	2/12/2002	TURBINE, COMBINED CYCLE, W/O DUCT FIRING	1990	MMBTU/H		16.5	LB/H	Other Case-by-Case	0	
TN-0144	HAYWOOD ENERGY CENTER, LLC	TN	954078F	2/1/2002	TURBINE, COMBINED CYCLE, W/ DUCT FIRING	1990	MMBTU/H	GOOD COMBUSTION PRACTICE	3	LB/H	BACT-PSD	0	
TN-0144	HAYWOOD ENERGY CENTER, LLC	TN	954078F	2/1/2002	TURBINE, COMBINED CYCLE, W/ DUCT FIRING	1990	MMBTU/H	GOOD COMBUSTION PRACTICE	19.3	LB/H	BACT-PSD	0	
TX-0350	ENNIS TRACTEBEL POWER	TX	PSD-TX-927	1/31/2002	COMBUSTION TURBINE W/HEAT RECOVERY STEAM GENERATOR	350	MW	NONE INDICATED	7.09	LB/H	Other Case-by-Case	0	
LA-0164	ACADIA POWER STATION, ACADIA POWER PARTNERS LLC	LA	PSD-LA-645 (M-2)	1/31/2002	GAS TURBINE UNITS 1, 2, 3, 4	183	MW EACH	GOOD DESIGN, PROPER OPERATING AND MAINTENANCE PRACTICES, AND USE OF CLEAN NATURAL GAS.	28	LB/H	BACT-PSD	0	
PA-0223	DUKE ENERGY FAYETTE, LLC	PA	PA-26-00535A	1/30/2002	TURBINE, COMBINED CYCLE, (2)	280	MW	OXIDATION CATALYST	5.3	PPMVD @ 15% O2	LAER	0	
OR-0035	PORT WESTWARD PLANT	OR	05-0008	1/16/2002	(2) COMBUSTION TURBINES, WITH DUCT BURNER	325	MW, EACH	CO CATALYST, GOOD COMBUSTION	4.9	PPM @ 15% O2	BACT-PSD	0	

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: CO

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*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	COMBUSTION TURBINE GENERATOR	154	MW	OXIDATION CATALYST SYSTEM	1.5	PPMVD	BACT-PSD	0	
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	COMBUSTION TURBINE GENERATOR	154	MW	CATALYST OXIDATION SYSTEM	1.5	PPMVD		0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	COMBUSTION TURBINE GENERATOR	180	MW	OXIDATION CATALYST SYSTEM	1.5	PPMVD	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	COMBUSTION TURBINE GENERATOR	180	MW	OXIDATION CATALYST SYSTEM	1.5	PPMVD	BACT-PSD	0	
*VA-0315	WARREN COUNTY POWER PLANT - DOMINION	VA	81391-007	12/17/2010	Combined cycle turbine and duct burner, 3	2996	MMBTU/H	Oxidation catalyst and good combustion practices.	1.5	PPMVD	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	COMBUSTION TURBINE GENERATOR	180	MW	OXIDATION CATALYST SYSTEM	2	PPMVD	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	COMBUSTION TURBINE GENERATOR	180	MW	OXIDATION CATALYST SYSTEM	2	PPMVD	BACT-PSD	0	
TX-0590	KING POWER STATION	TX	PSDTX1125	8/5/2010	Turbine	1350	MW	good combustion practices with an oxidation catalyst	2	PPMVD AT 15% O2	BACT-PSD	0	
ID-0018	LANGLEY GULCH POWER PLANT	ID	P-2009.0092	6/25/2010	COMBUSTION TURBINE, COMBINED CYCLE W/ DUCT BURNER	2375.28	MMBTU/H	CATALYTIC OXIDATION (CATOX), DRY LOW NOX (DLN), GOOD COMBUSTION PRACTICES (GCP)	2	PPMVD	BACT-PSD	2510	LB/H
GA-0138	LIVE OAKS POWER PLANT	GA	4911-127-0075-P-02-0	4/8/2010	COMBINED CYCLE COMBUSTION TURBINE - ELECTRIC GENERATING PLANT	600	MW	GOOD COMBUSTION PRACTICES AND CATALYTIC OXIDATION	2	PPM@15%O2	BACT-PSD	208	T/YR
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Combustion Turbine Generator	154	MW	OXIDATION CATALYST SYSTEM	2	PPMVD	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Combustion Turbine Generator	154	MW	OXIDATION CATALYST SYSTEM	2	PPMVD	BACT-PSD	0	
NY-0095	CAITHNES BELLPORT ENERGY CENTER	NY	PSD-NY-0001	5/10/2006	COMBUSTION TURBINE	2221	MMBUT/H	OXIDATION CATALYST	2	PPMVD@15%O2	BACT-PSD	0	
OR-0041	WANAPA ENERGY CENTER	OR	R10PSD-OR-05-01	8/8/2005	COMBUSTION TURBINE & HEAT RECOVERY STEAM GENERATOR	2384.1	MMBTU/H	OXIDATION CATALYST.	2	PPMDV @ 15% O2	BACT-PSD	2	PPM @ 15% O2
MI-0366	BERRIEN ENERGY, LLC	MI	323-01A	4/13/2005	3 COMBUSTION TURBINES AND DUCT BURNERS	1584	MMBTU/H	CATALYTIC OXIDATION.	2	PPMDV @ 15% O2	BACT-PSD	2	PPM @ 15% O2
WA-0328	BP CHERRY POINT COGENERATION PROJECT	WA	EFSEC/2002-01	1/11/2005	GE 7FA COMBUSTION TURBINE & HEAT RECOVERY STEAM GENERATOR	174	MW	LEAN PRE-MIX CT BURNER & OXIDATION CATALYST	2	PPMDV	BACT-PSD	0	PPM@ 15 % O2
OR-0039	COB ENERGY FACILITY, LLC	OR	18-0029	12/30/2003	TURBINE, COMBINED CYCLE, DUCT BURNER, NAT GAS, (4)	1150	MW	CATALYTIC OXIDATION	2	PPMVD @ 15% O2	BACT-PSD	2	PPM @ 15% O2
AZ-0043	DUKE ENERGY ARLINGTON VALLEY (AVEFII)	AZ	S01-004	11/12/2003	TURBINE, COMBINED CYCLE	325	MW	CATALYTIC OXIDIZER	2	PPM @ 15% O2	BACT-PSD	2	PPM @ 15% O2

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CA-1096	VERNON CITY LIGHT & POWER	CA	394164	5/27/2003	GAS TURBINE: COMBINED CYCLE < 50 MW	43	MW GAS TURBINE, 55 M	SCR SYSTEM, AND OXIDATION CATALYST	2	PPMVD @ 15% O2	BACT-PSD	2	PPM @ 15% O2
CA-1097	MAGNOLIA POWER PROJECT, SCPPA	CA	386305	5/27/2003	GAS TURBINE: COMBINED CYCLE >= 50 MW	181	NET MW (GAS TURBINE	SCR SYSTEM AND OXIDATION CATALYST	2	PPMVD @ 15% O2	BACT-PSD	2	PPM @ 15% O2
GA-0105	MCINTOSH COMBINED CYCLE FACILITY	GA	4911-103-0014-V-01-0	4/17/2003	TURBINE, COMBINED CYCLE, NATURAL GAS, (4)	140	MW	CATALYTIC OXIDATION	2	PPM @ 15% O2	BACT-PSD	2	PPM @ 15% O2
WA-0315	SUMAS ENERGY 2 GENERATION FACILITY	WA	EFSEC 2001-02	4/17/2003	TURBINES, COMBINED CYCLE, (2)	660	MW	OXIDATION CATALYST	2	PPMVD	BACT-PSD	2	PPM @ 15% O2
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	COMBINED CYCLE TURBINE (3)	2964	MMBTU/H	CO CATALYST	2	PPMVD @ 15% O2	Other Case-by-Case	2	PPMVD @ 15% O2
NV-0033	EL DORADO ENERGY, LLC	NV	A-00652	8/19/2004	COMBUSTION TURBINE, COMBINED CYCLE & COGEN(2)	475	MW	OXIDATION CATALYST	2.6	PPM @ 15% O2	LAER	3.5	PPM @ 15% O2
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	OXIDATION CATALYST SYSTEM	3	PPMVD	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	CATALYTIC OXIDATION SYSTEM	3	PPMVD	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Combustion Turbine Generator	154	MW	OXIDATION CATALYST SYSTEM	3	PPMVD	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Combustion Turbine Generator	154	MW	OXIDATION CATALYST SYSTEM	3	PPMVD	BACT-PSD	0	
CO-0056	ROCKY MOUNTAIN ENERGY CENTER, LLC	CO	05WE0524	5/2/2006	NATURAL-GAS FIRED, COMBINED-CYCLE TURBINE	300	MW	USE GOOD COMBUSTION CONTROL PRACTICES AND CATALYTIC OXIDATION.	3	PPM @ 15% O2	BACT-PSD	3	PPM @ 15 O2
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	COMBUSTION TURBINE GENERATORS AND HEAT RECOVERY STEAM GENERATORS - SW501F TURBINES OPTION	180	MW	OXIDATION CATALYST	3	PPM @ 15% O2	BACT-PSD	3	PPM @ 15% O2
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	COMBUSTION TURBINE GENERATORS AND HEAT RECOVERY STEAM GENERATORS - GE7FA TURBINES OPTION	170	MW	OXIDATION CATALYST	3	PPM @ 15% O2	BACT-PSD	3	PPM @ 15% O2
UT-0066	CURRENT CREEK	UT	DAQE-2524002-04	5/17/2004	NATURAL GAS FIRED TURBINES AND HEAT RECOVERY STEAM GENERATORS			OXIDATION CATALYST FOR COMBINED CYCLE MODE OF OPERATION	3	PPMVD	BACT-PSD	3	PPM @ 15% O2
NV-0037	COPPER MOUNTAIN POWER	NV	15347	5/14/2004	LARGE COMBUSTION TURBINES, COMBINED CYCLE & COGENERATION	600	MW	GOOD COMBUSTOR DESIGN AND AN OXIDATION CATALYST	3	PPMVD	LAER	3	PPM @ 15% O2
AZ-0043	DUKE ENERGY ARLINGTON VALLEY (AVEFII)	AZ	S01-004	11/12/2003	TURBINE, COMBINED CYCLE & DUCT BURNER	325	MW	CATALYTIC OXIDIZER	3	PPM @ 15% O2	BACT-PSD	3	PPM @ 15% O2
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	SIEMENS WESTINGHOUSE COMBUSTION TURBINES AND HEAT RECOVERY STEAM GENERATORS	1080	MW	OXIDATION CATALYST	3	PPMVD	BACT-PSD	3	PPM @ 15% O2

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AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	GE COMBUSTION TURBINES AND HEAT RECOVERY STEAM GENERATORS	1040	MW	OXIDATION CATALYST	3	PPMVD	BACT-PSD	3	PPM @ 15% O2
AZ-0039	SALT RIVER PROJECT/SANTAN GEN. PLANT	AZ	V95-008 S01-014	3/7/2003	TURBINE, COMBINED CYCLE, DUCT BURNER, NATURAL GAS	175	MW	CATALYTIC OXIDIZER	3	PPM @ 15% O2	LAER	0	
PA-0188	FAIRLESS ENERGY LLC	PA	PA-09-0124B	3/28/2002	TURBINE, COMBINED CYCLE	1190	MW	OXIDATION CATALYST	3	PPMVD @ 15% O2	BACT-PSD	3	PPM @ 15% O2
NV-0035	TRACY SUBSTATION EXPANSION PROJECT	NV	AP4911-1504	8/16/2005	TURBINE, COMBINED CYCLE COMBUSTION #2 WITH HRSG AND DUCT BURNER.	306	MW	OXIDATION CATALYST SYSTEM	3.5	PPM @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
NV-0035	TRACY SUBSTATION EXPANSION PROJECT	NV	AP4911-1504	8/16/2005	TURBINE, COMBINED CYCLE COMBUSTION #1 WITH HRSG AND DUCT BURNER.	306	MW	OXIDATION CATALYST	3.5	PPM @ 15% O2	BACT-PSD	3.5	PPM @ 15% O2
MI-0365	MIRANT WYANDOTTE LLC	MI	279-98B	1/28/2003	TURBINE, COMBINED CYCLE, (2)	2200	MMBTU/H	CATALYTIC OXIDATION SYSTEM.	3.8	PPM	BACT-PSD	3.8	PPM @ 15% O2
*TX-0618	CHANNEL ENERGY CENTER LLC	TX	PSDTX955M1	10/15/2012	Combined Cycle Turbine	180	MW	Good combustion	4	PPMVD	BACT-PSD	0	
*TX-0619	DEER PARK ENERGY CENTER	TX	PSDTX979M2	9/26/2012	Combined Cycle Turbine	180	MW	good combustion	4	PPMVD	BACT-PSD	0	
*TX-0620	ES JOSLIN POWER PLANT	TX	PSDTX1256	9/12/2012	Combined cycle gas turbine	195	MW	good combustion	4	PPMVD	BACT-PSD	0	
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Combined Cycle Turbine (EP01)	40	MW	Oxidation Catalyst	4	PPMV AT 15% O2	BACT-PSD	32	TONS
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Combined Cycle Turbine (EP02)	40	MW	Oxidation Catalyst	4	PPMV AT 15% O2	BACT-PSD	32	TONS
TX-0600	THOMAS C. FERGUSON POWER PLANT	TX	PSDTX1244	9/1/2011	Natural gas-fired turbines	390	MW	Good combustion practices and oxidation catalyst	4	PPMVD	BACT-PSD	0	
*CA-1209	HIGH DESERT POWER PROJECT	CA	SE 98-01	3/11/2010	COMBUSTION TURBINE GENERATOR	190	MW	OXIDATION CATALYST SYSTEM	4	PPMVD	BACT-PSD	0	
*CA-1209	HIGH DESERT POWER PROJECT	CA	SE 98-01	3/11/2010	COMBUSTION TURBINE GENERATOR	190	MW	CATALYST OXATION SYSTEM	4	PPMVD	BACT-PSD	0	
*CA-1209	HIGH DESERT POWER PROJECT	CA	SE 98-01	3/11/2010	COMBUSTION TURBINE GENERATOR	190	MW	OXIDATION CATALYST SYSTEM	4	PPMVD	BACT-PSD	0	
CA-1144	BLYTHE ENERGY PROJECT II	CA	SE 02-01	4/25/2007	2 COMBUSTION TURBINES	170	MW		4	PPMVD	BACT-PSD	0	
*CA-1195	ELK HILLS POWER LLC	CA	SJ 99-02	1/12/2006	COMBUSTION TURBINE GENERATOR	166	MW	SCR OR SCONOX	4	PPMVD	BACT-PSD	0	
*CA-1195	ELK HILLS POWER LLC	CA	SJ 99-02	1/12/2006	COMBUSTION TURBINE GENERATOR	166	MW	SCR OR SCONOX	4	PPMVD	BACT-PSD	0	
CA-1143	SUTTER POWER PLANT	CA	SAC 98-01	8/16/2004	2 COMBUSTION TURBINES	170	MW	OXIDATION CATALYST SYSEM	4	PPMVD	BACT-PSD	0	
NV-0038	IVANPAH ENERGY CENTER, L.P.	NV	1616	12/29/2003	LARGE COMBUSTION TURBINES, COMBINED CYCLE & COGENERATION	500	MW	GOOD COMBUSTION CONTROL AND CATALYTIC OXIDATION	4	PPMVD	LAER	4	PPM @ 15% O2
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	COMBUSTION TURBINE, LARGE, 2 EACH	1916	MMBTU/H	OXIDATION CATALYST AND GOOD COMBUSTION	4	PPMVD 15% O2	BACT-PSD	4	PPM @ 15% O2
CA-0997	SACRAMENTO MUNICIPAL UTILITY DISTRICT	CA	16006	9/1/2003	GAS TURBINES, (2)	1611	MMBTU/H	GOOD COMBUSTION CONTROL CATALYTIC OXIDATION AND USE OF GOOD COMBUSTION PRACTICES.	4	PPM @ 15% O2	LAER	4	PPM @ 15% O2
MI-0361	SOUTH SHORE POWER LLC	MI	342-01	1/30/2003	TURBINE, COMBINED CYCLE, (2)	172	MW		4	PPMVD @ 15% O2	BACT-PSD	4	PPM @ 15% O2

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AZ-0038	GILA BEND POWER GENERATING STATION	AZ	V00-001	5/15/2002	TURBINE, COMBINED CYCLE, DUCT BURNER, NATURAL GAS	170	MW	OXIDATION CATALYST	4	PPM @ 15% O2	BACT-PSD	4	PPM @ 15% O2
CT-0151	KLEEN ENERGY SYSTEMS, LLC	CT	104-0131 AND 104-0133	2/25/2008	SIEMENS SGT6-5000F COMBUSTION TURBINE #1 AND #2 (NATURAL GAS FIRED) WITH 445 MMBTU/HR NATURAL GAS DUCT BURNER	2.1	MMCF/H	CO CATLYST	4.3	LB/H	BACT-PSD	0.9	PPMVD @ 15 % O2
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	COMBUSTION TURBINE, LARGE 2 EACH	1827	MMBTU/H	OXIDATION CATALYST AND GOOD COMBUSTION	4.8	PPMVD @15% O2	BACT-PSD	4.8	PPM @ 15% O2
OR-0035	PORT WESTWARD PLANT	OR	05-0008	1/16/2002	(2) COMBUSTION TURBINES, WITH DUCT BURNER	325	MW, EACH	CO CATALYST AND GOOD COMBUSTION PRACTICES.	4.9	PPM @ 15% O2	BACT-PSD	4.9	PPM @ 15% O2
OR-0040	KLAMATH GENERATION, LLC	OR	18-0026	3/12/2003	TURBINE, COMBINED CYCLE, DUCT BURNER, NAT GAS (2)	480	MW	CATALYTIC OXIDATION	5	PPMVD @ 15% O2	BACT-PSD	5	PPM @ 15% O2
MI-0357	KALKASKA GENERATING, INC	MI	119-02	2/4/2003	TURBINE, COMBINED CYCLE, (2)	605	MW	OXIDATION CATALYST.	5	PPMVD @15% O2	BACT-PSD	5	PPM @ 15% O2
PA-0223	DUKE ENERGY FAYETTE, LLC	PA	PA-26-00535A	1/30/2002	TURBINE, COMBINED CYCLE, (2)	280	MW	OXIDATION CATALYST	5	PPMVD @ 15% O2	BACT-PSD	5	PPM @ 15% O2
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP03)	40	MW	Oxidation Catalyst	6	PPMV AT 15% O2	BACT-PSD	32.9	TONS
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Trubine (EP04)	40	MW	Oxidation Catalyst	6	PPMV AT 15% O2	BACT-PSD	32.9	TONS
*WY-0070	CHEYENNE PRAIRIE GENERATING STATION	WY	CT-12636	8/28/2012	Simple Cycle Turbine (EP05)	40	MW	Oxidation Catalyst	6	PPMV AT 15% O2	BACT-PSD	32.9	TONS
FL-0304	CANE ISLAND POWER PARK	FL	PSD-FL-400 (0970043-014-AC)	9/8/2008	300 MW COMBINED CYCLE COMBUSTION TURBINE	1860	MMBTU/H	GOOD COMBUSTION PRACTICES	6	PPMVD	BACT-PSD	0	
CA-1142	PASTORIA ENERGY FACILITY	CA	SJ 99-03	12/23/2004	3 COMBUSTION TURBINES	168	MW	XONON CATALYTIC COMBUSTORS OR DRY LOW NOX BURNERS & SCR	6	PPMVD	BACT-PSD	0	
PA-0189	CONECTIV BETHLEHEM, INC.	PA	48-328-006	1/16/2002	TURBINE, COMBINED CYCLE, (6)	122	MW	BACT FOR CO IS GOOD COMBUSTION PRACTICE	6	PPM @ 15% O2	BACT-PSD	0	
FL-0245	FPL MANATEE PLANT - UNIT 3	FL	PSD-FL-328 AND 0810010-006-AC	4/15/2003	TURBINE, SIMPLE CYCLE, NATURAL GAS, (4)	170	MW	GOOD COMBUSTION DESIGN AND PRACTICES	7.4	PPMVD @ 15% O2	BACT-PSD	7.4	PPM @ 15% O2
FL-0285	PROGRESS BARTOW POWER PLANT	FL	PSD-FL-381 AND 1030011-010-AC	1/26/2007	COMBINED CYCLE COMBUSTION TURBINE SYSTEM (4-ON-1)	1972	MMBTU/H	GOOD COMBUSTION	8	PPMVD	BACT-PSD	0	
FL-0285	PROGRESS BARTOW POWER PLANT	FL	PSD-FL-381 AND 1030011-010-AC	1/26/2007	SIMPLE CYCLE COMBUSTION TURBINE (ONE UNIT)	1972	MMBTU/H	GOOD COMBUSTION	8	PPMVD	BACT-PSD	0	
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	COMBINED CYCLE COMBUSTION GAS TURBINES - 6 UNITS	2333	MMBTU/H		8	PPMVD @15%O2	BACT-PSD	0	
FL-0265	HINES POWER BLOCK 4	FL	PSD-FL-342 AND 1050234-010-AC	6/8/2005	COMBINED CYCLE TURBINE	530	MW	GOOD COMBUSTION	8	PPM	BACT-PSD	8	PPM @ 15% O2
FL-0244	FPL MARTIN PLANT	FL	PSD-FL-327	4/16/2003	TURBINE, SIMPLE CYCLE, NATURAL GAS, (4)	170	MW	GOOD COMBUSTION DESIGN AND PRACTICES	8	PPMVD @ 15% O2	BACT-PSD	8	PPM @ 15% O2
FL-0241	CPV CANA	FL	PSD-FL-323	1/17/2002	TURBINE, COMBINED CYCLE, NATURAL GAS	1680	MMBTU/H	COMBUSTION CONTROLS	8	PPMVD @ 15% O2	BACT-PSD	8	PPM @ 15% O2
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	TURBINE, COMBINED CYCLE, (2), (GE )	170	MW	GOOD COMBUSTION PRACTICE	8.2	PPMVD @ 15% O2	BACT-PSD	8.2	PPM @ 15% O2
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	GE COMBUSTION TURBINE & DUCT BURNERS	1705	MMBTU/H	COMBUSTION CONTROL	8.2	PPM @ 15% O2	BACT-PSD	8.2	PPM @ 15% O2

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MN-0071	FAIRBAULT ENERGY PARK	MN	13100071-003	6/5/2007	COMBINED CYCLE COMBUSTION TURBINE W/DUCT BURNER	1758	MMBTU/H	GOOD COMBUSTION	9	PPMVD	BACT-PSD	11	PPMVD
VA-0289	DUKE ENERGY WYTHE, LLC	VA	11382	2/5/2004	TURBINE, COMBINED CYCLE, NATURAL GAS	170	MW	GOOD COMBUSTION PRACTICES.	9	PPMVD	BACT-PSD	9	PPM @ 15% O2
VA-0287	JAMES CITY ENERGY PARK	VA	61442	12/1/2003	TURBINE, COMBINED CYCLE, NATURAL GAS	1973	MMBTU/H	GOOD COMBUSTION PRACTICES	9	PPM	BACT-PSD	9	PPM @ 15% O2
IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINE, COMBINED CYCLE, NATURAL GAS (4)	1490.5	MMBTU/H	GOOD COMBUSTION PRACTICES, NATURAL GAS AS FUEL.	9	PPMVD @ 15% O2	BACT-PSD	9	PPM @ 15% O2
IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINES, SIMPLE CYCLE, NATURAL GAS, (4)	1490.5	MMBTU/H	GOOD COMBUSTION PRACTICES, CLEAN FUEL -- NATURAL GAS.	9	PPMVD @ 15% O2	BACT-PSD	9	PPM @ 15% O2
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, GE	175	MW	GOOD COMBUSTION PRACTICES	9	PPMVD	BACT-PSD	9	PPM @ 15% O2
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	TURBINES (3), COMBINED CYCLE, DUCT BURNERS OFF	180	MW	GOOD COMBUSTION PRACTICES (GCP) AND OXIDATION CATALYST	9.8	LB/H	BACT-PSD	2	PPM @ 15% O2
FL-0256	HINES ENERGY COMPLEX, POWER BLOCK 3	FL	PSD-FL-330 AND 1050234-006-AC	9/8/2003	COMBUSTION TURBINES, COMBINED CYCLE, NATURAL GAS,2	1830	MMBTU/H	COMBUSTION DESIGN, GOOD COMBUSTION PRACTICES.	10	PPMVD @15% O2	BACT-PSD	10	PPMVD @15% O2
FL-0244	FPL MARTIN PLANT	FL	PSD-FL-327	4/16/2003	TURBINE, COMBINED CYCLE, NATURAL GAS, (4)	170	MW	GOOD COMBUSTION DESIGN AND PRACTICES	10	PPMVD @ 15% O2	BACT-PSD	10	PPM @ 15% O2
FL-0245	FPL MANATEE PLANT - UNIT 3	FL	PSD-FL-328 AND 0810010-006-AC	4/15/2003	TURBINE, COMBINED CYCLE, NATURAL GAS (4)	170	MW	GOOD COMBUSTION DESIGN AND PRACTICES	10	PPMVD @ 15% O2	BACT-PSD	7.4	PPM @ 15% O2
OK-0090	DUKE ENERGY STEPHENS, LLC	OK	2001-157-C M-1 PSD	3/21/2003	TURBINES, COMBINED CYCLE (2)	1701	MMBTU/H	COMBUSTION CONTROL	10	PPM @ 15% O2	BACT-PSD	10	PPM @ 15% O2
VA-0261	CPV CUNNINGHAM CREEK	VA	81382	9/6/2002	TURBINE, COMBINED CYCLE, (2)	2132	MMBTU/H	GOOD COMBUSTION PRACTICES.	10	LB/H	BACT-PSD	3.1	PPM @ 15% O2
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, MHI/SW	175	MW	GOOD COMBUSTION PRACTICES	10	PPMVD	BACT-PSD	10	PPM @ 15% O2
PA-0226	LIMERICK POWER STATION	PA	PA-46-0203	4/9/2002	TURBINE, COMBINED CYCLE	550	MW		10	PPM @ 15% O2	BACT-PSD	10	PPM @ 15% O2
AR-0052	THOMAS B. FITZHUGH GENERATING STATION	AR	1165-AOP-R1 (24-0012)	2/15/2002	TURBINE, COMBINED CYCLE, NATURAL GAS	170.6	MW	GOOD COMBUSTION PRACTICES. DRY LOW NOX COMBUSTORS	10	PPM @ 15% O2	BACT-PSD	10	PPM @ 15% O2
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	TURBINE, COMBINED CYCLE, (2), (MHI)	170	MW	GOOD COMBUSTION PRACTICE/CO OXIDATION CATALYST	10.2	PPMVD @ 15% O2	BACT-PSD	10.2	PPM @ 15% O2
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	MHI COMBUSTION TURBINE & DUCT BURNERS	1767	MMBTU/H	CATALYTIC OXIDATION	10.2	PPM @ 15% O2	BACT-PSD	10.2	PPM @ 15% O2
VA-0262	MIRANT AIRSIDE INDUSTRIAL PARK	VA	32008	12/6/2002	TURBINE, COMBINED CYCLE, (2)	170	MW	GOOD COMBUSTION PRACTICES.	10.3	PPMVD @ 15% O2	BACT-PSD	10.3	PPM @ 15% O2
NC-0101	FORSYTH ENERGY PLANT	NC	00986R1	9/29/2005	TURBINE, COMBINED CYCLE, NATURAL GAS, (3)	1844.3	MMBTU/H	GOOD COMBUSTION PRACTICES AND EFFICIENT PROCESS DESIGN.	11.6	PPM @ 15% O2	BACT-PSD	11.6	PPM @ 15% O2
VA-0287	JAMES CITY ENERGY PARK	VA	61442	12/1/2003	TURBINE, COMBINED CYCLE, NATURAL GAS,DUCT BURNER	1973	MMBTU/H	GOOD COMBUSTION PRACTICES	12	PPM	BACT-PSD	12	PPM @ 15% O2
GA-0101	MURRAY ENERGY FACILITY	GA	4911-213-0034-P-01-1	10/23/2002	TURBINE, COMBINED CYCLE, (4)	173	MW	GOOD COMBUSTION PRACTICE	12	PPM @ 15% O2	BACT-PSD	12	PPM @ 15% O2
FL-0239	JEA/BRANDY BRANCH	FL	PSD-FL-310	3/27/2002	TURBINES, COMBINED CYCLE, (2)	1911	MMBTU/H	GOOD COMBUSTION	12.21	PPMVD	BACT-PSD	12.21	PPM @ 15% O2
MS-0055	EL PASO MERCHANT ENERGY CO.	MS	0540-00080	6/24/2002	TURBINE, COMBINED CYCLE, DUCT BURNER, NAT GAS, (2)	1737	MMBTU/H	GOOD COMBUSTION PRACTICE	13.8	PPMV @ 15% O2	BACT-PSD	13.8	PPM @ 15% O2

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IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINE, COMBINED CYCLE AND DUCT BURNER, NAT GAS	1490.5	MMBTU/H	GOOD COMBUSTION PRACTICE, NATURAL GAS AS FUEL.	14	PPMVD @ 15% O2	BACT-PSD	14	PPM @ 15% O2
VA-0289	DUKE ENERGY WYTHE, LLC	VA	11382	2/5/2004	TURBINE, COMBINED CYCLE, DUCT BURNER, NATURAL GAS	170	MW	GOOD COMBUSTION PRACTICES	14.6	PPMVD	BACT-PSD	14.6	PPM @ 15% O2
TX-0437	HARTBURG POWER, LP	TX	PSD-TX-1009	7/5/2002	TURBINE, COMBINED CYCLE & DUCT BURNER	277	mw	GOOD COMBUSTION PRACTICES, DESIGN, PROPER OPERATION	15	PPM	BACT-PSD	15	PPM @ 15% O2
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	COMBINED CYCLE TURBINE WITH DUCT BURNER	3202	MMBTU/H	CO CATALYST	15.4	LB/H	Other Case-by-Case	2	PPMVD @ 15% O2
OK-0096	REDBUD POWER PLANT	OK	2000-090-C M-3 PSD	6/3/2003	COMBUSTION TURBINE AND DUCT BURNERS	1832	MMBTU/H	GOOD COMBUSTION PRACTICES/DESIGN	17.2	PPMVD	BACT-PSD	17.2	PPM @ 15% O2
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Generation Turbines (2)	286	MMBTU/H	Good combustion practices and fueled by natural gas	17.46	LB/H	BACT-PSD	25	PPMV
NE-0017	BEATRICE POWER STATION	NE	76739	5/29/2003	TURBINE, COMBINED CYCLE, (2)	80	MW	GOOD COMBUSTION & CATALYTIC OXIDATION. EMISSION LIMITS SPECIFIED, NOT CONTROL DEVICES.	18.4	LB/H	Other Case-by-Case	0	
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, GE, DUCT BURNERS	175	MW	GOOD COMBUSTION PRACTICES	20	PPMVD	BACT-PSD	20	PPM @ 15% O2
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, MHI/SW, DUCT BURNERS	175	MW	GOOD COMBUSTION PRACTICES	20.6	PPMVD	BACT-PSD	20.6	PPM @ 15% O2
OH-0264	NORTON ENERGY STORAGE, LLC	OH	16-02110	5/23/2002	COMBUSTION TURBINE (9), COMB CYCLE W/O DUCT BURNER	300	MW	CATALYTIC OXIDATION WAS NOT CONSIDERED COST EFFECTIVE.	23	LB/H	BACT-PSD	11	PPM @ 15% O2
AR-0051	DUKE ENERGY-JACKSON FACILITY	AR	1998-AOP-R0 (34-0259)	4/1/2002	TURBINES, COMBINED CYCLE, NATURAL GAS, (2)	170	MW	GOOD OPERATING PRACTICE	23.6	PPM @ 15% O2	BACT-PSD	23.6	PPM @ 15% O2
TX-0428	HOUSTON OPERATIONS -- BATTLEGROUND SITE	TX	PSD-TX-276	12/19/2002	TURBINE, COMBINED CYCLE & DUCT BURNER	87	mw	GOOD COMBUSTION PRACTICES	25	PPMVD @ 15% O2	BACT-PSD	25	PPM @ 15% O2
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	TURBINES (4) (MODEL GE 7FA), DUCT BURNERS OFF	172	MW		25.7	LB/H	BACT-PSD	6	PPM @ 15% O2
LA-0157	PERRYVILLE POWER STATION	LA	PSD-LA-655 (M-1)	3/8/2002	TURBINE, SIMPLE CYCLE, NAT GAS, EPN 2-1	170	MW	GOOD OPERATING PRACTICES AND USE OF NATURAL GAS AS FUEL. BACT FOR NOX, LOW NOX BURNERS AND/OR SELECTIVE CATALYTIC REDUCTION, IS ALSO BACT FOR CO.	28	LB/H	BACT-PSD	9	PPMV @ 15% O2
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	TURBINE, COMBINED CYCLE, (2), (SWH)	170	MW	GOOD COMBUSTION PRACTICE	30	PPMVD @ 15% O2	BACT-PSD	30	PPM @ 15% O2
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	SW COMBUSTION TURBINE	1872	MMBTU/H	COMBUSTION CONTROL	30	PPM @ 15% O2	BACT-PSD	30	PPM @ 15% O2
TX-0351	WEATHERFORD ELECTRIC GENERATION FACILITY	TX	PSD-TX-933	3/11/2002	(2) GE 7241FA GAS TURBINES (TEMP STACK), S-1&2	1910	MMBTU/H	NONE INDICATED	31	LB/H	Other Case-by-Case	25	PPM @ 15% O2
WY-0061	BLACK HILLS CORP./NEIL SIMPSON TWO	WY	MD-850	4/4/2003	TURBINE, COMBINED CYCLE, & DUCT BURNER	40	MW	GOOD COMBUSTION PRACTICE	37.2	PPMV @ 15% O2	BACT-PSD	37.2	PPM @ 15% O2
NM-0044	CLOVIS ENERGY FACILITY	NM	PSD-NM-2605	6/27/2002	TURBINES, COMBINED CYCLE, NATURAL GAS (4)	1515	MMBTU/H	GOOD COMBUSTOR DESIGN. THIS FACILITY WILL ONLY COMBUST "SWEET" NATURAL GAS.	37.6	LB/H	BACT-PSD	10	PPM @ 15% O2

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OH-0264	NORTON ENERGY STORAGE, LLC	OH	16-02110	5/23/2002	COMBUSTION TURBINES (9), COMB CYCLE W DUCT BURNER	300	MW	CATALYTIC OXIDATION WAS NOT CONSIDERED COST EFFECTIVE.	38	LB/H	BACT-PSD	17	PPM @ 15% O2
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE AA-001 W/DUCT BURNER	2168	MMBTU/H	EFFICIENT COMBUSTION PRACTICES	40	PPMV @ 15% O2	BACT-PSD	40	PPM @ 15% O2
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE, AA-002 W /DUCT BURNER	2168	MMBTU/H	EFFICIENT COMBUSTION PRACTICES	40	PPMV @ 15% O2	BACT-PSD	40	PPM @ 15% O2
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE, AA-003 /DUCT BURNER	2168	MMBTU/H	EFFICIENT COMBUSTION PRACTICES	40	PPMV @ 15% O2	BACT-PSD	40	PPM @ 15% O2
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE AA-004 W/ DUCT BURNER	2168	MMBTU/H	EFFICIENT COMBUSTION PRACTICES	40	PPMV @ 15% O2	BACT-PSD	40	PPM @ 15% O2
OK-0056	HORSESHOE ENERGY PROJECT	OK	2001-156-C PSD	2/12/2002	TURBINES AND DUCT BURNERS	310	MW TOTAL	GOOD COMBUSTION CONTROL	40	PPM @ 15% O2	BACT-PSD	40	PPM @ 15% O2
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	TURBINES (2) (MODEL GE 7FA), DUCT BURNERS OFF	170	MW		43	LB/H	BACT-PSD	10	PPM @ 15% O2
TX-0388	SAND HILL ENERGY CENTER	TX	P1012	2/12/2002	GAS TURBINES, SIMPLE CYCLE (4)	48	MW (EACH)	LIMITED TO 2,750 HOURS PER YEAR. SEE NOTE	43	PPM @ 15% O2	BACT-PSD	43	PPM @ 15% O2
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Refrigeration Compressor Turbines (16)	286	MMBTU/H	Good combustion practices and fueled by natural gas	43.6	LB/H	BACT-PSD	58.4	PPMV
LA-0120	GEISMAR PLANT	LA	PSD-LA-647 (M-2)	2/26/2002	(2) COGENERATION UNITS POINT # 720-99 AND 721-99	40	MW EACH	GOOD COMBUSTION PRACTICES WITH NATURAL GAS AS FUEL.	44	LB/H	BACT-PSD	24.8	PPM @ 15% O2
TN-0144	HAYWOOD ENERGY CENTER, LLC	TN	954078F	2/1/2002	TURBINE, COMBINED CYCLE, W/O DUCT FIRING	1990	MMBTU/H	GOOD COMBUSTION PRACTICE	46	LB/H	BACT-PSD	28.3	PPM @ 15% O2
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	TURBINES (4) (MODEL GE 7FA), DUCT BURNERS ON	172	MW		50.3	LB/H	BACT-PSD	9	PPM @ 15% O2
VA-0262	MIRANT AIRSIDE INDUSTRIAL PARK	VA	32008	12/6/2002	TURBINE, SIMPLE CYCLE, (4)	84	MW	GOOD COMBUSTION PRACTICES.	51	PPMVD @ 15% O2	BACT-PSD	25	PPM @ 15% O2
TX-0351	WEATHERFORD ELECTRIC GENERATION FACILITY	TX	PSD-TX-933	3/11/2002	(2) GE7121EA GAS TURBINES, S-3&4	1079	MMBTU/H	NONE INDICATED	58	LB/H	Other Case-by-Case	25	PPM @ 15% O2
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	TURBINES (3), COMBINED CYCLE, DUCT BURNERS ON	180	MW	GOOD COMBUSTION PRACTICES (GCP) AND OXIDATION CATALYST	61.9	LB/H	BACT-PSD	10	PPM @ 15% O2
TX-0391	OXY COGENERATION FACILITY	TX	PSD-276	12/20/2002	HRSG UNIT NO. 3	255	MMBTU/H	GOOD COMBUSTION PRACTICES.	64.3	LB/H	Other Case-by-Case	0	
TX-0497	INEOS CHOCOLATE BAYOU FACILITY	TX	PSD-TX 983 AND 46192	8/29/2006	COGENERATION TRAIN 2 AND 3 (TURBINE AND DUCT BURNER EMISSIONS)	35	MW	BP AMOCO PROPOSES PROPER COMBUSTION CONTROL AS BACT FOR CO AND VOC EMISSIONS FROM THE TURBINES AND DUCT BURNERS. CO EMISSIONS FROM EACH TURBINE WILL NOT EXCEED 15 PPMVD AT 85% TO 100% OF BASE LOAD. CO EMISSIONS FROM EACH TU	66.81	LB/H	BACT-PSD	0	
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	TURBINES (2) (MODEL GE 7FA), DUCT BURNERS ON	170	MW		78	LB/H	BACT-PSD	14	PPM @ 15% O2
LA-0194	SABINE PASS LNG TERMINAL	LA	PSD-LA-703	11/24/2004	30 MW GAS TURBINE GNERATORS (4) LOW LOAD OPERATIONS	30	mw each	GOOD COMBUSTION PRACTICES	80	PPMVD @ 15% O2	BACT-PSD	0	

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TX-0352	BRAZOS VALLEY ELECTRIC GENERATING FACILITY	TX	PSD-TX-966	12/31/2002	(2) HRSG/TURBINES, HRSG-003 & -004	175	MW	GOOD COMBUSTION CONTROLS	92.4	LB/H	BACT-PSD	17	PPM @ 15% O2
TX-0352	BRAZOS VALLEY ELECTRIC GENERATING FACILITY	TX	PSD-TX-966	12/31/2002	(2) HRSG/TURBINES, HRSG-001 & -002	175	MW, EA	GOOD COMBUSTION CONTROLS	92.4	LB/H	BACT-PSD	17	PPM @ 15% O2
TX-0388	SAND HILL ENERGY CENTER	TX	P1012	2/12/2002	COMBINED CYCLE GAS TURBINE	164	MW		98.2	LB/H	Other Case-by-Case	17.5	PPM @ 15% O2
LA-0157	PERRYVILLE POWER STATION	LA	PSD-LA-655 (M-1)	3/8/2002	TURBINE, COMBINED CYCLE, HRSG, NAT GAS, (2) EPNS 1-1, 1-2	183	MW	GOOD OPERATING PRACTICES AND USE OF NATURAL GAS AS FUEL. BACT FOR NOX, LOW NOX BURNERS AND/OR SELECTIVE CATALYTIC REDUCTION, IS ALSO BACT FOR CO.	108.2	LB/H	BACT-PSD	0	
TX-0502	NACOGDOCHES POWER STERNE GENERATING FACILITY	TX	PSD-TX 1015 AND 49293	6/5/2006	WESTINGHOUSE/SIEMENS MODEL SW501F GAS TURBINE W/ 416.5 MMBTU DUCT BURNERS	190	MW	STEAG POWER LLC REPRESENTS GOOD COMBUSTION PRACTICES FOR THE CONTROL OF CO EMISSIONS FROM THE COMBUSTION TURBINES AND HRSG DUCT BURNERS. COMBINED CO WILL BE 20.2 PPMVD CORRECTED TO 15% O2.	109.4	LB/H	BACT-PSD	0	
TX-0407	STERNE ELECTRIC GENERATING FACILITY	TX	PSD-TX-1015	12/6/2002	TURBINES, COMBINED CYCLE, AND DUCT BURNERS (3)	190	MW	GOOD COMBUSTION PRACTICES.	109.4	LB/H	BACT-PSD	20.2	PPMVD @ 15% O2
TX-0391	OXY COGENERATION FACILITY	TX	PSD-276	12/20/2002	COMBINED-CYCLE GAS TURBINES (2)	87	MW (EACH)	GOOD COMBUSTION PRACTICES	112	LB/H	BACT-PSD	25	PPM @ 15% O2
TX-0391	OXY COGENERATION FACILITY	TX	PSD-276	12/20/2002	HRSG UNITS 1 & 2 (2)	255	MMBTU/H	GOOD COMBUSTION PRACTICES.	117	LB/H	BACT-PSD	25	PPM @ 15% O2
TX-0350	ENNIS TRACTEBEL POWER	TX	PSD-TX-927	1/31/2002	COMBUSTION TURBINE W/HEAT RECOVERY STEAM GENERATOR	350	MW	NONE INDICATED	124	LB/H	Other Case-by-Case	20	PPM @ 15% O2
TN-0144	HAYWOOD ENERGY CENTER, LLC	TN	954078F	2/1/2002	TURBINE, COMBINED CYCLE, W/ DUCT FIRING	1990	MMBTU/H	GOOD COMBUSTION PRACTICE	129.3	LB/H	BACT-PSD	28.3	PPM @ 15% O2
MT-0019	CONTINENTAL ENERGY SERVICES, INC., SILVER BOW GEN	MT	3165-00	6/7/2002	TURBINE, COMBINED CYCLE 2	500	MW		139.9	LB/H	Other Case-by-Case	5.27	PPM @ 15% O2
MT-0019	CONTINENTAL ENERGY SERVICES, INC., SILVER BOW GEN	MT	3165-00	6/7/2002	TURBINE, COMBINED CYCLE 1	500	MW		139.9	LB/H	Other Case-by-Case	5.27	PPM @ 15% O2
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	TWO COMBINED CYCLE GAS TURBINES	2110	MMBTU/H	PROPER OPERATING PRACTICES	143.31	LB/H	BACT-PSD	10	PPMVD@15%O2
TX-0411	AMELIA ENERGY CENTER	TX	PSD-TX-982	3/26/2002	TURBINE, COMBINED CYCLE, & DUCT BURNER (3)	180	MW	GOOD COMBUSTION PRACTICE	208	LB/H	BACT-PSD	25	PPM @ 15% O2
LA-0136	PLAQUEMINE COGENERATION FACILITY	LA	PSD-LA-659(M2)	7/23/2008	(4) GAS TURBINES/DUCT BURNERS	2876	MMBTU/H	GOOD COMBUSTION PRACTICES	212.5	LB/H	BACT-PSD	25	PPMVD @ 15% O2
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Combustion Turbine Generator	154	MW	OXIDATION CATALYST SYSTEM	224	LB/HR	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Combustion Turbine Generator	154	MW	OXIDATION CATALYST SYSTEM	224	LB/HR	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Combustion Turbine Generator	154	MW	OXIDATION CATALYST SYSTEM	247	LB/HR	BACT-PSD	0	

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*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Combustion Turbine Generator	154	MW	OXIDATION CATALYST SYSTEM	247	LB/HR	BACT-PSD	0	
OH-0268	LIMA ENERGY COMPANY	OH	03-13445	3/26/2002	COMBUSTION TURBINE (2), COMBINED CYCLE	170	MW	CATALYTIC OXIDATION PROVED NOT COST EFFECTIVE.	251	LB/H	BACT-PSD	25	PPM @ 15% O2
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	CATALYST OXIDATION SYSTEM	370.3	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	CATALYST OXIDATION SYSTEM	370.3	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	CATALYST OXIDATION SYSTEM	373.6	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	CATALYTIC OXIDATION SYSTEM	373.6	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	CATALYTIC OXIDATION SYSTEM	429.6	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	CATALYTIC OXIDATION SYSTEM	429.6	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	CATALYTIC OXIDATION SYSTEM	483.5	LB/HR	BACT-PSD	0	
*CA-1211	COLUSA GENERATING STATION	CA	SAC 06-01	3/11/2011	COMBUSTION TURBINE GENERATOR	172	MW	CATALYTIC OXIDATION SYSTEM	483.5	LB/HR	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Combustion Turbine Generator	154	MW	OXIDATION CATALYST SYSTEM	674	LB/HR	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Combustion Turbine Generator	154	MW	OXIDATION CATALYST SYSTEM	674	LB/HR	BACT-PSD	0	
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	SCN-5 SHUTDOWN CTG-1 / SCN-9 SHUTDOWN CTG-2	2110	MMBTU/H	COMPLETE EVENTS AS QUICKLY AS POSSIBLE ACCORDING TO MANUFACTURE <sub>2</sub> S RECOMMENDED PROCEDURES.	964.57	LB/H	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	COMBUSTION TURBINE GENERATOR	180	MW	OXIDATION CATALYST SYSTEM	1000	LB/HR	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	COMBUSTION TURBINE GENERATOR	180	MW	OXIDATION CATALYST SYSTEM	1000	LB/HR	BACT-PSD	0	
LA-0164	ACADIA POWER STATION, ACADIA POWER PARTNERS LLC	LA	PSD-LA-645 (M-2)	1/31/2002	GAS TURBINE UNITS 1, 2, 3, 4	183	MW EACH	GOOD DESIGN, PROPER OPERATING AND MAINTENANCE PRACTICES, AND USE OF CLEAN NATURAL GAS.	1225	LB/H	BACT-PSD	25	PPM @ 15% O2
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	SCN-3 COLD STARTUP CTG-1 SCN-7 COLD STARTUP CTG-2	2110	MMBTU/H	COMPLETE EVENTS AS QUICKLY AS POSSIBLE ACCORDING TO MANUFACTURE <sub>2</sub> S RECOMMENDED PROCEDURES.	1508.15	LB/H	BACT-PSD	0	
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	SCN-4 HOT STARTUP CTG-1 SCN-8 HOT STARTUP CTG-2	2110	MMBTU/H	COMPLETE EVENTS AS QUICKLY AS POSSIBLE ACCORDING TO MANUFACTURE <sub>2</sub> S RECOMMENDED PROCEDURES.	1575.8	LB/H	BACT-PSD	0	

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: PM, PM10, PM2.5

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGH PUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
LA-0257	SABINE PASS LNG TERMINAL	LA	PSD-LA-703(M3)	12/6/2011	Simple Cycle Generation Turbines (2)	286	MMBTU/H	Particulate matter, total (TPM)	Good combustion practices and fueled by natural gas	2.08	LB/H	BACT-PSD	0.007	LB/MMBTU
LA-0256	COGENERATION PLANT	LA	PSD-LA-754	12/6/2011	COGENERATION TRAINS 1-3 (1-10, 2-10, 3-10)	475	MMBTU/H	Particulate matter, total < 10 µ (TPM10)	USE OF NATURAL GAS AS FUEL AND GOOD COMBUSTION PRACTICES	3.72	LB/H	BACT-PSD	0.008	LB/MMBTU
LA-0256	COGENERATION PLANT	LA	PSD-LA-754	12/6/2011	COGENERATION TRAINS 1-3 (1-10, 2-10, 3-10)	475	MMBTU/H	Particulate matter, total < 2.5 µ (TPM2.5)	USE OF NATURAL GAS AS FUEL AND GOOD COMBUSTION PRACTICES	3.72	LB/H	BACT-PSD	0.008	LB/MMBTU
*MI-0402	SUMPTER POWER PLANT	MI	81-11	11/17/2011	Combined cycle combustion turbine w/ HRSG	130	MW electrical output	Particulate matter, total < 10 µ (TPM10)		0.0066	LB/MMBTU	OTHER CASE-BY-CASE	0	
*MI-0402	SUMPTER POWER PLANT	MI	81-11	11/17/2011	Combined cycle combustion turbine w/ HRSG	130	MW electrical output	Particulate matter, total < 2.5 µ (TPM2.5)		0.0066	LB/MMBTU	BACT-PSD	0	
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	COMBUSTION TURBINE GENERATOR	154	MW	Particulate matter, total (TPM)	USE PUC QUALITY NATURAL GAS	0.0048	LB/MMBTU	BACT-PSD	0	
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	COMBUSTION TURBINE GENERATOR	154	MW	Particulate matter, total < 10 µ (TPM10)	USE PUC QUALITY NATURAL GAS	0.0048	LB/MMBTU	BACT-PSD	0	
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	COMBUSTION TURBINE GENERATOR	154	MW	Particulate matter, total < 2.5 µ (TPM2.5)	USE PUC QUALITY NATURAL GAS	0.0048	LB/MMBTU	BACT-PSD	0	
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	COMBUSTION TURBINE GENERATOR	154	MW	Particulate matter, total (TPM)	USE PUC QUALITY NATURAL GAS	0.0048	LB/MMBTU	BACT-PSD	0	
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	COMBUSTION TURBINE GENERATOR	154	MW	Particulate matter, total < 10 µ (TPM10)	USE PUC QUALITY NATURAL GAS	0.0048	LB/MMBTU	BACT-PSD	0	
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	COMBUSTION TURBINE GENERATOR	154	MW	Particulate matter, total < 2.5 µ (TPM2.5)	USE PUC QUALITY NATURAL GAS	0.0048	LB/MMBTU	BACT-PSD	0	
TX-0600	THOMAS C. FERGUSON POWER PLANT	TX	PSDTX1244	9/1/2011	Natural gas-fired turbines	390	MW	Particulate matter, total < 2.5 µ (TPM2.5)	pipeline quality natural gas	33.43	LB/H	BACT-PSD	0.086	
LA-0254	NINEMILE POINT ELECTRIC GENERATING PLANT	LA	PSD-LA-752	8/16/2011	COMBINED CYCLE TURBINE GENERATORS (UNITS 6A & 6B)	7146	MMBTU/H	Particulate matter, total < 2.5 µ (TPM2.5)	WHILE FIRING NATURAL GAS: USE OF PIPELINE QUALITY NATURAL GAS AND GOOD COMBUSTION PRACTICES WHILE FIRING FUEL OIL: USE OF ULTRA LOW SULFUR FUEL OIL AND GOOD COMBUSTION PRACTICES	26.23	LB/H	BACT-PSD	0.004	LB/MMBTU
LA-0254	NINEMILE POINT ELECTRIC GENERATING PLANT	LA	PSD-LA-752	8/16/2011	COMBINED CYCLE TURBINE GENERATORS (UNITS 6A & 6B)	7146	MMBTU/H	Particulate matter, total < 10 µ (TPM10)	WHILE FIRING NATURAL GAS: USE OF PIPELINE QUALITY NATURAL GAS AND GOOD COMBUSTION PRACTICES WHILE FIRING FUEL OIL: USE OF ULTRA LOW SULFUR FUEL OIL AND GOOD COMBUSTION PRACTICES	26.23	LB/H	BACT-PSD	0.004	LB/MMBTU
OR-0048	CARTY PLANT	OR	25-0016-ST-02	12/29/2010	COMBINED CYCLE NATURAL GAS-FIRED ELECTRIC GENERATING UNIT	2866	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUEL	2.5	LB/MMCF	BACT-PSD	0	

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: PM, PM10, PM2.5

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGH PUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
*AK-0073	INTERNATIONAL STATION POWER PLANT	AK	AQ0164CPT01	12/20/2010	Fuel Combustion	59900	HP	Particulate matter, filterable < 10 µ (FPM10)	Combustion Turbines EU IDs 5-8 use good combustion practices involve increasing the residence time and excess oxygen to ensure complete combustion which in turn minimize particulates without an add-on control technology.	0.0066	LB/MMBTU	BACT-PSD	0	
AK-0071	INTERNATIONAL STATION POWER PLANT	AK	AQ0164CPT01	12/20/2010	GE LM6000PF-25 Turbines (4)	59900	hp ISO	Particulate matter, total (TPM)	Good Combustion Practices	0.0066	LB/MMBTU	BACT-PSD	0	
AK-0071	INTERNATIONAL STATION POWER PLANT	AK	AQ0164CPT01	12/20/2010	GE LM6000PF-25 Turbines (4)	59900	hp ISO	Particulate matter, total < 10 µ (TPM10)	Good Combustion Practices	0.0066	LB/MMBTU	BACT-PSD	0	
AK-0071	INTERNATIONAL STATION POWER PLANT	AK	AQ0164CPT01	12/20/2010	GE LM6000PF-25 Turbines (4)	59900	hp ISO	Particulate matter, total < 2.5 µ (TPM2.5)	Good Combustion Practices	0.0066	LB/MMBTU	BACT-PSD	0	
*AK-0073	INTERNATIONAL STATION POWER PLANT	AK	AQ0164CPT01	12/20/2010	Fuel Combustion	140	MMBTU/H	Particulate matter, total < 10 µ (TPM10)	Combustion Turbines EU IDs 9-12 use good combustion practices involve increasing the residence time and excess oxygen to ensure complete combustion which in turn minimize particulates without an add-on control technology.	7.6	LB/MMBTU	BACT-PSD	0	
*VA-0315	WARREN COUNTY POWER PLANT - DOMINION	VA	81391-007	12/17/2010	Combined cycle turbine and duct burner, 3	2996	MMBTU/H	Particulate matter, total < 10 µ (TPM10)	Natural Gas only, fuel has maximum sulfur content of 0.0003% by weight.	8	LB/H	BACT-PSD	0.003	LB/MMBTU
*VA-0315	WARREN COUNTY POWER PLANT - DOMINION	VA	81391-007	12/17/2010	Combined cycle turbine and duct burner, 3	2996	MMBTU/H	Particulate matter, total < 2.5 µ (TPM2.5)	Natural Gas only, fuel has maximum sulfur content of 0.0003% by weight.	8	LB/H	BACT-PSD	0.003	LB/MMBTU
TX-0590	KING POWER STATION	TX	PSDTX1125	8/5/2010	Turbine	1350	MW	Particulate matter, total (TPM)	use low ash fuel (natural gas or low sulfur diesel as a backup) and good combustion practices	11.1	LB/H	BACT-PSD	0	
TX-0590	KING POWER STATION	TX	PSDTX1125	8/5/2010	Turbine	1350	MW	Particulate matter, total < 10 µ (TPM10)	use of low ash fuel (natural gas or low sulfur diesel as a backup)	11.1	LB/H	BACT-PSD	0	
TX-0590	KING POWER STATION	TX	PSDTX1125	8/5/2010	Turbine	1350	MW	Particulate matter, total < 2.5 µ (TPM2.5)	use of low ash fuel (natural gas or low sulfur diesel as a backup)	11.1	LB/H	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Combustion Turbine Generator	154	MW	Particulate matter, total (TPM)	PUC QUALITY NATURAL GAS	12	LB/H	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Combustion Turbine Generator	154	MW	Particulate matter, total < 2.5 µ (TPM2.5)	PUC QUALITY NATURAL GAS	12	LB/H	BACT-PSD	0	
OK-0129	CHOUTEAU POWER PLANT	OK	2007-115-C(M-1)PSD	1/23/2009	COMBINED CYCLE COGENERATION >25MW	1882	MMBTU/H	Particulate matter, total < 10 µ (TPM10)	NATURAL GAS FUEL	6.59	LB/H	N/A	0.004	LB/MMBTU
FL-0304	CANE ISLAND POWER PARK	FL	PSD-FL-400 (0970043-014-AC)	9/8/2008	300 MW COMBINED CYCLE COMBUSTION TURBINE	1860	MMBTU/H	Particulate matter, total < 10 µ (TPM10)	FUEL SPECIFICATIONS : 2 GR S/100 SCF OF GAS	2	GR S/100 SCF GAS	BACT-PSD	0	
LA-0136	PLAQUEMINE COGENERATION FACILITY	LA	PSD-LA-659(M2)	7/23/2008	(4) GAS TURBINES/DUCT BURNERS	2876	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	USE OF CLEAN BURNING FUELS	33.5	LB/H	BACT-PSD	0.012	LB/MMBTU
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	TWO COMBINED CYCLE GAS TURBINES	2110	MMBTU/H	Particulate Matter (PM)	GOOD COMBUSTION DESIGN/ PROPER OPERATING PRACTICES/ PIPELINE QUALITY NATURAL GAS AS FUEL	24.23	LB/H	BACT-PSD	0.011	LB/MMBTU

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: PM, PM10, PM2.5

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CT-0151	KLEEN ENERGY SYSTEMS, LLC	CT	104-0131 AND 104-0133	2/25/2008	SIEMENS SGT6-5000F COMBUSTION TURBINE #1 AND #2 (NATURAL GAS FIRED) WITH 445 MMBTU/HR NATURAL GAS DUCT BURNER	2.1	MMCF/H	Particulate matter, filterable < 10 µ (FPM10)		11	LB/H	BACT-PSD	0	
MN-0071	FAIRBAULT ENERGY PARK	MN	13100071-003	6/5/2007	COMBINED CYCLE COMBUSTION TURBINE W/DUCT BURNER	1758	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.01	LB/MMBTU	BACT-PSD	0.03	LB/MMBTU
CA-1144	BLYTHE ENERGY PROJECT II	CA	SE 02-01	4/25/2007	2 COMBUSTION TURBINES	170	MW	Particulate matter, filterable < 10 µ (FPM10)	USE PUBLIC UTILITY COMMISSION QUALITY NATURAL GAS W/ SULFUR CONTENT LESS THAN OR EQUAL TO 0.5 GRAINS PER 100 SCF	6	LB/H	BACT-PSD	0	
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	COMBINED CYCLE COMBUSTION GAS TURBINES - 6 UNITS	2333	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		2	GS/100 SCF GAS	BACT-PSD	0	
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO 99.8 MMBTU/H GAS-FUELED AUXILIARY BOILERS	99.8	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		2	GS/100 SCF GAS	BACT-PSD	0	
TX-0497	INEOS CHOCOLATE BAYOU FACILITY	TX	PSD-TX 983 AND 46192	8/29/2006	COGENERATION TRAIN 2 AND 3 (TURBINE AND DUCT BURNER EMISSIONS)	35	MW	Particulate matter, filterable < 10 µ (FPM10)	THE USE OF PROPER COMBUSTION CONTROL AND FIRING ONLY GASEOUS FUELS CONTAINING NO ASH IS BACT FOR PARTICULATE MATTER FROM THE GAS FIRED TURBINES AND DUCT BURNERS.	10.03	LB/H	BACT-PSD	0	
TX-0502	NACOGDOCHES POWER STERNE GENERATING FACILITY	TX	PSD-TX 1015 AND 49293	6/5/2006	WESTINGHOUSE/SIEMENS MODEL SW501F GAS TURBINE W/ 416.5 MMBTU DUCT BURNERS	190	MW	Particulate matter, filterable < 10 µ (FPM10)	STEAG POWER LLC REPRESENTS THE FIRING OF PIPELINE NATURAL GAS IN THE COMBUSTION TURBINES AND DUCT FIRED HRSGS AS BACT FOR PM10.	26.9	LB/H	BACT-PSD	0	
NY-0095	CAITHNES BELLPORT ENERGY CENTER	NY	PSD-NY-0001	5/10/2006	COMBUSTION TURBINE	2221	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	LOW SULFUR FUEL	0.0055	LB/MMBTU	BACT-PSD	0	
CO-0056	ROCKY MOUNTAIN ENERGY CENTER, LLC	CO	05WE0524	5/2/2006	NATURAL-GAS FIRED, COMBINED-CYCLE TURBINE	300	MW	Particulate matter, filterable < 10 µ (FPM10)	NATURAL GAS QUALITY FUEL ONLY AND GOOD COMBUSTION CONTROL PRACTICES.	0.0074	LB/MMBTU	BACT-PSD	0	
NC-0101	FORSYTH ENERGY PLANT	NC	00986R1	9/29/2005	TURBINE, COMBINED CYCLE, NATURAL GAS, (3)	1844.3	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	USE OF ONLY CLEAN-BURNING LOW-SULFUR FUELS AND GOOD COMBUSTION PRACTICES.	0.019	LB/MMBTU	BACT-PSD	0	
NC-0101	FORSYTH ENERGY PLANT	NC	00986R1	9/29/2005	TURBINE & DUCT BURNER, COMBINED CYCLE, NAT GAS, 3	1844.3	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN BURNING LOW-SULFUR FUELS AND GOOD COMBUSTION PRACTICES	0.021	LB/MMBTU	BACT-PSD	0	
NV-0035	TRACY SUBSTATION EXPANSION PROJECT	NV	AP4911-1504	8/16/2005	TURBINE, COMBINED CYCLE COMBUSTION #2 WITH HRSG AND DUCT BURNER.	306	MW	Particulate matter, filterable < 10 µ (FPM10)	BEST COMBUSTION PRACTICES.	0.011	LB/MMBTU	BACT-PSD	0	
NV-0035	TRACY SUBSTATION EXPANSION PROJECT	NV	AP4911-1504	8/16/2005	TURBINE, COMBINED CYCLE COMBUSTION #1 WITH HRSG AND DUCT BURNER.	306	MW	Particulate matter, filterable < 10 µ (FPM10)	BEST COMBUSTION PRACTICES.	0.011	LB/MMBTU	BACT-PSD	0	

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: PM, PM10, PM2.5

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MI-0366	BERRIEN ENERGY, LLC	MI	323-01A	4/13/2005	3 COMBUSTION TURBINES AND DUCT BURNERS	1584	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	STATE OF THE ART COMBUSTION TECHNIQUES AND USE OF NATURAL GAS ARE BACT FOR PM10.	19	LB/H	BACT-PSD	0.012	LB/MMBTU
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	TURBINES (4) (MODEL GE 7FA), DUCT BURNERS OFF	172	MW	Particulate matter, filterable < 10 µ (FPM10)		15	LB/H	BACT-PSD	0	
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	TURBINES (4) (MODEL GE 7FA), DUCT BURNERS ON	172	MW	Particulate matter, filterable < 10 µ (FPM10)		23.3	LB/H	BACT-PSD	0	
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	COMBUSTION TURBINE GENERATORS AND HEAT RECOVERY STEAM GENERATORS - GE7FA TURBINES OPTION	170	MW	Particulate matter, filterable < 10 µ (FPM10)		29.8	LB/H	BACT-PSD	0	
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	COMBUSTION TURBINE GENERATORS AND HEAT RECOVERY STEAM GENERATORS - SW501F TURBINES OPTION	180	MW	Particulate matter, filterable < 10 µ (FPM10)		33.1	LB/H	BACT-PSD	0	
MS-0073	RELIANT ENERGY CHOCTAW COUNTY, LLC	MS	0444-00018	11/23/2004	EMISSION POINT AA-001 GEN. ELEC. COMBUST. TURBINE	230	MW	Particulate matter, filterable < 10 µ (FPM10)		20.59	LB/H	BACT-PSD	0	
NV-0033	EL DORADO ENERGY, LLC	NV	A-00652	8/19/2004	COMBUSTION TURBINE, COMBINED CYCLE & COGEN(2)	475	MW	Particulate matter, filterable < 10 µ (FPM10)		9	LB/H	LAER	0	
CA-1143	SUTTER POWER PLANT	CA	SAC 98-01	8/16/2004	2 COMBUSTION TURBINES	170	MW	Particulate matter, filterable < 10 µ (FPM10)		11.5	LB/H	BACT-PSD	0	
MN-0053	FAIRBAULT ENERGY PARK	MN	13100071-001	7/15/2004	TURBINE, SIMPLE CYCLE, NATURAL GAS (1)	1663	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUEL AND GOOD COMBUSTION PRACTICES.	0.01	LB/MMBTU	BACT-PSD	0	
MN-0053	FAIRBAULT ENERGY PARK	MN	13100071-001	7/15/2004	TURBINE, COMBINED CYCLE, NATURAL GAS (1)	1876	MMBTU/H	Particulate Matter (PM)	CLEAN FUEL AND GOOD COMBUSTION PRACTICES.	0.01	LB/MMBTU	BACT-PSD	0	
UT-0066	CURRANT CREEK	UT	DAQE-2524002-04	5/17/2004	NATURAL GAS FIRED TURBINES AND HEAT RECOVERY STEAM GENERATORS			Particulate matter, filterable < 10 µ (FPM10)		0.066	LB/MMBTU	BACT-PSD	0	
NV-0037	COPPER MOUNTAIN POWER	NV	15347	5/14/2004	LARGE COMBUSTION TURBINES, COMBINED CYCLE & COGENERATION	600	MW	Particulate matter, filterable < 10 µ (FPM10)	USE OF LOW-SULFUR NATURAL GAS	21.3	LB/H	LAER	21.3	LB/H
VA-0289	DUKE ENERGY WYTHE, LLC	VA	11382	2/5/2004	TURBINE, COMBINED CYCLE, NATURAL GAS	170	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES.	17.5	LB/H	BACT-PSD	0	
VA-0289	DUKE ENERGY WYTHE, LLC	VA	11382	2/5/2004	TURBINE, COMBINED CYCLE, DUCT BURNER, NATURAL GAS	170	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES	23.7	LB/H	BACT-PSD	0	

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: PM, PM10, PM2.5

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGH PUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
OR-0039	COB ENERGY FACILITY, LLC	OR	18-0029	12/30/2003	DUCT BURNERS, NATURAL GAS, (4)	654	MMBTU/H	Particulate Matter (PM)	CLEAN FUEL	0.03	LB/MMBTU	N/A	0.03	LB/MMBTU
OR-0039	COB ENERGY FACILITY, LLC	OR	18-0029	12/30/2003	TURBINE, COMBINED CYCLE, DUCT BURNER, NAT GAS, (4)	1150	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION AND FIRING NATURAL GAS	14	LB/H	BACT-PSD	0	
NV-0038	IVANPAH ENERGY CENTER, L.P.	NV	1616	12/29/2003	LARGE COMBUSTION TURBINES, COMBINED CYCLE & COGENERATION	500	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION CONTROL AND USE OF PIPELINE-QUALITY NATURAL GAS	11.25	LB/H	LAER	0	
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	DUCT BURNER, 2 EACH	800	MMBTU/H	Particulate Matter (PM)	CLEAN FUEL AND GOOD COMBUSTION	0.009	LB/MMBTU	BACT-PSD	0.009	LB/MMBTU
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	DUCT BURNER, 2 EACH	800	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUEL AND GOOD COMBUSTION	0.009	LB/MMBTU	BACT-PSD	0.009	LM/MMBTU
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	COMBUSTION TURBINE, LARGE, 2 EACH	1916	MMBTU/H	Particulate Matter (PM)	CLEAN FUELS AND GOOD COMBUSTION PRACTICES	0.009	LB/MMBTU	BACT-PSD	0	
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	COMBUSTION TURBINE, LARGE, 2 EACH	1916	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUELS AND GOOD COMBUSTION PRACTICES	0.009	LB/MMBTU	BACT-PSD	0	
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	COMBUSTION TURBINE, LARGE 2 EACH	1827	MMBTU/H	Particulate Matter (PM)	CLEAN FUELS AND GOOD COMBUSTION	0.057	LB/MMBTU	BACT-PSD	0	
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	COMBUSTION TURBINE, LARGE 2 EACH	1827	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUELS AND GOOD COMBUSTION	0.057	LB/MMBTU	BACT-PSD	0	
VA-0287	JAMES CITY ENERGY PARK	VA	61442	12/1/2003	TURBINE, COMBINED CYCLE, NATURAL GAS	1973	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES/DESIGN AND CLEAN FUEL	18	LB/H	BACT-PSD	0.009	LB/MMBTU
VA-0287	JAMES CITY ENERGY PARK	VA	61442	12/1/2003	TURBINE, COMBINED CYCLE, NATURAL GAS, DUCT BURNER	1973	MMBTU/H	Particulate Matter (PM)	GOOD COMBUSTION/DESIGN AND CLEAN FUEL	18	LB/H	BACT-PSD	0.009	LB/MMBTU
VA-0287	JAMES CITY ENERGY PARK	VA	61442	12/1/2003	TURBINE, COMBINED CYCLE, NATURAL GAS, DUCT BURNER	1973	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION/DESIGN AND CLEAN FUEL	24.7	LB/H	BACT-PSD	0.013	LB/MMBTU
VA-0287	JAMES CITY ENERGY PARK	VA	61442	12/1/2003	TURBINE, COMBINED CYCLE, NATURAL GAS, DUCT BURNER	1973	MMBTU/H	Particulate Matter (PM)	GOOD COMBUSTION/DESIGN AND CLEAN FUEL	24.7	LB/H	BACT-PSD	0.013	LB/MMBTU
AZ-0043	DUKE ENERGY ARLINGTON VALLEY (AVEFII)	AZ	S01-004	11/12/2003	TURBINE, COMBINED CYCLE	325	MW	Particulate matter, filterable < 10 µ (FPM10)		18	LB/H	BACT-PSD	0	
AZ-0043	DUKE ENERGY ARLINGTON VALLEY (AVEFII)	AZ	S01-004	11/12/2003	TURBINE, COMBINED CYCLE & DUCT BURNER	325	MW	Particulate matter, filterable < 10 µ (FPM10)		25	LB/H	BACT-PSD	0	
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	SIEMENS WESTINGHOUSE COMBUSTION TURBINES AND HEAT RECOVERY STEAM GENERATORS	1080	MW	Particulate matter, filterable < 10 µ (FPM10)		30.3	LB/H	BACT-PSD	0	
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	GE COMBUSTION TURBINES AND HEAT RECOVERY STEAM GENERATORS	1040	MW	Particulate matter, filterable < 10 µ (FPM10)		45.5	LB/H	BACT-PSD	0	

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: PM, PM10, PM2.5

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGH PUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
CA-0997	SACRAMENTO MUNICIPAL UTILITY DISTRICT	CA	16006	9/1/2003	GAS TURBINES, (2)	1611	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION CONTROL	9	LB/H	LAER	0.006	LB/MMBTU
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	TURBINES (2) (MODEL GE 7FA), DUCT BURNERS OFF	170	MW	Particulate matter, filterable < 10 µ (FPM10)		19	LB/H	BACT-PSD	0	
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	TURBINES (2) (MODEL GE 7FA), DUCT BURNERS ON	170	MW	Particulate matter, filterable < 10 µ (FPM10)		28	LB/H	BACT-PSD	0	
OK-0096	REDBUD POWER PLANT	OK	2000-090-C M-3 PSD	6/3/2003	COMBUSTION TURBINE AND DUCT BURNERS	1832	MMBTU/H	Particulate Matter (PM)	USE OF LOW ASH FUEL AND EFFICIENT COMBUSTION	0.012	LB/MMBTU	BACT-PSD	0	
NE-0017	BEATRICE POWER STATION	NE	76739	5/29/2003	TURBINE, COMBINED CYCLE, (2)	80	MW	Particulate Matter (PM)		10.8	LB/H	Other Case-by-Case	0	
CA-1096	VERNON CITY LIGHT & POWER	CA	394164	5/27/2003	GAS TURBINE: COMBINED CYCLE < 50 MW	43	MW GAS TURBINE, 55 M	Particulate Matter (PM)		0.01	G/SCF	BACT-PSD	0	
CA-1097	MAGNOLIA POWER PROJECT, SCPPA	CA	386305	5/27/2003	GAS TURBINE: COMBINED CYCLE >= 50 MW	181	NET MW (GAS TURBINE)	Particulate Matter (PM)		0.01	G/SCF	BACT-PSD	0	
GA-0105	MCINTOSH COMBINED CYCLE FACILITY	GA	4911-103-0014-V-01-0	4/17/2003	TURBINE, COMBINED CYCLE, NATURAL GAS, (4)	140	MW	Particulate Matter (PM)	CLEAN FUEL, GOOD COMBUSTION PRACTICE	0.009	LB/MMBTU	BACT-PSD	0	
WA-0315	SUMAS ENERGY 2 GENERATION FACILITY	WA	EFSEC 2001-02	4/17/2003	TURBINES, COMBINED CYCLE, (2)	660	MW	Particulate matter, filterable (FPM)	GOOD COMBUSTION PRACTICE, LOW SULFUR FUEL	194	LB/D	BACT-PSD	0	
WA-0315	SUMAS ENERGY 2 GENERATION FACILITY	WA	EFSEC 2001-02	4/17/2003	TURBINES, COMBINED CYCLE, (2)	660	MW	Particulate Matter (PM)	GOOD COMBUSTION PRACTICE, CLEAN FUEL	377	LB/D	BACT-PSD	0	
OK-0090	DUKE ENERGY STEPHENS, LLC STEPHENS ENERGY	OK	2001-157-C M-1 PSD	3/21/2003	TURBINES, COMBINED CYCLE (2)	1701	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUEL AND EFFICIENT COMBUSTION	0.015	LB/MMBTU	Other Case-by-Case	0	
OR-0040	KLAMATH GENERATION, LLC	OR	18-0026	3/12/2003	TURBINE, COMBINED CYCLE, DUCT BURNER, NAT GAS (2)	480	MW	Particulate matter, filterable < 10 µ (FPM10)	NATURAL GAS < 1 GR S/100 SCF OF GAS	0.0042	LB/MMBTU	BACT-PSD	0	
AZ-0039	SALT RIVER PROJECT/SANTAN GEN. PLANT	AZ	V95-008 S01-014	3/7/2003	TURBINE, COMBINED CYCLE, DUCT BURNER, NATURAL GAS	175	MW	Particulate matter, filterable < 10 µ (FPM10)		0.01	LB/MMBTU	LAER	0	
MI-0357	KALKASKA GENERATING, INC	MI	119-02	2/4/2003	DUCT BURNERS ON HRSGS, (2)	620	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES AND CLEAN FUEL.	0.01	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
MI-0357	KALKASKA GENERATING, INC	MI	119-02	2/4/2003	TURBINE, COMBINED CYCLE, (2)	605	MW	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUEL AND GOOD COMBUSTION PRACTICES.	38	LB/H	BACT-PSD	0	
MI-0361	SOUTH SHORE POWER LLC	MI	342-01	1/30/2003	TURBINE, COMBINED CYCLE, (2)	172	MW	Particulate matter, filterable < 10 µ (FPM10)	USE OF NATURAL GAS AND STATE OF THE ART COMBUSTION TECHNIQUES.	24	LB/H	BACT-PSD	0	
MI-0365	MIRANT WYANDOTTE LLC	MI	279-98B	1/28/2003	TURBINE, COMBINED CYCLE, (2)	2200	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES AND USE OF PIPELINE QUALITY NATURAL GAS REPRESENT BACT.	5.6	MG/CM	BACT-PSD	0	
WA-0291	WALLULA POWER PLANT	WA	EFSEC/2001-03	1/3/2003	TURBINE, COMBINED CYCLE, NATURAL GAS (4)	1300	MW	Particulate Matter (PM)		0.0029	GR/DSCF	Other Case-by-Case	0	

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: PM, PM10, PM2.5

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WA-0291	WALLULA POWER PLANT	WA	EFSEC/2001-03	1/3/2003	TURBINE, COMBINED CYCLE, NATURAL GAS (4)	1300	MW	Particulate matter, filterable < 10 µ (FPM10)	EXCLUSIVE USE OF NATURAL GAS HAS BEEN SELECTED TO BE THE LOWEST AVAILABLE EMISSION RATE (LAER) FOR THE CONTROL OF PM10 EMISSIONS FROM EACH PGU.	0.0029	GR/DSCF	LAER	0	
TX-0352	BRAZOS VALLEY ELECTRIC GENERATING FACILITY	TX	PSD-TX-966	12/31/2002	(2) HRSG/TURBINES, HRSG-003 & -004	175	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION CONTROLS	38.6	LB/H	BACT-PSD	0	
TX-0352	BRAZOS VALLEY ELECTRIC GENERATING FACILITY	TX	PSD-TX-966	12/31/2002	(2) HRSG/TURBINES, HRSG-001 & -002	175	MW, EA	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION CONTROLS	38.6	LB/H	BACT-PSD	0	
TX-0391	OXY COGENERATION FACILITY	TX	PSD-276	12/20/2002	COMBINED-CYCLE GAS TURBINES (2)	87	MW (EACH)	Particulate matter, filterable < 10 µ (FPM10)		5	LB/H	Other Case-by-Case	0	
TX-0391	OXY COGENERATION FACILITY	TX	PSD-276	12/20/2002	HRSG UNIT NO. 3	255	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		20	LB/H	Other Case-by-Case	0.078	LB/MMBTU
TX-0391	OXY COGENERATION FACILITY	TX	PSD-276	12/20/2002	HRSG UNITS 1 & 2 (2)	255	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		20	LB/H	Other Case-by-Case	0.078	LB/MMBTU
VA-0262	MIRANT AIRSIDE INDUSTRIAL PARK	VA	32008	12/6/2002	TURBINE, SIMPLE CYCLE, (4)	84	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES. DRIFT ELIMINATORS.	10	LB/H	BACT-PSD	0	
VA-0262	MIRANT AIRSIDE INDUSTRIAL PARK	VA	32008	12/6/2002	TURBINE, COMBINED CYCLE, (2)	170	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES. DRIFT ELIMINATORS.	18	LB/H	BACT-PSD	0	
TX-0407	STERNE ELECTRIC GENERATING FACILITY	TX	PSD-TX-1015	12/6/2002	TURBINES, COMBINED CYCLE, AND DUCT BURNERS (3)	190	MW	Particulate matter, filterable < 10 µ (FPM10)	USAGE OF PIPELINE NATURAL GAS.	26.9	LB/H	BACT-PSD	0	
VA-0260	HENRY COUNTY POWER	VA	21389	11/21/2002	TURBINE, COMBINED CYCLE, (4), 70% LOAD	171	MW	Particulate Matter (PM)	GOOD COMBUSTION AND DESIGN. CLEAN BURNING FUEL.	0.014	LB/MMBTU	BACT-PSD	0	
VA-0260	HENRY COUNTY POWER	VA	21389	11/21/2002	TURBINE, COMBINED CYCLE, (4), 70% LOAD	171	MW	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUEL. GOOD COMBUSTION AND DESIGN.	0.014	LB/MMBTU	BACT-PSD	0	
VA-0260	HENRY COUNTY POWER	VA	21389	11/21/2002	TURBINE, COMBINED CYCLE, (4), 100% LOAD	171	MW	Particulate Matter (PM)	GOOD COMBUSTION DESIGN AND CLEAN FUEL	25.3	LB/H	BACT-PSD	0	
VA-0260	HENRY COUNTY POWER	VA	21389	11/21/2002	TURBINE, COMBINED CYCLE, (4), 100% LOAD	171	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION DESIGN AND CLEAN FUEL.	25.3	LB/H	BACT-PSD	0	
VA-0255	VA POWER - POSSUM POINT	VA	70225	11/18/2002	DUCT BURNERS	385	MMBTU/H	Particulate Matter (PM)		0.03	LB/MMBTU	BACT-PSD	0.03	LB/MMBTU
VA-0255	VA POWER - POSSUM POINT	VA	70225	11/18/2002	TURBINE, NATURAL GAS, NO DUCT BURNER FIRING	1937	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		18.3	LB/H	BACT-PSD	0.009	LB/MMBTU
VA-0255	VA POWER - POSSUM POINT	VA	70225	11/18/2002	TURBINE, COMBINED CYCLE, NATURAL GAS, DUCT BURNER	1937	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		22.2	LB/H	BACT-PSD	0.011	LB/MMBTU
GA-0101	MURRAY ENERGY FACILITY	GA	4911-213-0034-P-01-1	10/23/2002	TURBINE, COMBINED CYCLE, (4)	173	MW	Particulate Matter (PM)	GOOD COMBUSTION PRACTICE, CLEAN FUEL	25	LB/H	BACT-PSD	0	
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	TURBINES (3), COMBINED CYCLE, DUCT BURNERS ON	180	MW	Particulate matter, filterable < 10 µ (FPM10)	BURNING NATURAL GAS	0.0101	LB/MMBTU	BACT-PSD	0	

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: PM, PM10, PM2.5

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OH-0248	LAWRENCE ENERGY PIKE GENERATION FACILITY	OH	07-00505	9/24/2002	TURBINES (3), COMBINED CYCLE, DUCT BURNERS OFF	180	MW	Particulate matter, filterable < 10 µ (FPM10)	BURNING NATURAL GAS	12.7	LB/H	BACT-PSD	0	
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE AA-001 W/ DUCT BURNER	2168	MMBTU/H	Particulate Matter (PM)	LOW ASH FUEL AND GOOD COMBUSTION PRACTICES	44.2	LB/H	BACT-PSD	0.020	LB/MMBTU
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE AA-001 W/ DUCT BURNER	2168	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	LOW ASH FUEL AND GOOD COMBUSTION PRACTICES	44.2	LB/H	BACT-PSD	0.020	LB/MMBTU
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE, AA-002 W / DUCT BURNER	2168	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	LOW ASH FUEL AND GOOD COMBUSTION PRACTICES	44.2	LB/H	BACT-PSD	0.020	LB/MMBTU
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE, AA-002 W / DUCT BURNER	2168	MMBTU/H	Particulate Matter (PM)	LOW ASH FUEL AND GOOD COMBUSTION PRACTICES	44.2	LB/H	BACT-PSD	0.020	LB/MMBTU
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE, AA-003 / DUCT BURNER	2168	MMBTU/H	Particulate Matter (PM)	LOW ASH FUEL AND GOOD COMBUSTION PRACTICES	44.2	LB/H	BACT-PSD	0.020	LB/MMBTU
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE, AA-003 / DUCT BURNER	2168	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	LOW ASH FUEL AND GOOD COMBUSTION PRACTICES	44.2	LB/H	BACT-PSD	0.020	LB/MMBTU
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE AA-004 W/ DUCT BURNER	2168	MMBTU/H	Particulate Matter (PM)	LOW ASH FUEL AND GOOD COMBUSTION PRACTICES	44.2	LB/H	BACT-PSD	0.020	LB/MMBTU
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE AA-004 W/ DUCT BURNER	2168	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	LOW ASH FUEL AND GOOD COMBUSTION PRACTICES	44.2	LB/H	BACT-PSD	0.020	LB/MMBTU
WA-0299	SUMAS ENERGY 2 GENERATION FACILITY	WA	EFSEC/2001-02	9/6/2002	TURBINES, COMBINED CYCLE, (2)	334.5	MW	Particulate matter, filterable (FPM)	CLEAN FUEL -- NATURAL GAS ONLY	0.0039	LB/MMBTU	BACT-PSD	0	
WA-0299	SUMAS ENERGY 2 GENERATION FACILITY	WA	EFSEC/2001-02	9/6/2002	TURBINES, COMBINED CYCLE, (2)	334.5	MW	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUEL -- NATURAL GAS ONLY	0.0115	LB/MMBTU	BACT-PSD	0	
VA-0261	CPV CUNNINGHAM CREEK	VA	81382	9/6/2002	TURBINE, COMBINED CYCLE, (2)	2132	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.0119	LB/MMBTU	BACT-PSD	0	
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	DUCT BURNERS	200	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICE	0.02	LB/MMBTU	BACT-PSD	0.02	LB/MMBTU
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	TURBINE, COMBINED CYCLE, (2), (SWH)	170	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICE/CLEAN FUEL	17	LB/H	BACT-PSD	0	
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	TURBINE, COMBINED CYCLE, (2), (MHI)	170	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICE	18.5	LB/H	BACT-PSD	0	
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	TURBINE, COMBINED CYCLE, (2), (GE )	170	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES/CLEAN FUEL	19.5	LB/H	BACT-PSD	0	
CO-0052	ROCKY MOUNTAIN ENERGY CENTER, LLC.	CO	02WE0228	8/11/2002	TWO (2) NATURAL GAS FIRED, COMBINED-CYCLE, TURBINE	2311	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	USE OF PIPELINE QUALITY NATURAL GAS AND APPLICATION OF GOOD COMBUSTION CONTROL PRACTICES	0.0065	LB/MMBTU	BACT-PSD	0	
IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	DUCT BURNER, NATURAL GAS, (4)	300	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.0075	LB/MMBTU	BACT-PSD	0.0075	LB/MMBTU
IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINE, COMBINED CYCLE, NATURAL GAS (4)	1490.5	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.012	LB/MMBTU	BACT-PSD	0	
IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINES, SIMPLE CYCLE, NATURAL GAS, (4)	1490.5	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.012	LB/MMBTU	BACT-PSD	0	

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IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINE, COMBINED CYCLE AND DUCT BURNER, NAT GAS	1490.5	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		20.2	LB/H	BACT-PSD	0.014	LB/MMBTU
AL-0185	BARTON SHOALS ENERGY	AL	X001, X002	7/12/2002	FOUR (4) COMBINED CYCLE COMBUSTION TURBINE UNITS	173	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES	0.006	LB/MMBTU	BACT-PSD	0	
NM-0044	CLOVIS ENERGY FACILITY	NM	PSD-NM-2605	6/27/2002	TURBINES, COMBINED CYCLE, NATURAL GAS (4)	1515	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		19	LB/H	BACT-PSD	0.013	LB/MMBTU
MS-0055	EL PASO MERCHANT ENERGY CO.	MS	0540-00080	6/24/2002	TURBINE, COMBINED CYCLE, DUCT BURNER, NAT GAS, (2)	1737	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	USE OF LOW ASH FUEL	20.5	LB/H	BACT-PSD	0.012	LB/MMBTU
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	SW COMBUSTION TURBINE	1872	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	LOW ASH FUEL AND EFFICIENT COMBUSTION	0.0092	LB/MMBTU	BACT-PSD	0	
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	MHI COMBUSTION TURBINE & DUCT BURNERS	1767	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	LOW ASH FUEL AND EFFICIENT COMBUSTION	0.01	LB/MMBTU	BACT-PSD	0	
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	GE COMBUSTION TURBINE & DUCT BURNERS	1705	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	LOW SULFUR FUEL AND EFFICIENT COMBUSTION	0.019	LB/MMBTU	BACT-PSD	0	
MT-0019	CONTINENTAL ENERGY SERVICES, INC., SILVER BOW GEN	MT	3165-00	6/7/2002	TURBINE, COMBINED CYCLE 2	500	MW	Particulate matter, filterable < 10 µ (FPM10)		32.4	LB/H	Other Case-by-Case	0	
MT-0019	CONTINENTAL ENERGY SERVICES, INC., SILVER BOW GEN	MT	3165-00	6/7/2002	TURBINE, COMBINED CYCLE 1	500	MW	Particulate matter, filterable < 10 µ (FPM10)		32.4	LB/H	Other Case-by-Case	0	
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, GE	175	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES	14.1	LB/H	BACT-PSD	0	
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, GE, DUCT BURNERS	175	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES	16.85	LB/H	BACT-PSD	0	
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, MHI/SW	175	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES	18.79	LB/H	Other Case-by-Case	0	
NC-0095	MIRANT GASTONIA POWER FACILITY	NC	09175R00	5/28/2002	TURBINES, COMBINED CYCLE, MHI/SW, DUCT BURNERS	175	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES	21.32	LB/H	BACT-PSD	0	
OH-0264	NORTON ENERGY STORAGE, LLC	OH	16-02110	5/23/2002	COMBUSTION TURBINE (9), COMB CYCLE W/O DUCT BURNER	300	MW	Particulate matter, filterable < 10 µ (FPM10)		12	LB/H	BACT-PSD	0	
OH-0264	NORTON ENERGY STORAGE, LLC	OH	16-02110	5/23/2002	COMBUSTION TURBINES (9), COMB CYCLE W DUCT BURNER	300	MW	Particulate matter, filterable < 10 µ (FPM10)		13	LB/H	BACT-PSD	0	
AZ-0038	GILA BEND POWER GENERATING STATION	AZ	V00-001	5/15/2002	TURBINE, COMBINED CYCLE, DUCT BURNER, NATURAL GAS	170	MW	Particulate matter, filterable < 10 µ (FPM10)		0.014	LB/MMBTU	BACT-PSD	0	
IA-0058	GREATER DES MOINES ENERGY CENTER	IA	77-13-002	4/10/2002	COMBUSTION TURBINES -SIMPLE CYCLE	350	MW	Particulate matter, filterable < 10 µ (FPM10)		0.0094	LB/MMBTU	BACT-PSD	0	

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: PM, PM10, PM2.5

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGH PUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
IA-0058	GREATER DES MOINES ENERGY CENTER	IA	77-13-002	4/10/2002	COMBUSTION TURBINES - COMBINED CYCLE	350	MW	Particulate matter, filterable < 10 µ (FPM10)		0.0108	LB/MMBTU	BACT-PSD	0	
PA-0226	LIMERICK POWER STATION	PA	PA-46-0203	4/9/2002	TURBINE, COMBINED CYCLE	550	MW	Particulate matter, filterable < 10 µ (FPM10)		0.014	LB/MMBTU	Other Case-by-Case	0	
AR-0051	DUKE ENERGY-JACKSON FACILITY	AR	1998-AOP-R0 (34-0259)	4/1/2002	TURBINES, COMBINED CYCLE, NATURAL GAS, (2)	170	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION CONTROL, CLEAN FUEL	32.2	LB/H	BACT-PSD	0	
PA-0188	FAIRLESS ENERGY LLC	PA	PA-09-0124B	3/28/2002	TURBINE, COMBINED CYCLE	1190	MW	Particulate matter, filterable < 10 µ (FPM10)		0.014	LB/MMBTU	BACT-PSD	0	
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	DUCT BURNER (3)	256	MMBTU/H	Particulate Matter (PM)	NONE LISTED	0.03	LB/MMBTU	BACT-PSD	0.03	LB/MMBTU
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	COMBINED CYCLE TURBINE (3)	2964	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	NONE LISTED	35.8	LB/H	BACT-PSD	0.012	LB/MMBTU
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	COMBINED CYCLE TURBINE WITH DUCT BURNER	3202	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	NONE LISTED	38.8	LB/H	Other Case-by-Case	0.012	LB/MMBTU
OH-0268	LIMA ENERGY COMPANY	OH	03-13445	3/26/2002	COMBUSTION TURBINE (2), COMBINED CYCLE	170	MW	Particulate matter, filterable < 10 µ (FPM10)	USE OF CLEAN BURNING FUELS.	18	LB/H	BACT-PSD	0	
TX-0411	AMELIA ENERGY CENTER	TX	PSD-TX-982	3/26/2002	TURBINE, COMBINED CYCLE, & DUCT BURNER (3)	180	MW	Particulate matter, filterable < 10 µ (FPM10)	NATURAL GAS COMBUSTION	25.6	LB/H	BACT-PSD	0	
TX-0351	WEATHERFORD ELECTRIC GENERATION FACILITY	TX	PSD-TX-933	3/11/2002	(2) GE7121EA GAS TURBINES, S-3&4	1079	MMBTU/H	Particulate Matter (PM)	NONE INDICATED	14	LB/H	Other Case-by-Case	0.013	LB/MMBTU
TX-0351	WEATHERFORD ELECTRIC GENERATION FACILITY	TX	PSD-TX-933	3/11/2002	(2) GE 7241FA GAS TURBINES (TEMP STACK), S-1&2	1910	MMBTU/H	Particulate Matter (PM)	NONE INDICATED	18	LB/H	Other Case-by-Case	0.009	LB/MMBTU
LA-0157	PERRYVILLE POWER STATION	LA	PSD-LA-655 (M-1)	3/8/2002	DUCT BURNERS, (2) EPNS 1-1, 1-2	310	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD OPERATING PRACTICES AND USE OF NATURAL GAS AS FUEL.	0.01	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
LA-0157	PERRYVILLE POWER STATION	LA	PSD-LA-655 (M-1)	3/8/2002	TURBINE, SIMPLE CYCLE, NAT GAS, EPN 2-1	170	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD OPERATING PRACTICES AND USE OF NATURAL GAS AS FUEL.	18	LB/H	BACT-PSD	0	
LA-0157	PERRYVILLE POWER STATION	LA	PSD-LA-655 (M-1)	3/8/2002	TURBINES, COMBINED CYCLE, GAS, (2) EPNS 1-1, 1-2	170	MW	Particulate matter, filterable < 10 µ (FPM10)	PROPER OPERATING INSTRUCTIONS AND USE OF NATURAL GAS AS FUEL	23	LB/H	BACT-PSD	0	
LA-0157	PERRYVILLE POWER STATION	LA	PSD-LA-655 (M-1)	3/8/2002	TURBINE, COMBINED CYCLE, HRSG, NAT GAS, (2) EPNS 1-1, 1-2	183	MW	Particulate matter, filterable < 10 µ (FPM10)	GOOD OPERATING PRACTICES AND USE OF NATURAL GAS AS FUEL.	26.2	LB/H	BACT-PSD	0	
LA-0120	GEISMAR PLANT	LA	PSD-LA-647 (M-2)	2/26/2002	(2) COGENERATION UNITS POINT # 720-99 AND 721-99	40	MW EACH	Particulate matter, filterable < 10 µ (FPM10)	USE OF CLEAN NATURAL GAS WITH GOOD COMBUSTION PRACTICES AND NO ADD-ON CONTROLS.	10.8	LB/H	BACT-PSD	0	
WA-0289	TRANSALTA CENTRALIA GENERATION LLC	WA	PSD-01-01	2/22/2002	(4) TURBINE/HRSG			Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES AND NATURAL GAS AS FUEL	4.1	LB/H	BACT-PSD	0	
WA-0289	TRANSALTA CENTRALIA GENERATION LLC	WA	PSD-01-01	2/22/2002	(4) TURBINE/HRSG			Particulate Matter (PM)	GOOD COMBUSTION PRACTICES	4.1	LB/H	BACT-PSD	0	

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: PM, PM10, PM2.5

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGH PUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
AR-0052	THOMAS B. FITZHUGH GENERATING STATION	AR	1165-AOP-R1 (24-0012)	2/15/2002	HEAT RECOVERY STEAM GENERATOR (DUCT BURNER)	220	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUELS	4.4	LB/H	BACT-PSD	0.02	LB/MMBTU
AR-0052	THOMAS B. FITZHUGH GENERATING STATION	AR	1165-AOP-R1 (24-0012)	2/15/2002	TURBINE, COMBINED CYCLE, NATURAL GAS	170.6	MW	Particulate matter, filterable < 10 µ (FPM10)	LOW ASH FUELS, GOOD COMBUSTION PRACTICE	5.9	LB/H	BACT-PSD	0	
OK-0055	MUSTANG ENERGY PROJECT	OK	2001-132-C PSD	2/12/2002	COMBUSTION TURBINES W/DUCT BURNERS	0		Particulate matter, filterable < 10 µ (FPM10)	USE OF NO-ASH FUEL AND EFFICIENT COMBUSTION	0.007	LB/MMBTU	BACT-PSD	0	
OK-0056	HORSESHOE ENERGY PROJECT	OK	2001-156-C PSD	2/12/2002	TURBINES AND DUCT BURNERS	310	MW TOTAL	Particulate matter, filterable < 10 µ (FPM10)	LOW ASH FUEL (NATURAL GAS)	0.0117	LB/MMBTU	BACT-PSD	0	
TX-0388	SAND HILL ENERGY CENTER	TX	P1012	2/12/2002	GAS TURBINES, SIMPLE CYCLE (4)	48	MW (EACH)	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICE	4.5	LB/H	Other Case-by-Case	0	
TX-0388	SAND HILL ENERGY CENTER	TX	P1012	2/12/2002	COMBINED CYCLE GAS TURBINE	164	MW	Particulate matter, filterable < 10 µ (FPM10)		32	LB/H	Other Case-by-Case	0	
TN-0144	HAYWOOD ENERGY CENTER, LLC	TN	954078F	2/1/2002	TURBINE, COMBINED CYCLE, W/O DUCT FIRING	1990	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUELS, GOOD COMBUSTION PRACTICES	12.5	LB/H	BACT-PSD	0.006	LB/MMBTU
TN-0144	HAYWOOD ENERGY CENTER, LLC	TN	954078F	2/1/2002	TURBINE, COMBINED CYCLE, W/ DUCT FIRING	1990	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUELS, GOOD COMBUSTION PRACTICES	17.5	LB/H	BACT-PSD	0.009	LB/MMBTU
LA-0164	ACADIA POWER STATION, ACADIA POWER PARTNERS LLC	LA	PSD-LA-645 (M-2)	1/31/2002	GAS TURBINE UNITS 1, 2, 3, 4	183	MW EACH	Particulate matter, filterable < 10 µ (FPM10)	GOOD DESIGN, PROPER OPERATING AND MAINTENANCE PRACTICES, USE OF CLEAN NATURAL GAS.	20	LB/H	BACT-PSD	0	
TX-0350	ENNIS TRACTEBEL POWER	TX	PSD-TX-927	1/31/2002	COMBUSTION TURBINE W/HEAT RECOVERY STEAM GENERATOR	350	MW	Particulate matter, filterable < 10 µ (FPM10)	NONE INDICATED	25.62	LB/H	Other Case-by-Case	0	
PA-0223	DUKE ENERGY FAYETTE, LLC	PA	PA-26-00535A	1/30/2002	TURBINE, COMBINED CYCLE, (2)	280	MW	Particulate matter, filterable < 10 µ (FPM10)		34.8	LB/H	BACT-PSD	0	
FL-0241	CPV CANA	FL	PSD-FL-323	1/17/2002	TURBINE, COMBINED CYCLE, NATURAL GAS	1680	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUELS GOOD COMBUSTION	11	LB/H	BACT-PSD	0.007	LB/MMBTU
PA-0189	CONECTIV BETHLEHEM, INC.	PA	48-328-006	1/16/2002	TURBINE, COMBINED CYCLE, (6)	122	MW	Particulate matter, filterable < 10 µ (FPM10)		0.0135	PPM	Other Case-by-Case	0	
OR-0035	PORT WESTWARD PLANT	OR	05-0008	1/16/2002	(2) COMBUSTION TURBINES, WITH DUCT BURNER	325	MW, EACH	Particulate Matter (PM)	USE OF PIPELINE QUALITY NATURAL GAS	0.1	GR/DSCF	Other Case-by-Case	0	

## RBLC REVIEW FOR COMBINED CYCLE COMBUSTION TURBINES: SO2

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
*VA-0315	WARREN COUNTY POWER PLANT - DOMINION	VA	81391-007	12/17/2010	Combined cycle turbine and duct burner, 3	2996	MMBTU/H	Natural Gas only, fuel has maximum sulfur content of 0.0003% by weight.	0.98	LB/H	OTHER CASE-BY-CASE	0.0003	LB/MMBTU
OK-0129	CHOUTEAU POWER PLANT	OK	2007-115-C(M-1)PSD	1/23/2009	COMBINED CYCLE COGENERATION >25MW	1882	MMBTU/H	NATURAL GAS FUEL	1.06	LB/H	N/A	0.0006	LB/MMBTU
FL-0304	CANE ISLAND POWER PARK	FL	PSD-FL-400 (0970043-014-AC)	9/8/2008	300 MW COMBINED CYCLE COMBUSTION TURBINE	1860	MMBTU/H	FUEL SPECIFICATIONS.		GR S/100 SCF 2 GAS	BACT-PSD	0	
FL-0303	FPL WEST COUNTY ENERGY CENTER UNIT 3	FL	0990646-002-AC (PSD-FL-396)	7/30/2008	THREE NOMINAL 250 MW CTG (EACH) WITH SUPPLEMENTARY-FIRED HRSG	2333	MMBTU/H		2	GR S/100SCF	BACT-PSD	0	
LA-0136	PLAQUEMINE COGENERATION FACILITY	LA	PSD-LA-659(M2)	7/23/2008	(4) GAS TURBINES/DUCT BURNERS	2876	MMBTU/H	LOW SULFUR FUELS WITH MAXIMUM SULFUR CONTENT OF 5 GR/100 SCF.	40.7	LB/H	BACT-PSD	3.3	PPMVD @ 15% O2
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	TWO COMBINED CYCLE GAS TURBINES	2110	MMBTU/H	USE LOW-SULFUR PIPELINE-QUALITY NATURAL GAS AS FUEL	12.06	LB/H	BACT-PSD	0.0057	LB/MMBTU
FL-0285	PROGRESS BARTOW POWER PLANT	FL	PSD-FL-381 AND 1030011-010-AC	1/26/2007	COMBINED CYCLE COMBUSTION TURBINE SYSTEM (4-ON-1)	1972	MMBTU/H		2	GR/100SCF	BACT-PSD	0	
FL-0285	PROGRESS BARTOW POWER PLANT	FL	PSD-FL-381 AND 1030011-010-AC	1/26/2007	SIMPLE CYCLE COMBUSTION TURBINE (ONE UNIT)	1972	MMBTU/H		2	GR/100SCF	BACT-PSD	0	
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	COMBINED CYCLE COMBUSTION GAS TURBINES - 6 UNITS	2333	MMBTU/H	LOW SULFUR FUELS	2	GS/100 SCF GAS	BACT-PSD	0	
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO 99.8 MMBTU/H GAS-FUELED AUXILIARY BOILERS	99.8	MMBTU/H		2	GS/100 SCF GAS	BACT-PSD	0	
NC-0101	FORSYTH ENERGY PLANT	NC	00986R1	9/29/2005	TURBINE, COMBINED CYCLE, NATURAL GAS, (3)	1844.3	MMBTU/H	USE OF VERY LOW-SULFUR FUEL (NATURAL GAS)	0.0006	LB/MMBTU	BACT-PSD	0	
NC-0101	FORSYTH ENERGY PLANT	NC	00986R1	9/29/2005	TURBINE & DUCT BURNER, COMBINED CYCLE, NAT GAS, 3	1844.3	MMBTU/H	LOW SULFUR FUEL (NATURAL GAS)	0.0006	LB/MMBTU	BACT-PSD	0	
OR-0041	WANAPA ENERGY CENTER	OR	R10PSD-OR-05-01	8/8/2005	COMBUSTION TURBINE & HEAT RECOVERY STEAM GENERATOR	2384.1	MMBTU/H		0		BACT-PSD	0	
MN-0053	FAIRBAULT ENERGY PARK	MN	13100071-001	7/15/2004	TURBINE, COMBINED CYCLE, NATURAL GAS (1)	1876	MMBTU/H	LOW SULFUR FUEL.	0.8	GR/SCF	BACT-PSD	0	
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	COMBUSTION TURBINE, LARGE 2 EACH	1827	MMBTU/H	LOW SULFLUR FUEL	0.05	% S BY WT	BACT-PSD	0	
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	COMBUSTION TURBINE, LARGE, 2 EACH	1916	MMBTU/H	LOW SULFUR FUEL	0.8	GR/100SCF	BACT-PSD	0	
VA-0287	JAMES CITY ENERGY PARK	VA	61442	12/1/2003	TURBINE, COMBINED CYCLE, NATURAL GAS, DUCT BURNER	1973	MMBTU/H	LOW SULFUR FUELS	11.3	LB/H	BACT-PSD	0.0057	LB/MMBTU
VA-0287	JAMES CITY ENERGY PARK	VA	61442	12/1/2003	TURBINE, COMBINED CYCLE, NATURAL GAS	1973	MMBTU/H	LOW SULFUR FUELS	11.4	LB/H	BACT-PSD	0.0058	LB/MMBTU

## RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: SO2

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
FL-0256	HINES ENERGY COMPLEX, POWER BLOCK 3	FL	PSD-FL-330 AND 1050234-006-AC	9/8/2003	COMBUSTION TURBINES, COMBINED CYCLE, NATURAL GAS,2	1830	MMBTU/H	PERMIT LIMIT IS LOW SULFUR FUELS	0		BACT-PSD	0	
CA-0997	SACRAMENTO MUNICIPAL UTILITY DISTRICT	CA	16006	9/1/2003	GAS TURBINES, (2)	1611	MMBTU/H	LOW SULFUR NATURAL GAS	1	GR/100 SCF	LAER	0	
OK-0096	REDBUD POWER PLANT	OK	2000-090-C M-3 PSD	6/3/2003	COMBUSTION TURBINE AND DUCT BURNERS	1832	MMBTU/H	VERY LOW SO2 EMISSION RATE-LOW SULFUR FUEL	0.003	LB/MMBTU	BACT-PSD	0	
MI-0362	MIDLAND COGENERATION (MCV)	MI	209-02	4/21/2003	TURBINE, COMBINED CYCLE, (11)	984	MMBTU/H	USE OF NATURAL GAS WITH SULFUR CONTENT OF 0.2 GRAINS/100 CUBIC FEET OF GAS.	0.2	GR/100 SCF	BACT-PSD	0	
OK-0090	DUKE ENERGY STEPHENS, LLC STEPHENS ENERGY	OK	2001-157-C M-1 PSD	3/21/2003	TURBINES, COMBINED CYCLE (2)	1701	MMBTU/H	USE OF PIPELINE-QUALITY NATURAL GAS (VERY LOW SULFUR FUEL) MAXIMUM 0.8 % S BY WT.	0.006	LB/MMBTU	BACT-PSD	0	
MI-0365	MIRANT WYANDOTTE LLC	MI	279-98B	1/28/2003	TURBINE, COMBINED CYCLE, (2)	2200	MMBTU/H	USE OF SWEET NATURAL GAS WITH SULFUR CONTENT NOT TO EXCEED 0.8 GRAINS PER 100 SCF.	53.4	T/YR	BACT-PSD	0	
TX-0391	OXY COGENERATION FACILITY	TX	PSD-276	12/20/2002	HRSG UNIT NO. 3	255	MMBTU/H	LOW SULFUR NG LIMITED TO 5 GRAINS/100 DSCF.	0.2	LB/H	Other Case-by-Case	0.0008	LB/MMBTU
TX-0391	OXY COGENERATION FACILITY	TX	PSD-276	12/20/2002	HRSG UNITS 1 & 2 (2)	255	MMBTU/H	SULFUR CONTENT LIMITED TO LESS THAN 5 GRAINS/100 DSCF.	0.84	LB/H	BACT-PSD	0.0033	LB/MMBTU
VA-0255	VA POWER - POSSUM POINT	VA	70225	11/18/2002	TURBINE, COMBINED CYCLE, NATURAL GAS, DUCT BURNER	1937	MMBTU/H		2.08	LB/H	BACT-PSD	0	
VA-0255	VA POWER - POSSUM POINT	VA	70225	11/18/2002	TURBINE, NATURAL GAS, NO DUCT BURNER FIRING	1937	MMBTU/H		1.74	LB/H	BACT-PSD	0	
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE AA-001 W/DUCT BURNER	2168	MMBTU/H	LOW SULFUR FUEL	15.6	LB/H	BACT-PSD	0.0072	LB/MMBTU
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE, AA-002 W /DUCT BURNER	2168	MMBTU/H	LOW SULFUR FUEL	15.6	LB/H	BACT-PSD	0.0072	LB/MMBTU
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE, AA-003 /DUCT BURNER	2168	MMBTU/H	LOW SULFUR FUEL	15.6	LB/H	BACT-PSD	0.0072	LB/MMBTU
MS-0059	PIKE GENERATION FACILITY	MS	2280-00062	9/24/2002	TURBINE AA-004 W/ DUCT BURNER	2168	MMBTU/H	LOW SULFUR FUEL	15.6	LB/H	BACT-PSD	0.0072	LB/MMBTU
VA-0261	CPV CUNNINGHAM CREEK	VA	81382	9/6/2002	TURBINE, COMBINED CYCLE, (2)	2132	MMBTU/H		0.0119	LB/MMBTU	BACT-PSD	0	
IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINE, COMBINED CYCLE, NATURAL GAS (4)	1490.5	MMBTU/H	LOW SULFUR NATURAL GAS: 0.007 % S BY WT (2 GR/100 SCF), GOOD COMBUSTION PRACTICE	0.0028	LB/MMBTU	BACT-PSD	0	
IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINES, SIMPLE CYCLE, NATURAL GAS, (4)	1490.5	MMBTU/H	LOW SULFUR NATURAL GAS: < 0.007 % S BY WT (2 GR/100 SCF), GOOD COMBUSTION PRACTICES.	0.0028	LB/MMBTU	BACT-PSD	0	
IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	TURBINE, COMBINED CYCLE AND DUCT BURNER, NAT GAS	1490.5	MMBTU/H	LOW SULFUR NATURAL GAS: < .007 %S BY WT (2 GR/100 SCF), GOOD COMBUSTION PRACTICE.	4.4	LB/H	BACT-PSD	0.0030	LB/MMBTU
NM-0044	CLOVIS ENERGY FACILITY	NM	PSD-NM-2605	6/27/2002	TURBINES, COMBINED CYCLE, NATURAL GAS (4)	1515	MMBTU/H	PIPELINE QUALITY NATURAL GAS, GOOD ENGINEERING PRACTICE	4.3	LB/H	BACT-PSD	0.0028	LB/MMBTU
MS-0055	EL PASO MERCHANT ENERGY CO.	MS	0540-00080	6/24/2002	TURBINE, COMBINED CYCLE, DUCT BURNER, NAT GAS, (2)	1737	MMBTU/H	LOW SULFUR FUEL	32.2	LB/H	BACT-PSD	0.0185	LB/MMBTU

## RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: SO2

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	COMBINED CYCLE TURBINE WITH DUCT BURNER	3202	MMBTU/H	NONE LISTED	0.004	LB/MMBTU	Other Case-by-Case	0.8	PPM @ 15% O2
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	COMBINED CYCLE TURBINE (3)	2964	MMBTU/H	ONLY USE NATURAL GAS WITH SULFUR CONTENT 0.8%	0.004	LB/MMBTU	Other Case-by-Case	0.8	PPM @ 15% O2
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	DUCT BURNER (3)	256	MMBTU/H	NONE LISTED	0.2	LB/MMBTU	BACT-PSD	0.2	LB/MMBTU
FL-0239	JEA/BRANDY BRANCH	FL	PSD-FL-310	3/27/2002	TURBINES, COMBINED CYCLE, (2)	1911	MMBTU/H	CLEAN FUELS, SULFUR FUEL LIMIT.	2	GR/100SCF	Other Case-by-Case	0	
TX-0351	WEATHERFORD ELECTRIC GENERATION FACILITY	TX	PSD-TX-933	3/11/2002	(2) GE7121EA GAS TURBINES, S-3&4	1079	MMBTU/H	PIPELINE-QUALITY, SWEET NAT GAS CONTAINING NO MORE THAN 2.0 GR S/100 DSCF	6	LB/H	N/A	0.0056	LB/MMBTU
TX-0351	WEATHERFORD ELECTRIC GENERATION FACILITY	TX	PSD-TX-933	3/11/2002	(2) GE 7241FA GAS TURBINES (TEMP STACK), S-1&2	1910	MMBTU/H	PIPELINE-QUALITY, SWEET NAT GAS CONTAINING NO MORE THAN 2.0 GR S/100 DSCF	10.5	LB/H	N/A	0.0055	LB/MMBTU
AR-0052	THOMAS B. FITZHUGH GENERATING STATION	AR	1165-AOP-R1 (24-0012)	2/15/2002	HEAT RECOVERY STEAM GENERATOR (DUCT BURNER)	220	MMBTU/H	GOOD COMBUSTION PRACTICES AND DESIGN.	1	PPM @ 15% O2	BACT-PSD	0	
TN-0144	HAYWOOD ENERGY CENTER, LLC	TN	954078F	2/1/2002	TURBINE, COMBINED CYCLE, W/O DUCT FIRING	1990	MMBTU/H	LOW SULFUR FUEL (<2.0 GR SULFUR PER 100 SCF OF NATURAL GAS)	9.8	LB/H	BACT-PSD	0.0049	LB/MMBTU
TN-0144	HAYWOOD ENERGY CENTER, LLC	TN	954078F	2/1/2002	TURBINE, COMBINED CYCLE, W/ DUCT FIRING	1990	MMBTU/H	LOW SULFUR FUEL (<2.0 GR SULFUR PER 100 SCF OF NATURAL GAS)	11.7	LB/H	BACT-PSD	0.0059	LB/MMBTU
FL-0241	CPV CANA	FL	PSD-FL-323	1/17/2002	TURBINE, COMBINED CYCLE, NATURAL GAS	1680	MMBTU/H	CLEAN FUELS, FUEL SULFUR LIMIT: .0065% S	0		BACT-PSD	0	

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: H2SO4

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
TX-0600	THOMAS C. FERGUSON POWER PLANT	TX	PSDTX1244	9/1/2011	Natural gas-fired turbines	390	MW	pipeline quality natural gas	13.68	LB/H	BACT-PSD	0	
*VA-0315	WARREN COUNTY POWER PLANT - DOMINION	VA	81391-007	12/17/2010	Combined cycle turbine and duct burner, 3	2996	MMBTU/H	Natural Gas burning.	0.0001	LB/MMBTU	BACT-PSD	0	
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	TWO COMBINED CYCLE GAS TURBINES	2110	MMBTU/H	USE OF LOW-SULFUR PIPELINE QUALITY NATURAL GAS AS FUEL AND PROPER SCR DESIGN	1.85	LB/H	BACT-PSD	0.0009	LB/MMBTU
FL-0256	HINES ENERGY COMPLEX, POWER BLOCK 3	FL	PSD-FL-330 AND 1050234-006-AC	9/8/2003	COMBUSTION TURBINES, COMBINED CYCLE, NATURAL GAS,2	1830	MMBTU/H	PERMIT LIMIT IS LOW SULFUR FUELS- NATURAL GAS	0		Other Case-by-Case	0	
TX-0497	INEOS CHOCOLATE BAYOU FACILITY	TX	PSD-TX 983 AND 46192	8/29/2006	COGENERATION TRAIN 2 AND 3 (TURBINE AND DUCT BURNER EMISSIONS)	35	MW	THE TURBINES WILL FIRE NATURAL GAS AND THE DUCT BURNERS WILL FIRE NATURAL GAS AND COMPLEX GAS WITH A SULFUR CONTENT LESS THAN FIVE GRAINS PER 100 STANDARD CUBIC FEET ON AN HOURLY BASIS	1.94	LB/H	BACT-PSD	0	
TX-0502	NACOGDOCHES POWER STERNE GENERATING FACILITY	TX	PSD-TX 1015 AND 49293	6/5/2006	WESTINGHOUSE/SIEMENS MODEL SW501F GAS TURBINE W/ 416.5 MMBTU DUCT BURNERS	190	MW		1.3	LB/H	BACT-PSD	0	
MI-0365	MIRANT WYANDOTTE LLC	MI	279-98B	1/28/2003	TURBINE, COMBINED CYCLE, (2)	2200	MMBTU/H	USE OF NATURAL GAS. LOW SULFUR FUEL	12.3	T/YR	Other Case-by-Case	0	
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	COMBUSTION TURBINE, LARGE 2 EACH	1827	MMBTU/H	LOW SULFUR FUEL	0.05	% S BY WT	BACT-PSD	0	
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	COMBUSTION TURBINE, LARGE, 2 EACH	1916	MMBTU/H	LOW SULFUR FUEL	0.8	GR/100 SCT	BACT-PSD	0	
MS-0055	EL PASO MERCHANT ENERGY CO.	MS	0540-00080	6/24/2002	TURBINE, COMBINED CYCLE, DUCT BURNER, NAT GAS, (2)	1737	MMBTU/H	USE OF LOW SULFUR FUEL	10	T/YR	BACT-PSD	0	
NC-0101	FORSYTH ENERGY PLANT	NC	00986R1	9/29/2005	TURBINE, COMBINED CYCLE, NATURAL GAS, (3)	1844.3	MMBTU/H	VERY LOW-SULFUR FUEL (NATURAL GAS) OR NO. 2 FUEL OIL (0.015% SULFUR CONTENT BY WEIGHT).	0		BACT-PSD	0	
NY-0095	CAITHNES BELLPORT ENERGY CENTER	NY	PSD-NY-0001	5/10/2006	COMBUSTION TURBINE	2221	MMBTU/H	LOWSULFUR FUEL	0.0004	LB/MMBTU	BACT-PSD	0	
NV-0035	TRACY SUBSTATION EXPANSION PROJECT	NV	AP4911-1504	8/16/2005	TURBINE, COMBINED CYCLE COMBUSTION #2 WITH HRSG AND DUCT BURNER.	306	MW	BEST COMBUSTION PRACTICES.	1	LB/H	BACT-PSD	0	
NV-0035	TRACY SUBSTATION EXPANSION PROJECT	NV	AP4911-1504	8/16/2005	TURBINE, COMBINED CYCLE COMBUSTION #1 WITH HRSG AND DUCT BURNER.	306	MW	BEST COMBUSTION PRACTICES.	1	LB/H	BACT-PSD	0	
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	TURBINES (4) (MODEL GE 7FA), DUCT BURNERS ON	172	MW		2.2	LB/H	BACT-PSD	0	
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	TURBINES (4) (MODEL GE 7FA), DUCT BURNERS OFF	172	MW		1.68	LB/H	BACT-PSD	0	

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: H2SO4

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	TURBINES (2) (MODEL GE 7FA), DUCT BURNERS ON	170	MW		2.2	LB/H	N/A	0	
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	TURBINES (2) (MODEL GE 7FA), DUCT BURNERS OFF	170	MW		1.7	LB/H	N/A	0	
FL-0245	FPL MANATEE PLANT - UNIT 3	FL	PSD-FL-328 AND 0810010-006-AC	4/15/2003	TURBINE, COMBINED CYCLE, NATURAL GAS (4)	170	MW	LOW SULFUR FUEL	2	GR/100 SCF	BACT-PSD	0	
FL-0245	FPL MANATEE PLANT - UNIT 3	FL	PSD-FL-328 AND 0810010-006-AC	4/15/2003	TURBINE, SIMPLE CYCLE, NATURAL GAS, (4)	170	MW	LOW SULFUR FUEL	2	GR/100 SCF	BACT-PSD	0	
MI-0357	KALKASKA GENERATING, INC	MI	119-02	2/4/2003	TURBINE, COMBINED CYCLE, (2)	605	MW	USE OF LOW SULFUR FUEL.	4.5	LB/H	Other Case-by-Case	0	
TX-0352	BRAZOS VALLEY ELECTRIC GENERATING FACILITY	TX	PSD-TX-966	12/31/2002	(2) HRSG/TURBINES, HRSG-003 & -004	175	MW	PIPELINE QUALITY NATURAL GAS	1.3	LB/H	Other Case-by-Case	0	
TX-0352	BRAZOS VALLEY ELECTRIC GENERATING FACILITY	TX	PSD-TX-966	12/31/2002	(2) HRSG/TURBINES, HRSG-001 & -002	175	MW, EA	FIRING PIPELINE QUALITY NATURAL GAS	1.3	LB/H	Other Case-by-Case	0	
TX-0407	STERNE ELECTRIC GENERATING FACILITY	TX	PSD-TX-1015	12/6/2002	TURBINES, COMBINED CYCLE, AND DUCT BURNERS (3)	190	MW		1.3	LB/H	BACT-PSD	0	
OH-0248	LAWRENCE ENERGY CONNECTIV	OH	07-00505	9/24/2002	TURBINES (3), COMBINED CYCLE, DUCT BURNERS OFF	180	MW		1.82	LB/H	BACT-PSD	0	
PA-0189	BETHLEHEM, INC.	PA	48-328-006	1/16/2002	TURBINE, COMBINED CYCLE, (6)	122	MW	BACT FOR H2SO4 IS GOOD COMBUSTION AND LOW SULFUR FUELS	0.0002	PPM	Other Case-by-Case	0	
TN-0144	HAYWOOD ENERGY CENTER, LLC	TN	954078F	2/1/2002	TURBINE, COMBINED CYCLE, W/ DUCT FIRING	1990	MMBTU/H	LOW SULFUR FUEL (<2.0 GR SULFUR PER 100 SCF OF NATURAL GAS)	20.1	T/YR	BACT-PSD	0	
TN-0144	HAYWOOD ENERGY CENTER, LLC	TN	954078F	2/1/2002	TURBINE, COMBINED CYCLE, W/O DUCT FIRING	1990	MMBTU/H	LOW SULFUR FUEL (<2.0 GR SULFUR PER 100 SCF OF NATURAL GAS)	20.1	T/YR	BACT-PSD	0	
OH-0248	LAWRENCE ENERGY CPV CUNNINGHAM CREEK	OH	07-00505	9/24/2002	TURBINES (3), COMBINED CYCLE, DUCT BURNERS ON	180	MW		3.71	LB/H	BACT-PSD	0	
VA-0261	CPV CUNNINGHAM CREEK	VA	81382	9/6/2002	TURBINE, COMBINED CYCLE, (2)	2132	MMBTU/H	GOOD COMBUSTION PRACTICES.	0.0012	LB/MMBTU	BACT-PSD	0	
WA-0299	SUMAS ENERGY 2 GENERATION FACILITY	WA	EFSEC/2001-02	9/6/2002	TURBINES, COMBINED CYCLE, (2)	334.5	MW	LOW SULFUR FUEL -- NATURAL GAS ONLY	0.0008	LB/MMBTU	BACT-PSD	0	
AL-0185	BARTON SHOALS ENERGY	AL	X001, X002	7/12/2002	FOUR (4) COMBINED CYCLE COMBUSTION TURBINE UNITS	173	MW	NATURAL GAS ONLY	0.0011	LB/MMBTU	BACT-PSD	0	
OH-0264	NORTON ENERGY STORAGE, LLC	OH	16-02110	5/23/2002	COMBUSTION TURBINE (9), COMB CYCLE W/O DUCT BURNER	300	MW		0.198	LB/H	N/A	0	
OH-0264	NORTON ENERGY STORAGE, LLC	OH	16-02110	5/23/2002	COMBUSTION TURBINES (9), COMB CYCLE W DUCT BURNER	300	MW		0.255	LB/H	N/A	0	
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	COMBINED CYCLE TURBINE WITH DUCT BURNER	3202	MMBTU/H	NONE	7.8	LB/H	Other Case-by-Case	0.0024	LB/MMBTU
TX-0428	HOUSTON OPERATIONS -- BATTLEGROUND SITE	TX	PSD-TX-276	12/19/2002	TURBINE, COMBINED CYCLE & DUCT BURNER	87	mw	LOW SULFUR PIPELINE NATURAL GAS AND PLANT FUEL GAS	0		BACT-PSD	0	
TX-0437	HARTBURG POWER, LP	TX	PSD-TX-1009	7/5/2002	TURBINE, COMBINED CYCLE & DUCT BURNER	277	mw	USE OF PROPER COMBUSTION CONTROL AND LOW SULFUR FUEL: < 5 GR S/100 SCF HOURLY BASIS, < .25 GR S/100 SCF ANNUAL BASIS.	0		BACT-PSD	0	

RBLC REVIEW FOR COMBINED CYLCE COMBUSTION TURBINES: H2SO4

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	COMBINED CYCLE TURBINE (3)	2964	MMBTU/H	NONE LISTED	7.2	LB/H	Other Case-by-Case	0.0024	LB/MMBTU
OH-0268	LIMA ENERGY COMPANY	OH	03-13445	3/26/2002	COMBUSTION TURBINE (2), COMBINED CYCLE TURBINE, COMBINED CYCLE, & DUCT BURNER (3)	170	MW		0.53	LB/H	N/A	0	
TX-0411	AMELIA ENERGY CENTER	TX	PSD-TX-982	3/26/2002		180	MW	LOW SULFUR FUEL	2.08	LB/H	BACT-PSD	0	
TX-0351	WEATHERFORD ELECTRIC GENERATION FACILITY	TX	PSD-TX-933	3/11/2002	(2) GE 7241FA GAS TURBINES (TEMP STACK), S-1&2	1910	MMBTU/H	PIPELINE-QUALITY, SWEET NAT GAS CONTAINING NO MORE THAN 2.0 GR S/100 DSCF	0.8	LB/H	Other Case-by-Case	0.0004	LB/MMBTU
TX-0351	WEATHERFORD ELECTRIC GENERATION FACILITY	TX	PSD-TX-933	3/11/2002	(2) GE7121EA GAS TURBINES, S-3&4	1079	MMBTU/H	PIPELINE-QUALITY, SWEET NAT GAS CONTAINING NO MORE THAN 2.0 GR S/100 DSCF	0.5	LB/H	Other Case-by-Case	0.0005	LB/MMBTU
WA-0291	WALLULA POWER PLANT	WA	EFSEC/2001-03	1/3/2003	TURBINE, COMBINED CYCLE, NATURAL GAS (4)	1300	MW	EXCLUSIVE USE OF NATURAL GAS	0.0002	GR/DSCF	Other Case-by-Case	0	
TX-0350	ENNIS TRACTEBEL POWER	TX	PSD-TX-927	1/31/2002	COMBUSTION TURBINE W/HEAT RECOVERY STEAM GENERATOR	350	MW	NONE INDICATED	2.37	LB/H	Other Case-by-Case	0	
WA-0315	SUMAS ENERGY 2 GENERATION FACILITY	WA	EFSEC 2001-02	4/17/2003	TURBINES, COMBINED CYCLE, (2)	660	MW	LOW SULFUR FUEL: < 2 GR/100 CF 7 DAY AVG, 1.1 GR/100 CF 12 MO AVG	39	LB/D	BACT-PSD	0	
WA-0328	BP CHERRY POINT COGENERATION PROJECT	WA	EFSEC/2002-01	1/11/2005	GE 7FA COMBUSTION TURBINE & HEAT RECOVERY STEAM GENERATOR	174	MW	LIMIT FUEL TYPE TO NATURAL GAS	0		BACT-PSD	0	

RBLC REVIEW FOR COOLING TOWERS IN POWER PLANTS: PM

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	COOLING TOWER	130000	GAL/MIN	Particulate matter, total (TPM)		1.6	LB/HR	BACT-PSD	5000	PPM TDS
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	COOLING TOWER	130000	GAL/MIN	Particulate matter, total < 10 µ (TPM10)		1.6	LB/HR	BACT-PSD	5000	5000 PPM TDS
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	COOLING TOWER	130000	GAL/MIN	Particulate matter, total < 2.5 µ (TPM2.5)		1.6	LB/HR	BACT-PSD	5000	PPM TDS
LA-0254	NINEMILE POINT ELECTRIC GENERATING PLANT	LA	PSD-LA-752	8/16/2011	CHILLER COOLING TOWER (CHILL CT)	12000	GALS/MIN	Particulate matter, total < 10 µ (TPM10)	HIGH EFFICIENCY MIST ELIMINATOR	0.001	PERCENT DRIFT	BACT-PSD	0.001	PERCENT DRIFT
LA-0254	NINEMILE POINT ELECTRIC GENERATING PLANT	LA	PSD-LA-752	8/16/2011	CHILLER COOLING TOWER (CHILL CT)	12000	GALS/MIN	Particulate matter, total < 2.5 µ (TPM2.5)	HIGH EFFICIENCY MIST ELIMINATOR	0.001	PERCENT DRIFT	BACT-PSD	0.001	PERCENT DRIFT
LA-0254	NINEMILE POINT ELECTRIC GENERATING PLANT	LA	PSD-LA-752	8/16/2011	UNIT 6 COOLING TOWER	115847	GALS/MIN	Particulate matter, total < 10 µ (TPM10)	HIGH EFFICIENCY MIST ELIMINATOR	0.0005	PERCENT DRIFT	BACT-PSD	0.0005	PERCENT DRIFT
LA-0254	NINEMILE POINT ELECTRIC GENERATING PLANT	LA	PSD-LA-752	8/16/2011	UNIT 6 COOLING TOWER	115847	GALS/MIN	Particulate matter, total < 2.5 µ (TPM2.5)	HIGH EFFICIENCY MIST ELIMINATOR	0.0005	PERCENT DRIFT	BACT-PSD	0.0005	PERCENT DRIFT
ID-0018	LANGLEY GULCH POWER PLANT	ID	P-2009.0092	6/25/2010	COOLING TOWER	63200	GAL/MIN	Particulate Matter (PM)	DRIFT ELIMINATORS, GOOD OPERATING PRACTICES	0		BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Cooling Tower	130000	gpm	Particulate matter, total (TPM)		1.6	LB/H	BACT-PSD	5000	PPM TDS
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Cooling Tower	130000	gpm	Particulate matter, total < 2.5 µ (TPM2.5)		1.6	LB/H	BACT-PSD	5000	PPM TDS
OK-0129	CHOUTEAU POWER PLANT	OK	2007-115-C(M-1)PSD	1/23/2009	COOLING TOWER	9	CELLS	Particulate matter, total (TPM)	DRIFT ELIMINATORS	0.4	LB/H/CELL	BACT-PSD	0	
FL-0304	CANE ISLAND POWER PARK	FL	PSD-FL-400 (0970043-014-AC)	9/8/2008	AN EIGHT-CELL MECHANICAL COOLING TOWER			Particulate matter, total < 10 µ (TPM10)		0		BACT-PSD	0	
FL-0303	FPL WEST COUNTY ENERGY CENTER UNIT 3 PLAQUEMINE COGENERATION FACILITY	FL	0990646-002-AC (PSD-FL-396)	7/30/2008	ONE 26-CELL MECHANICAL DRAFT COOLING TOWER			Particulate Matter (PM)	THE PERMITTEE SHALL CERTIFY THAT THE COOLING TOWER WAS CONSTRUCTED TO ACHIEVE THE SPECIFIED DRIFT RATE OF NO MORE THAN 0.0005 PERCENT OF THE CIRCULATING WATER FLOW RATE.	0.0005	%	BACT-PSD	0	
LA-0136		LA	PSD-LA-659(M2)	7/23/2008	COOLING TOWER	0.01	% DRIFT RATE	Particulate matter, filterable < 10 µ (FPM10)	GOOD OPERATING PRACTICES	1.4	LB/H	BACT-PSD	0.005	% DRIFT RATE
LA-0224	ARSENAL HILL POWER PLANT	LA	PSD-LA-726	3/20/2008	COOLING TOWER	140000	GAL/MIN	Particulate matter, filterable < 10 µ (FPM10)	USE OF MIST ELIMINATORS	1.4	LB/H	BACT-PSD	0	
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO 26- CELL MECHANICAL DRAFT	306000	GAL/MIN	Particulate Matter (PM)		0		BACT-PSD	0	
NC-0101	FORSYTH ENERGY PLANT	NC	00986R1	9/29/2005	COOLING TOWER	3834	GAL/MIN	Particulate Matter (PM)		0.007	LB/H	BACT-PSD	0	
NC-0101	FORSYTH ENERGY PLANT	NC	00986R1	9/29/2005	COOLING TOWER	3834	GAL/MIN	Particulate matter, filterable < 10 µ (FPM10)		0.002	LB/H	BACT-PSD	0	
OR-0041	WANAPA ENERGY CENTER	OR	R10PSD-OR-05-01	8/8/2005	COOLING TOWER	6.2	CF/SEC	Particulate Matter (PM)	INSTALLATION OF HIGH EFFICIENCY 0.0005% DRIFT ELIMINATORS. LIMIT TOTAL DISSOLVED SOLIDS IN THE WATER TO LESS THAN 3,532 PPMW.	3532	PPMW	BACT-PSD	0	
LA-0192	CRESCENT CITY POWER	LA	PSD-LA-704	6/6/2005	MAIN COOLING TOWER	290200	GAL/MIN	Particulate matter, filterable < 10 µ (FPM10)	MARLEY EXCEL DRIFT ELIMINATORS	2.61	LB/H	BACT-PSD	0	

RBLC REVIEW FOR COOLING TOWERS IN POWER PLANTS: PM

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
LA-0192	CRESCENT CITY POWER	LA	PSD-LA-704	6/6/2005	CHILLER COOLING TOWER	35000	GAL H2O/MIN	Particulate matter, filterable < 10 µ (FPM10)		1.75	LB/H	BACT-PSD	0	
WA-0328	BP CHERRY POINT COGENERATION PROJECT	WA	EFSEC/2002-01	1/11/2005	COOLING TOWER			Particulate Matter (PM)	INSTALLATION OF DRIFT ELIMINATORS WITH DRIFT LOSS OF LESS THAN 0.001% OF THE RECIRCULATING WATER FLOW/RATE.	0		BACT-PSD	0	
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	COOLING TOWER, (2) 10 CELL MECHANICAL DRAFT			Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATORS	2.6	LB/H	BACT-PSD	0	
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	MECHANICAL DRAFT COOLING TOWERS	170000	Gal/Min	Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATORS (NOT TO EXCEED A TOTAL DRIFT RATE OF 0.0005 PERCENT OF CIRCULATING WATER FLOW)	3	LB/H	BACT-PSD	0	
MD-0032	DICKERSON	MD	CPCN CASE NO. 8888	11/5/2004	COOLING TOWER	10	CELLS	Particulate Matter (PM)	MIST ELIMINATORS	0.001	%	BACT-PSD	0	
LA-0191	MICHOUD ELECTRIC GENERATING PLANT	LA	PSD-LA-700	10/12/2004	COOLING TOWERS (2)	1728	Gal/min	Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATORS AND GOOD OPERATING PRACTICES	0.052	LB/H	BACT-PSD	0	
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	MECHANICAL DRAFT COOLING TOWERS FOR GE TURBINES	173870	GAL/MIN	Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATORS	0.0005	% BY VOL	BACT-PSD	0	
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	MECHANICAL DRAFT COOLING TOWERS FOR SIEMENS TURBINES	141400	GAL/MIN	Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATORS	0.0005	% BY VOL	BACT-PSD	0	
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	COOLING TOWER			Particulate Matter (PM)		2.08	LB/H	BACT-PSD	0	
TX-0374	CHOCOLATE BAYOU PLANT	TX	PSD-TX-983	3/24/2003	COOLING WATER TOWER (2 CELLS), COGENCWT			Particulate matter, filterable < 10 µ (FPM10)	NONE INDICATED	0.54	LB/H	Other Case-by-Case	0	
OK-0090	DUKE ENERGY STEPHENS, LLC STEPHENS ENERGY	OK	2001-157-C M-1 PSD	3/21/2003	COOLING TOWER			Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATORS	1.2	LB/H	BACT-PSD	0	
WA-0291	WALLULA POWER PLANT	WA	EFSEC/2001-03	1/3/2003	COOLING TOWER			Particulate matter, filterable < 10 µ (FPM10)	WATER TREATMENT PLUS A 0.0005% DRIFT RATE HAS BEEN SELECTED TO BE LAER FOR THE CONTROL OF PM10 EMISSIONS FROM THE COOLING TOWERS.	3.7	LB/H	LAER	0	
WA-0291	WALLULA POWER PLANT	WA	EFSEC/2001-03	1/3/2003	COOLING TOWER			Particulate Matter (PM)	WATER PRETREATMENT PLUS A 0.0005% DRIFT RATE	3.7	LB/H	Other Case-by-Case	0	
TX-0352	BRAZOS VALLEY ELECTRIC GENERATING FACILITY	TX	PSD-TX-966	12/31/2002	(2) COOLING TOWERS, CT-001& -002			Particulate matter, filterable < 10 µ (FPM10)	NONE INDICATED	1.58	LB/H	BACT-PSD	0	
TX-0407	STERNE ELECTRIC GENERATING FACILITY	TX	PSD-TX-1015	12/6/2002	COOLING TOWERS, (3)			Particulate matter, filterable < 10 µ (FPM10)	CHROMIUM BASED SOLUTIONS SHALL NOT BE USED.	1.01	LB/H	BACT-PSD	0	
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	22 CELL MECHANICAL DRAFT COOLING TOWER			Particulate matter, filterable < 10 µ (FPM10)	HIGH EFFICIENCY DRIFT ELIMINATORS	1.69	LB/H	N/A	0	
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	COOLING TOWER	11.4	MMGAL/H	Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATORS	0.001	% DRIFT LOSS	BACT-PSD	0	
CO-0052	ROCKY MOUNTAIN ENERGY CENTER, LLC.	CO	02WE0228	8/11/2002	EVAPORATIVE WATER COOLING TOWER			Particulate matter, filterable < 10 µ (FPM10)	HIGH EFFICIENCY DRIFT ELIMINATOR	0.42	LB/MM GAL CIRCULATED	BACT-PSD	0	
IN-0114	MIRANT SUGAR CREEK LLC	IN	167-15295-00123-4911	7/24/2002	COOLING TOWERS, (2)			Particulate matter, filterable < 10 µ (FPM10)	GOOD DESIGN AND OPERATION PRACTICES	1.41	LB/H	BACT-PSD	0	

## RBLC REVIEW FOR COOLING TOWERS IN POWER PLANTS: PM

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
NM-0044	CLOVIS ENERGY FACILITY	NM	PSD-NM-2605	6/27/2002	COOLING TOWER (CT-1 AND CT-2)	130000	GPM	Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATORS	0.7	LB/H	BACT-PSD	0	
OK-0070	GENOVA OK 1 POWER PROJECT	OK	2001-223-C PSD	6/13/2002	COOLING TOWER	12	CELLS	Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATORS	0.307	LB/H PER CELL	BACT-PSD	0	
OH-0264	NORTON ENERGY STORAGE, LLC	OH	16-02110	5/23/2002	COOLING TOWERS (3), MECHANICAL INDUCED DRAFT			Particulate matter, filterable < 10 µ (FPM10)		5.62	LB/H	BACT-PSD	0	
AR-0051	DUKE ENERGY-JACKSON FACILITY	AR	1998-AOP-R0 (34-0259)	4/1/2002	TOWER, COOLING			Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATOR.	0.7	LB/H	BACT-PSD	0	
NJ-0043	LIBERTY GENERATING STATION	NJ	BOP990001	3/28/2002	COOLING TOWER (3)-MECHANICAL DRAFT			Particulate matter, filterable < 10 µ (FPM10)	NONE	7.93	T/YR	Other Case-by-Case	0	
OH-0268	LIMA ENERGY COMPANY	OH	03-13445	3/26/2002	COOLING TOWER			Particulate matter, filterable < 10 µ (FPM10)	IMPLEMENTATION OF HIGH EFFICIENCY DRIFT ELIMINATORS.	1.88	LB/H	BACT-PSD	0	
TX-0351	WEATHERFORD ELECTRIC GENERATION FACILITY	TX	PSD-TX-933	3/11/2002	COOLING TOWER, C-1			Particulate Matter (PM)	NONE INDICATED	1.45	LB/H	Other Case-by-Case	0	
LA-0157	PERRYVILLE POWER STATION	LA	PSD-LA-655 (M-1)	3/8/2002	COOLING TOWER			Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATORS	3.3	LB/H	BACT-PSD	0	
LA-0120	GEISMAR PLANT	LA	PSD-LA-647 (M-2)	2/26/2002	COOLING WATER TOWER, #343-99	23000	GAL/MIN	Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATORS	1.72	LB/H	BACT-PSD	0	
AR-0052	THOMAS B. FITZHUGH GENERATING STATION	AR	1165-AOP-R1 (24-0012)	2/15/2002	COOLING TOWER			Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATORS	0.4	LB/H	BACT-PSD	0	
OK-0055	MUSTANG ENERGY PROJECT	OK	2001-132-C PSD	2/12/2002	COOLING TOWERS			Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATORS	3.78	LB/H	BACT-PSD	0	
OK-0056	HORSESHOE ENERGY PROJECT	OK	2001-156-C PSD	2/12/2002	COOLING TOWERS	111438	GPM TOTAL	Particulate matter, filterable < 10 µ (FPM10)	DRIFT ELIMINATORS DESIGN	0.001	% DRIFT	BACT-PSD	0	
LA-0164	ACADIA POWER STATION, ACADIA POWER PARTNERS LLC	LA	PSD-LA-645 (M-2)	1/31/2002	COOLING WATER TOWER NO. 1 & 2	152000	GAL/MIN EACH	Particulate matter, filterable < 10 µ (FPM10)	INTEGRATED DRIFT ELIMINATORS	0.76	LB/H	BACT-PSD	0	
TX-0350	ENNIS TRACTEBEL POWER	TX	PSD-TX-927	1/31/2002	COOLING TOWER, CT-1			Particulate matter, filterable < 10 µ (FPM10)	NONE INDICATED	0.5	LB/H	Other Case-by-Case	0	

## RBLC REVIEW FOR AUXILIARY BOILERS AT POWER PLANTS: NOx

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	AUXILIARY HEATER	40	MMBTU/HR		9	PPMVD	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	AUXILIARY BOILER	37.4	MMBTU/HR	ULTRA LOW NOX BURNER, USE PUC QUALITY NATURAL GAS, OPERATIONAL RESTRICTION OF 46, 675 MMBTU/YR	9	PPMVD	BACT-PSD	0	
OR-0048	CARTY PLANT	OR	25-0016-ST-02	12/29/2010	NATURAL GAS-FIRED BOILER	91	MMBTU/H	LOW NOX BURNERS	4.5	LB/H	BACT-PSD	0.05	LB/MMBTU
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Heater	40	MMBTu/hr	OPERATIONAL RESTRICTION OF 1000 HR/YR	9	PPMVD	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Boiler	35	MMBTu/hr	OPERATIONAL RESTRICTION OF 500 HR/YR	9	PPMVD	BACT-PSD	0	
OK-0129	CHOUTEAU POWER PLANT	OK	2007-115-C(M-1)PSD	1/23/2009	AUXILIARY BOILER	33.5	MMBTU/H	LOW-NOX BURNERS	0.07	LB/MMBTU	BACT-PSD	0	
FL-0303	FPL WEST COUNTY ENERGY CENTER UNIT 3	FL	0990646-002-AC (PSD-FL-396)	7/30/2008	TWO NOMINAL 10 MMBTU/H NATURAL GAS-FIRED PROCESS HEATERS	10	MMBTU/H	GOOD COMBUSTION	0.095	LB/MMBTU	BACT-PSD	0	
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO 99.8 MMBTU/H GAS-FUELED AUXILIARY BOILERS	99.8	MMBTU/H		0.05	LB/MMBTU	BACT-PSD	0	
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO GAS-FUELED 10 MMBTU/H PROCESS HEATERS	10	MMBTU/H		0.095	LB/MMBTU	BACT-PSD	0	
NY-0095	CAITHNES BELLPORT ENERGY CENTER	NY	PSD-NY-0001	5/10/2006	AUXILIARY BOILER	29.4	MMBTU/H	LOW NOX BURNERS & FLUE GAS RECIRCULATION	0.011	LB/MMBTU	BACT-PSD	0	
NV-0035	TRACY SUBSTATION EXPANSION PROJECT	NV	AP4911-1504	8/16/2005	BOILER, AUXILIARY	37.7	MMBTU/H	BEST COMBUSTION PRACTICES.	0.037	LB/MMBTU	BACT-PSD	0.037	LB/MMBTU
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	BOILERS (2)	30.6	MMBTU/H		1.07	LB/H	BACT-PSD	0.035	LB/MMBTU
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	AUXILIARY BOILER	38	MMBTU/H	LOW NOX BURNERS	0.37	LB/MMBTU	BACT-PSD	0.37	LB/MMBTU
NV-0037	COPPER MOUNTAIN POWER	NV	15347	5/14/2004	AUXILIARY BOILER	60	MMBTU/H	LOW NOX BURNER (WITH EITHER INTERNAL OR EXTERNAL FLUE GAS RECIRCULATION)	0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
OR-0039	COB ENERGY FACILITY, LLC	OR	18-0029	12/30/2003	BOILERS, AUXILIARY, NATURAL GAS, (2)	80	MMBTU/H	LOW NOX BURNERS AND FLUE GAS RECIRCULATION	0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	BOILER, COMMERCIAL	70	MMBTU/H	DRY LOW NOX AND FLUE GAS RECIRCULATION	0.036	LB/MMBTU		0.036	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR GE TURBINE	41	MMBTU/H	LOW NOX BURNERS	0.027	LB/MMBTU	BACT-PSD	0.027	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR SIEMENS TURBINES	55.34	MMBTU/H	LOW NOX BURNERS	0.036	LB/MMBTU	BACT-PSD	0.036	LB/MMBTU
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	BOILER	30.6	MMBTU/H		1.08	LB/H	BACT-PSD	0.035	LB/MMBTU
OK-0090	DUKE ENERGY STEPHENS, LLC	OK	2001-157-C M-1 PSD	3/21/2003	BOILER, AUXILIARY	33	MMBTU/H	LOW-NOX BURNERS	0.05	LB/MMBTU	BACT-PSD	0.05	LB/MMBTU
VA-0260	HENRY COUNTY POWER	VA	21389	11/21/2002	AUXILIARY BOILER, (2)	40	MMBTU/H	LOW NOX BURNERS AND CLEAN FUEL.	3.2	LB/H	BACT-PSD	0.08	LB/MMBTU

## RBLC REVIEW FOR AUXILIARY BOILERS AT POWER PLANTS: NOx

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	BOILER	99	MMBTU/H	LOW NOX BURNERS	4.95	LB/H	BACT-PSD	0.05	LB/MMBTU
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	AUXILIARY BOILER	33	MMBTU/H	LOW NOX OPTION (LOW NOX BURNER AND/OR FLUE GAS RECIRCULATION)	0.04	LB/MMBTU	BACT-PSD	0.04	LB/MMBTU
AL-0185	BARTON SHOALS ENERGY	AL	X001, X002	7/12/2002	TWO (2) 40 MMBTU/H AUXILIARY BOILERS	40	MMBTU/H	LOW NOX BURNERS	0.05	LB/MMBTU	BACT-PSD	0	
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	AUXILIARY BOILER	33	MMBTU/H	LOW NOX BURNERS	0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
IA-0058	GREATHER DES MOINES ENERGY CENTER	IA	77-13-002	4/10/2002	AUXILIARY BOILER	68	MMBTU/H		0.05	LB/MMBTU	BACT-PSD	0.05	LB/MMBTU
AR-0051	DUKE ENERGY-JACKSON FACILITY	AR	1998-AOP-R0 (34-0259)	4/1/2002	BOILER, AUXILIARY	33	MMBTU/H		0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
OK-0055	MUSTANG ENERGY PROJECT	OK	2001-132-C PSD	2/12/2002	AUXILIARY BOILER	31	MMBTU/H	COMBUSTION CONTROL	0.01	LB/MMBTU	Other Case-by-Case	0.01	LB/MMBTU

RBLC REVIEW FOR AUXILIARY BOILERS AT POWER PLANTS: VOC

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
OK-0129	CHOUTEAU POWER PLANT	OK	2007-115-C(M-1)PSD	1/23/2009	AUXILIARY BOILER	33.5	MMBTU/H	GOOD COMBUSTION	0.54	LB/H	BACT-PSD	0.016	LB/MMBTU
FL-0303	FPL WEST COUNTY ENERGY CENTER UNIT 3	FL	0990646-002-AC (PSD-FL-396)	7/30/2008	TWO NOMINAL 10 MMBTU/H NATURAL GAS-FIRED PROCESS HEATERS	10	MMBTU/H		2	GS/100 SCF	BACT-PSD	0.003	LB/MMBTU
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO 99.8 MMBTU/H GAS-FUELED AUXILIARY BOILERS	99.8	MMBTU/H		2	GS/100 SCF GAS	BACT-PSD	0.003	LB/MMBTU
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO GAS-FUELED 10 MMBTU/H PROCESS HEATERS	10	MMBTU/H		2	GR S/100 SCF GAS	BACT-PSD	0.003	LB/MMBTU
NV-0035	TRACY SUBSTATION EXPANSION PROJECT	NV	AP4911-1504	8/16/2005	BOILER, AUXILIARY	37.7	MMBTU/H	BEST COMBUSTION PRACTICES.	0.005	LB/MMBTU	BACT-PSD	0	
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	BOILERS (2)	30.6	MMBTU/H		0.49	LB/H	BACT-PSD	0.016	LB/MMBTU
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	AUXILIARY BOILER	38	MMBTU/H		0.0033	LB/MMBTU	BACT-PSD	0	
NV-0037	COPPER MOUNTAIN POWER	NV	15347	5/14/2004	AUXILIARY BOILER	60	MMBTU/H	EFFECTIVE COMBUSTION SYSTEM DESIGN, 10:1 TURNDOWN CAPABILITY AND LOW NOX BURNER TECHNOLOGY	0.4	LB/H	LAER	0.007	LB/MMBTU
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	BOILER, COMMERCIAL	70	MMBTU/H	GOOD COMBUSTION	0.007	LB/MMBTU	BACT-PSD	0	
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR GE TURBINE	41	MMBTU/H		0.01	LB/MMBTU	BACT-PSD	0	
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR SIEMENS TURBINES	55.34	MMBTU/H		0.01	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	BOILER	30.6	MMBTU/H		0.49	LB/H	BACT-PSD	0.016	LB/MMBTU
OK-0090	DUKE ENERGY STEPHENS, LLC STEPHENS ENERGY	OK	2001-157-C M-1 PSD	3/21/2003	BOILER, AUXILIARY	33	MMBTU/H	BOILER DESIGN AND GOOD OPERATING PRACTICES	0.016	LB/MMBTU	BACT-PSD	0	
VA-0255	VA POWER - POSSUM POINT	VA	70225	11/18/2002	BOILER, AUXILIARY	99	MMBTU/H	GOOD COMBUSTION PRACTICES.	0.4	LB/H	Other Case-by-Case	0.004	LB/MMBTU
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	BOILER	99	MMBTU/H		0.545	LB/H	BACT-PSD	0.0055	LB/MMBTU
VA-0261	CPV CUNNINGHAM CREEK	VA	81382	9/6/2002	AUXILIARY BOILER	80	MMBTU/H	GOOD COMBUSTION PRACTICES.	0.42	LB/H	BACT-PSD	0.005	LB/MMBTU
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	AUXILIARY BOILER	33	MMBTU/H	GOOD COMBUSTION PRACTICE	0.018	LB/MMBTU	BACT-PSD	0	
AL-0185	BARTON SHOALS ENERGY	AL	X001, X002	7/12/2002	TWO (2) 40 MMBTU/H AUXILIARY BOILERS	40	MMBTU/H	GOOD COMBUSTION PRACTICES	0.0054	LB/MMBTU	BACT-PSD	0	
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	AUXILIARY BOILER	33	MMBTU/H	BOILER DESIGN AND GOOD COMBUSTION PRACTICES	0.016	LB/MMBTU	BACT-PSD	0	
AR-0051	DUKE ENERGY-JACKSON FACILITY	AR	1998-AOP-R0 (34-0259)	4/1/2002	BOILER, AUXILIARY	33	MMBTU/H	GOOD OPERATING PRACTICE	0.016	LB/MMBTU	BACT-PSD	0.016	LB/MMBTU
OK-0055	MUSTANG ENERGY PROJECT	OK	2001-132-C PSD	2/12/2002	AUXILIARY BOILER	31	MMBTU/H	COMBUSTION CONTROL	0.0055	LB/MMBTU	Other Case-by-Case	0	

## RBLC REVIEW FOR AUXILIARY BOILERS AT POWER PLANTS: CO

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	AUXILIARY HEATER	40	MMBTU/HR		50	PPMVD	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	AUXILIARY BOILER	37.4	MMBTU/HR	ULTRA LOW NOX BURNER, USE PUC QUALITY NATURAL GAS, OPERATIONAL RESTRICTION OF 46, 675 MMBTU/YR	50	PPMVD	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Heater	40	MMBTu/hr	OPERATIONAL RESTRICTION OF 1000 HR/YR	50	PPMVD	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Boiler	35	MMBTu/hr	OPERATIONAL RESTRICTION OF 500 HR/YR	50	PPMVD	BACT-PSD	0	
OK-0129	CHOUTEAU POWER PLANT	OK	2007-115-C(M-1)PSD	1/23/2009	AUXILIARY BOILER	33.5	MMBTU/H	GOOD COMBUSTION	5.02	LB/H	N/A	0.150	LB/MMBTU
FL-0303	FPL WEST COUNTY ENERGY CENTER UNIT 3	FL	0990646-002-AC (PSD-FL-396)	7/30/2008	TWO NOMINAL 10 MMBTU/H NATURAL GAS-FIRED PROCESS HEATERS	10	MMBTU/H	GOOD COMBUSTION	0.08	LB/MMBTU	BACT-PSD	0	
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO 99.8 MMBTU/H GAS-FUELED AUXILIARY BOILERS	99.8	MMBTU/H		0.08	LB/MMBTU	BACT-PSD	0	
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO GAS-FUELED 10 MMBTU/H PROCESS HEATERS	10	MMBTU/H		0.08	LB/MMBTU	BACT-PSD	0	
NY-0095	CAITHNES BELLPORT ENERGY CENTER	NY	PSD-NY-0001	5/10/2006	AUXILIARY BOILER	29.4	MMBTU/H	GOOD COMBUSTION PRACTICES	0.036	LB/MMBTU	BACT-PSD	0	
NV-0035	TRACY SUBSTATION EXPANSION PROJECT	NV	AP4911-1504	8/16/2005	BOILER, AUXILIARY	37.7	MMBTU/H	BEST COMBUSTION PRACTICES	0.036	LB/MMBTU	BACT-PSD	0.036	LB/MMBTU
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	BOILERS (2)	30.6	MMBTU/H		1.13	LB/H	BACT-PSD	0.037	LB/MMBTU
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	AUXILIARY BOILER	38	MMBTU/H		0.08	LB/MMBTU	BACT-PSD	0.08	LB/MMBTU
NV-0037	COPPER MOUNTAIN POWER	NV	15347	5/14/2004	AUXILIARY BOILER	60	MMBTU/H	DESIGN, 10:1 TURNDOWN CAPABILITY, AND LNB TECHNOLOGY	0.08	LB/MMBTU	LAER	0.08	LB/MMBTU
OR-0039	COB ENERGY FACILITY, LLC	OR	18-0029	12/30/2003	BOILERS, AUXILIARY, NATURAL GAS, (2)	80	MMBTU/H	GOOD COMBUSTION	0.037	LB/MMBTU	BACT-PSD	0.037	LB/MMBTU
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	BOILER, COMMERCIAL	70	MMBTU/H	GOOD COMBUSTION	0.06	LB/MMBTU	BACT-PSD	0.06	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR GE TURBINE	41	MMBTU/H		0.09	LB/MMBTU	BACT-PSD	0.09	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR SIEMENS TURBINES	55.34	MMBTU/H		0.14	LB/MMBTU	BACT-PSD	0.14	LB/MMBTU
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	BOILER	30.6	MMBTU/H		3.34	LB/H	BACT-PSD	0.109	LB/MMBTU
OK-0090	DUKE ENERGY STEPHENS, LLC	OK	2001-157-C M-1 PSD	3/21/2003	BOILER, AUXILIARY	33	MMBTU/H	BOILER DESIGN AND GOOD OPERATING PRACTICES	0.085	LB/MMBTU	BACT-PSD	0.085	LB/MMBTU
VA-0260	HENRY COUNTY POWER	VA	21389	11/21/2002	AUXILIARY BOILER, (2)	40	MMBTU/H	GOOD COMBUSTION AND DESIGN. CLEAN FUEL.	2.9	LB/H	BACT-PSD	0.073	LB/MMBTU
VA-0255	VA POWER - POSSUM POINT	VA	70225	11/18/2002	BOILER, AUXILIARY	99	MMBTU/H	GOOD COMBUSTION PRACTICES.	14.9	LB/H	Other Case-by-Case	0.15	LB/MMBTU

RBLC REVIEW FOR AUXILIARY BOILERS AT POWER PLANTS: CO

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	BOILER	99	MMBTU/H		8.32	LB/H	BACT-PSD	0.084	LB/MMBTU
VA-0261	CPV CUNNINGHAM CREEK	VA	81382	9/6/2002	AUXILIARY BOILER	80	MMBTU/H	GOOD COMBUSTION PRACTICES.	6.42	LB/H	BACT-PSD	0.08	LB/MMBTU
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	AUXILIARY BOILER	33	MMBTU/H	GOOD COMBUSTION PRACTICE	0.04	LB/MMBTU	BACT-PSD	0.04	LB/MMBTU
AL-0185	BARTON SHOALS ENERGY	AL	X001, X002	7/12/2002	TWO (2) 40 MMBTU/H AUXILIARY BOILERS	40	MMBTU/H	GOOD COMBUSTION PRACTICES	0.082	LB/MMBTU	BACT-PSD	0	
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	AUXILIARY BOILER	33	MMBTU/H	BOILER DESIGN AND GOOD OPERATING PRACTICES	0.037	LB/MMBTU	BACT-PSD	0.037	LB/MMBTU
IA-0058	GREATER DES MOINES ENERGY CENTER	IA	77-13-002	4/10/2002	AUXILIARY BOILER	68	MMBTU/H		0.084	LB/MMBTU	Other Case-by-Case	0.084	LB/MMBTU
AR-0051	DUKE ENERGY- JACKSON FACILITY	AR	1998-AOP-R0 (34-0259)	4/1/2002	BOILER, AUXILIARY	33	MMBTU/H	GOOD OPERATING PRACTICE	0.15	LB/MMBTU	BACT-PSD	0.15	LB/MMBTU
OK-0055	MUSTANG ENERGY PROJECT	OK	2001-132-C PSD	2/12/2002	AUXILIARY BOILER	31	MMBTU/H	COMBUSTION CONTROL	0.084	LB/MMBTU	BACT-PSD	0.084	LB/MMBTU

RBLC REVIEW FOR AUXILIARY BOILERS AT POWER PLANTS: PM, PM10, PM2.5

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	AUXILIARY HEATER	40	MMBTU/HR	Particulate matter, total (TPM)	USE PUC QUALITY PIPELINE NATURAL GAS	0.3	LB/HR	BACT-PSD	0.008	LB/MMBTU
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	AUXILIARY HEATER	40	MMBTU/HR	Particulate matter, total < 2.5 μ (TPM2.5)	USE PUC QUALITY PIPELINE NATURAL GAS	0.3	LB/HR	BACT-PSD	0.008	LB/MMBTU
*CA-1212	PALMDALE HYBRID POWER PROJECT	CA	SE 09-01	10/18/2011	AUXILIARY HEATER	40	MMBTU/HR	Particulate matter, total < 10 μ (TPM10)	USE PUC QUALITY PIPELINE NATURAL GAS	0.3	LB/HR	BACT-PSD	0.008	LB/MMBTU
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	AUXILIARY BOILER	37.4	MMBTU/HR	Particulate matter, total (TPM)	USE PUC QUALITY NATURAL GAS, OPERATIONAL LIMIT OF 46,675 MMBTU/YR	0.0034	GR/DSCF	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	AUXILIARY BOILER	37.4	MMBTU/HR	Particulate matter, total < 10 μ (TPM10)	USE PUC QUALITY NATURAL GAS, OPERATIONAL LIMIT OF 46,675 MMBTU/YR	0.0034	GR/DSCF	BACT-PSD	0	
OR-0048	CARTY PLANT	OR	25-0016-ST-02	12/29/2010	NATURAL GAS-FIRED BOILER	91	MMBTU/H	Particulate matter, filterable < 10 μ (FPM10)	CLEAN FUEL	2.5	LB/MMCF	BACT-PSD	0.0025	LB/MMBTU
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Heater	40	MMBTu/hr	Particulate matter, total (TPM)	OPERATIONAL RESTRICTION OF 1000 HR/YR, USE PUC QUALITY NATURAL GAS	0.2	GRANS PER 100 DSCF	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Heater	40	MMBTu/hr	Particulate matter, total < 2.5 μ (TPM2.5)	OPERATIONAL RESTRICTION OF 1000 HR/YR	0.2	GRAINS PER 100 DSCF	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Boiler	35	MMBTu/hr	Particulate matter, total (TPM)	OPERATIONAL RESTRICTION OF 500 HR/YR, USE PUC QUALITY NATURAL GAS	0.2	GRAINS PER 100 DSCF	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Boiler	35	MMBTu/hr	Particulate matter, total < 2.5 μ (TPM2.5)	OPERATIONAL RESTRICTION OF 500 HR/YR, USE PUC QUALITY NATURAL GAS	0.2	GRAINS PER 100 DSCF	BACT-PSD	0	
FL-0303	FPL WEST COUNTY ENERGY CENTER UNIT 3	FL	0990646-002-AC (PSD-FL-396)	7/30/2008	TWO NOMINAL 10 MMBTU/H NATURAL GAS-FIRED PROCESS HEATERS	10	MMBTU/H	Particulate Matter (PM)		2	GS/100 SCF	BACT-PSD	0	
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO 99.8 MMBTU/H GAS-FUELED AUXILIARY BOILERS	99.8	MMBTU/H	Particulate matter, filterable < 10 μ (FPM10)		2	GS/100 SCF GAS	BACT-PSD	0	
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO GAS-FUELED 10 MMBTU/H PROCESS HEATERS	10	MMBTU/H	Particulate matter, filterable < 10 μ (FPM10)		2	GR S/100 SCF GAS	BACT-PSD	0	
NY-0095	CAITHNES BELLPORT ENERGY CENTER	NY	PSD-NY-0001	5/10/2006	AUXILIARY BOILER	29.4	MMBTU/H	Particulate matter, filterable < 10 μ (FPM10)	LOW SULFUR FUEL	0.0033	LB/MMBTU	BACT-PSD	0	
NV-0035	TRACY SUBSTATION EXPANSION PROJECT	NV	AP4911-1504	8/16/2005	BOILER, AUXILIARY	37.7	MMBTU/H	Particulate matter, filterable < 10 μ (FPM10)	BEST COMBUSTION PRACTICES.	0.004	LB/MMBTU	BACT-PSD	0.004	LB/MMBTU
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	BOILERS (2)	30.6	MMBTU/H	Particulate matter, filterable < 10 μ (FPM10)		0.31	LB/H	BACT-PSD	0.01	LB/MMBTU
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	AUXILIARY BOILER	38	MMBTU/H	Particulate matter, filterable < 10 μ (FPM10)		0.0033	LB/MMBTU	BACT-PSD	0.0033	LB/MMBTU
NV-0037	COPPER MOUNTAIN POWER	NV	15347	5/14/2004	AUXILIARY BOILER	60	MMBTU/H	Particulate matter, filterable < 10 μ (FPM10)	RESTRICTION OF OPERATION TO NATURAL GAS	0.5	LB/H	LAER	0.008	LB/MMBTU
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	BOILER, COMMERCIAL	70	MMBTU/H	Particulate Matter (PM)	CLEAN FUELS	0.008	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	BOILER, COMMERCIAL	70	MMBTU/H	Particulate matter, filterable < 10 μ (FPM10)	CLEAN FUELS	0.008	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR GE TURBINE	41	MMBTU/H	Particulate matter, filterable < 10 μ (FPM10)		0.015	LB/MMBTU	BACT-PSD	0.015	LB/MMBTU

RBL REVIEW FOR AUXILIARY BOILERS AT POWER PLANTS: PM, PM10, PM2.5

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR SIEMENS TURBINES	55.34	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.015	LB/MMBTU	BACT-PSD	0.015	LB/MMBTU
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	BOILER	30.6	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.31	LB/H	BACT-PSD	0.01	LB/MMBTU
OK-0090	DUKE ENERGY STEPHENS, LLC STEPHENS ENERGY	OK	2001-157-C M-1 PSD	3/21/2003	BOILER, AUXILIARY	33	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	USE OF LOW ASH FUEL AND EFFICIENT COMBUSTION	0.01	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
VA-0255	VA POWER - POSSUM POINT	VA	70225	11/18/2002	BOILER, AUXILIARY	99	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUEL AND GOOD COMBUSTION PRACTICES.	0.7	LB/H	Other Case-by-Case	0.007	LB/MMBTU
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	BOILER	99	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.76	LB/H	BACT-PSD	0.0076	LB/MMBTU
VA-0261	CPV CUNNINGHAM CREEK	VA	81382	9/6/2002	AUXILIARY BOILER	80	MMBTU/H	Particulate Matter (PM)	GOOD COMBUSTION PRACTICES.	0.58	LB/H	BACT-PSD	0.007	LB/MMBTU
VA-0261	CPV CUNNINGHAM CREEK	VA	81382	9/6/2002	AUXILIARY BOILER	80	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES.	0.58	LB/H	BACT-PSD	0.007	LB/MMBTU
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	AUXILIARY BOILER	33	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICE	0.012	LB/MMBTU	BACT-PSD	0.012	LB/MMBTU
AL-0185	BARTON SHOALS ENERGY	AL	X001, X002	7/12/2002	TWO (2) 40 MMBTU/H AUXILIARY BOILERS	40	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	NATURAL GAS ONLY	0.0075	LB/MMBTU	BACT-PSD	0	
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	AUXILIARY BOILER	33	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	LOW ASH FUEL AND EFFICIENT COMBUSTION	0.01	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
IA-0058	GREATER DES MOINES ENERGY CENTER	IA	77-13-002	4/10/2002	AUXILIARY BOILER	68	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.0076	LB/MMBTU	BACT-PSD	0.0076	LB/MMBTU
AR-0051	DUKE ENERGY- JACKSON FACILITY	AR	1998-AOP-R0 (34-0259)	4/1/2002	BOILER, AUXILIARY	33	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD OPERATING PRACTICE	0.01	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU

RBLC REVIEW FOR AUXILIARY BOILERS AT POWER PLANTS: SO2 AND H2SO4

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGH PUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
OK-0129	CHOUTEAU POWER PLANT	OK	2007-115-C(M-1)PSD	1/23/2009	AUXILIARY BOILER	33.5	MMBTU/H	Sulfur Dioxide (SO2)	LOW SULFUR FUEL	0.03	LB/H	N/A	0.001	LB/MMBTU
FL-0303	FPL WEST COUNTY ENERGY CENTER UNIT 3	FL	0990646-002-AC (PSD-FL-396)	7/30/2008	TWO NOMINAL 10 MMBTU/H NATURAL GAS-FIRED PROCESS HEATERS	10	MMBTU/H	Sulfur Dioxide (SO2)		2	GS/100 SCF	BACT-PSD	0.003	LB/MMBTU
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO 99.8 MMBTU/H GAS-FUELED AUXILIARY BOILERS	99.8	MMBTU/H	Sulfur Dioxide (SO2)		2	GS/100 SCF GAS	BACT-PSD	0.003	LB/MMBTU
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO GAS-FUELED 10 MMBTU/H PROCESS HEATERS	10	MMBTU/H	Sulfur Dioxide (SO2)		2	GS/100 SCF GAS	BACT-PSD	0.003	LB/MMBTU
NY-0095	CAITHNES BELLPORT ENERGY CENTER	NY	PSD-NY-0001	5/10/2006	AUXILIARY BOILER	29.4	MMBTU/H	Sulfur Dioxide (SO2)	LOW SULFUR FUEL	0.0005	LB/MMBTU	BACT-PSD	0	
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	BOILERS (2)	30.6	MMBTU/H	Sulfur Dioxide (SO2)	THE MAXIMUM S CONTENT OF THE NATURAL GAS SHALL NOT EXCEED 2 GRAINS PER 100 CUBIC FEET.	0.031	LB/H	BACT-PSD	0.001	LB/MMBTU
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	AUXILIARY BOILER	38	MMBTU/H	Sulfur Dioxide (SO2)		0.0023	LB/MMBTU	BACT-PSD	0.0023	LB/MMBTU
NV-0037	COPPER MOUNTAIN POWER	NV	15347	5/14/2004	AUXILIARY BOILER	60	MMBTU/H	Sulfur Dioxide (SO2)	USE OF LOW-SULFUR NATURAL GAS	0.04	LB/H	BACT-PSD	0.0007	LB/MMBTU
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	BOILER, COMMERCIAL	70	MMBTU/H	Sulfur Dioxide (SO2)	LOW SULFUR FUEL	0.001	LB/MMBTU	BACT-PSD	0.001	LB/MMBTU
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	BOILER, COMMERCIAL	70	MMBTU/H	Sulfuric Acid (mist, vapors, etc)	LOW SULFUR FUEL	0.8	GR/100 SCF	BACT-PSD	0.001	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR GE TURBINE	41	MMBTU/H	Sulfur Dioxide (SO2)		0.0025	LB/MMBTU	BACT-PSD	0.0025	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR SIEMENS TURBINES	55.34	MMBTU/H	Sulfur Dioxide (SO2)		0.0025	LB/MMBTU	BACT-PSD	0.0025	LB/MMBTU
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	BOILER	30.6	MMBTU/H	Sulfur Dioxide (SO2)		0.031	LB/H	BACT-PSD	0.001	LB/MMBTU
OK-0090	DUKE ENERGY STEPHENS, LLC STEPHENS ENERGY	OK	2001-157-C M-1 PSD	3/21/2003	BOILER, AUXILIARY	33	MMBTU/H	Sulfur Dioxide (SO2)	BACT IS USE OF PIPE-LINE QUALITY NATURAL GAS	0.2	LB/H	BACT-PSD	0.006	LB/MMBTU
VA-0255	VA POWER - POSSUM POINT	VA	70225	11/18/2002	BOILER, AUXILIARY	99	MMBTU/H	Sulfur Dioxide (SO2)	LOW SULFUR FUEL AND GOOD COMBUSTION PRACTICES.	0.1	LB/H	Other Case-by-Case	0.001	LB/MMBTU
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	BOILER	99	MMBTU/H	Sulfur Dioxide (SO2)		0.56	LB/H	BACT-PSD	0.0057	LB/MMBTU

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - NOx

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
*FL-0335	SUWANNEE MILL	FL	1210468-001-AC(PSD-FL-417)	9/5/2012	Four(4) Natural Gas Boilers - 46 MMBtu/hour	46	MMBtu/hr	Low NOx Burner and Flue Gas Recirculation	0.036	LB/MMBTU	BACT-PSD	0	
*OH-0350	REPUBLIC STEEL	OH	P0109191	7/18/2012	Steam Boiler	65	MMBtu/H		0.07	LB/MMBTU	N/A	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	AUXILIARY BOILER	37.4	MMBTU/HR	ULTRA LOW NOX BURNER, USE PUC QUALITY NATURAL GAS, OPERATIONAL RESTRICTION OF 46, 675 MMBTU/YR	9	PPMVD	BACT-PSD	0	
OR-0048	CARTY PLANT	OR	25-0016-ST-02	12/29/2010	NATURAL GAS-FIRED BOILER	91	MMBTU/H	LOW NOX BURNERS	4.5	LB/H	BACT-PSD	0.05	LB/MMBTU
AK-0071	INTERNATIONAL STATION POWER PLANT	AK	AQ0164CPT01	12/20/2010	Sigma Thermal Auxiliary Heater (1)	12.5	MMBTU/H	Low NOx Burners and Flue Gas Recirculation	32	LB/MMSCF	BACT-PSD	0	
LA-0240	FLOPAM INC.	LA	PSD-LA-747/1280-00141-V0	6/14/2010	Boilers	25.1	MMBTU/H	Ultra Low NOx Burners	0.38	LB/H	LAER	0.015	LB/MMBTU
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Heater	40	MMBtu/hr	OPERATIONAL RESTRICTION OF 1000 HR/YR	9	PPMVD	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Boiler	35	MMBtu/hr	OPERATIONAL RESTRICTION OF 500 HR/YR	9	PPMVD	BACT-PSD	0	
NV-0050	MGM MIRAGE	NV	825	11/30/2009	BOILERS - UNITS CC026, CC027 AND CC028 AT CITY CENTER	44	MMBTU/H	LOW NOX BURNER AND GOOD COMBUSTION PRACTICES	0.0109	LB/MMBTU	Other Case-by-Case	0.0109	LB/MMBTU
NV-0050	MGM MIRAGE	NV	825	11/30/2009	BOILERS - UNITS CC001, CC002, AND CC003 AT CITY CENTER	41.64	MMBTU/H	LOW NOX BURNER AND FLUE GAS RECIRCULATION	0.011	LB/MMBTU	Other Case-by-Case	0.011	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP01	35.4	MMBTU/H	LOW NOX BURNER	0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP03	33.48	MMBTU/H	LOW NOX BURNER	0.0367	LB/MMBTU	BACT-PSD	0.0367	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT BA03	31.38	MMBTU/H	LOW-NOX BURNER	0.0306	LB/MMBTU	BACT-PSD	0.0306	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP26	24	MMBTU/H	LOW NOX BURNER	0.0108	LB/MMBTU	BACT-PSD	0.0108	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT PA15	21	MMBTU/H	LOW NOX BURNER	0.0366	LB/MMBTU	BACT-PSD	0.0366	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT BA01	16.8	MMBTU/H	LOW-NOX BURNER AND BLUE GAS RECIRCULATION	0.03	LB/MMBTU	BACT-PSD	0.03	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT IP04	16.7	MMBTU/H	LOW NOX BURNER	0.049	LB/MMBTU	BACT-PSD	0.0049	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT FL01	14.34	MMBTU/H	LOW NOX BURNER AND FLUE GAS RECIRCULATION	0.0353	LB/MMBTU	BACT-PSD	0.0353	LB/MMBTU
NH-0015	CONCORD STEAM CORPORATION	NH	TP-0014	2/27/2009	BOILER 3 (AUXILIARY)	76.8	MMBTU/H	LOW NOX BURNERS, FLUE GAS RECIRCULATION, AND LESS THAN 700 HOURS OF OPERATION PER CONSECUTIVE 12 MONTH PERIOD.	0.049	LB/MMBTU	LAER	0	
NH-0015	CONCORD STEAM CORPORATION	NH	TP-0014	2/27/2009	BOILER 2 (AUXILIARY)	76.8	MMBTU/H	LOW NOX BURNERS, FLUE GAS RECIRCULATION, AND LESS THAN 700 HOURS OPERATION PER CONSECUTIVE 12 MONTH PERIOD.	0.049	LB/MMBTU	LAER	0	
OK-0135	PRYOR PLANT CHEMICAL	OK	2008-100-C PSD	2/23/2009	BOILERS #1 AND #2	80	MMBTU/H	LOW-NOX BURNERS AND GOOD COMBUSTION PRACTICES	4	LB/H	BACT-PSD	0.050	LB/MMBTU
SC-0115	GP CLARENDON LP	SC	0680-0046-CB	2/10/2009	NATURAL GAS SPACE HEATERS - 14 UNITS (ID 17)	20.89	MMBTU/H		1.99	LB/H	BACT-PSD	0.095	LB/MMBTU

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - NOx

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
OK-0136	PONCA CITY REFINERY	OK	2007-042-C PSD	2/9/2009	TB-1, TB-2, TB-3	95	MMBTU/H	ULTRA-LOW NOX BURNERS: 0.036 LB/MMBTU.	3.42	LB/H	BACT-PSD	0.036	LB/MMBTU
OK-0137	PONCA CITY REFINERY	OK	2007-042-C PSD	2/9/2009	TB-1 Leased Boiler No. 1	95	MMBTU/H	Ultra-low NOx burners (0.036lb/mmbtu)	3.42	LB/H	BACT-PSD	0.036	LB/MMBTU
OK-0137	PONCA CITY REFINERY	OK	2007-042-C PSD	2/9/2009	TB-2 Leased Boiler No.2	95	MMBTU/H	ULNB- Ultra-low NOx burners , 0.036lb/mmbtu	3.42	LB/H	BACT-PSD	0.036	LB/MMBTU
OK-0129	CHOUTEAU POWER PLANT	OK	2007-115-C(M-1)PSD	1/23/2009	AUXILIARY BOILER	33.5	MMBTU/H	LOW-NOX BURNERS	0.07	LB/MMBTU	BACT-PSD	0	
SC-0114	GP ALLENDALE LP	SC	0160-0020-CB CPCN CASE NO. 9129	11/25/2008	NATURAL GAS SPACE HEATERS - 14 UNITS (ID 18)	20.89	MMBTU/H		1.99	LB/H	BACT-PSD	0.095	LB/MMBTU
MD-0040	CPV ST CHARLES	MD		11/12/2008	BOILER	93	MMBTU/H	LOW NOX WITH FGR	0.011	LB/MMBTU	BACT-PSD	0	
OH-0323	TITAN TIRE CORPORATION OF BRYAN	OH	03-17392	6/5/2008	BOILER	50.4	MMBTU/H		2.47	LB/H	BACT-PSD	50	LB/MMSCF
MD-0037	MEDIMMUNE FREDERICK CAMPUS	MD	NSR-2007-01	1/28/2008	FOUR (4) NATURAL GAS BOILERS EACH RATED AT 29.4 MILLION BTU PER HOUR	29.4	MMBTU/H	ULTRA LOW NOX BURNERS ON EACH OF THE FOUR IDENTICAL BOILERS	9	PPM	LAER	0.011	LB/MMBTU
MN-0070	MINNESOTA STEEL INDUSTRIES, LLC	MN	06100067-001	9/7/2007	SMALL BOILERS & HEATERS(<100 MMBTU/H)	99	MMBTU/H		0.0035	LB/MMBTU	BACT-PSD	0	
AL-0230	THYSSENKRUPP STEEL AND STAINLESS USA, LLC	AL	503-0095-X001 THRU X026	8/17/2007	3 NATURAL GAS-FIRED BOILERS WITH ULNB & EGR (537-539)	64.9	MMBTU each	ULNB & EGR (ULTRA-LOW NOX BURNERS (ULNB)(EXHAUST GAS RECIRCULATION (EGR) & SAME FLUE GAS RECIRCULATION (FGR)	0.035	LB/MMBTU	BACT-PSD	0	
OH-0309	TOLEDO SUPPLIER PARK- PAINT SHOP	OH	04-01358	5/3/2007	BOILER (2), NATURAL GAS	20.4	MMBTU/H	LOW NOX BURNERS AND FLUE GAS RECIRCULATION	0.72	LB/H	LAER	0.035	LB/MMBTU
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO GAS-FUELED 10 MMBTU/H PROCESS HEATERS	10	MMBTU/H		0.095	LB/MMBTU	BACT-PSD	0	
NV-0044	HARRAH'S OPERATING COMPANY, INC.	NV	257	1/4/2007	COMMERCIAL/INSTITUTIONAL-SIZE BOILERS	35.4	MMBTU/H	LOW-NOX BURNER AND FLUE GAS RECIRCULATION	0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
TX-0501	TEXSTAR GAS PROCESS FACILITY	TX	PSD-TX 55M3 AND 6051	7/11/2006	POWER STEAM BOILER	93	MMBTU/H		8.39	LB/H	BACT-PSD	0.1	LB/MMBTU
WA-0316	NORTHWEST PIPELINE CORP. -MT VERNON COMPRESSOR	WA	PSD-01-09 AMENDMENT 5	6/14/2006	BOILER, NATURAL GAS	4.19	MMBTU/H	GOOD COMBUSTION PRACTICE	34	PPMDV @ 3% O2	BACT-PSD	0.04	LB/MMBTU
CA-1128	COTTAGE HEALTH CARE - PUEBLO STREET	CA	11974	5/16/2006	BOILER: 5 TO < 33.5 MMBTU/H	25	MMBTU/H (75 MMBTU/H)	ULTRA-LOW NOX BURNER	9	PPMV AT 3% O2	BACT-PSD	0	
NY-0095	CAITHNES BELLPORT ENERGY CENTER	NY	PSD-NY-0001	5/10/2006	AUXILIARY BOILER PICKLE LINE BOILERS, SN-52	29.4	MMBTU/H	LOW NOX BURNERS	0.011	LB/MMBTU	BACT-PSD	0	
AR-0090	NUCOR STEEL, ARKANSAS	AR	1139-AOP-R6	4/3/2006	BOILER: >= 50 MMBTU/H	12.6	MMBTU EACH	ULTRA LOW NOX BURNERS: NATCOM P-97-LOG-35-2127	2.9	LB/H	BACT-PSD	0.075	LB/MMBTU
CA-1127	GENENTECH, INC.	CA	12680	9/27/2005	AUXILIARY THERMAL OIL HEATER	97	MMBTU/H	USE OF NATURAL GAS AS FUEL AND GOOD COMBUSTION PRACTICES	9	PPMVD @ 3% O2	BACT-PSD	0	
LA-0203	OAKDALE OSB PLANT	LA	PSD-LA-710	6/13/2005		66.5	MMBTU/H		7.82	LB/H	BACT-PSD	0.118	LB/MMBTU
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	BOILERS (2)	30.6	MMBTU/H		1.07	LB/H	BACT-PSD	0.035	LB/MMBTU
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	AUXILIARY BOILER	38	MMBTU/H	LOW NOX BURNERS	0.37	LB/MMBTU	BACT-PSD	0.37	LB/MMBTU
AL-0212	HYUNDAI MOTOR MANUFACTURING ALABAMA, LLC	AL	209-0090-X001,X002	11/22/2004	BOILER, NATURAL GAS (2)	24.5	mmbtu/h	LOW NOX BURNERS	0.35	LB/MMBTU	BACT-PSD	0.35	LB/MMBTU

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - NOx

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT UT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
WI-0227	PORT WASHINGTON GENERATING STATION	WI	04-RV-175	10/13/2004	NATURAL GAS FIRED AUXILIARY BOILER	97.1	MMBTU/H	NATURAL GAS FUEL, COMBUSTION OPTIMIZATION (BASED ON CAPACITY FACTOR DURING OZONE SEASON EXCEEDING 20%)	13.7	LB/H	N/A	0.141	LB/MMBTU
WI-0226	WPS - WESTON PLANT	WI	04-RV-128	8/27/2004	NATURAL GAS FIRED BOILER	46.2	MMBTU/H	BURNER DESIGN, NATURAL GAS FUELED	1.67	LB/H	N/A	0.036	LB/MMBTU
AR-0077	BLUEWATER PROJECT	AR	2062-AOP-RO	7/22/2004	BOILERS	22	MMBTU/H	LOW NOX BURNERS	0.08	LB/MMBTU	BACT-PSD	0.08	LB/MMBTU
CO-0058	CHEYENNE STATION	CO	03WE0910303-	6/12/2004	HEATERS	45	MMBTU/H	LOW NOX BURNERS	0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
OH-0276	CHARTER STEEL	OH	13-04176	6/10/2004	BOILER FOR VACUUM OXYGEN DEGASSER VESSEL	28.6	MMBTU/H	LOW NOX BURNER	2.8	LB/H	BACT-PSD	0.098	LB/MMBTU
NV-0037	COPPER MOUNTAIN POWER	NV	15347	5/14/2004	AUXILIARY BOILER	60	MMBTU/H	LOW NOX BURNER (WITH EITHER INTERNAL OR EXTERNAL FLUE GAS RECIRCULATION)	0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
ID-0015	J R SIMPLOT COMPANY - DON SIDING PLANT	ID	T1-9507-114-1	4/5/2004	BOILER, 64 MMBTU/H	64	MMBTU/H	LOW-NOX BURNER	2.88	LB/H	RACT	0.045	LB/MMBTU
AL-0191	HYUNDAI MOTOR MANUFACTURING OF ALABAMA, LLC	AL	209-0090-X001,X002,X003	3/23/2004	BOILERS, NATURAL GAS, (3)	50	MMBTU/H	NATURAL GAS ONLY; LOW NOX BURNERS	1.75	LB/H	BACT-PSD	0.035	LB/MMBTU
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S51/B51, 80 MMBTU/H	80	MMBTU/H	NAT. GAS / PROPANE, LOW NOX BURNER	0.04	LB/MMBTU	BACT-PSD	0.04	LB/MMTU
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S50/B50, 60 MMBTU/H	60	MMBTU/H	LOW NOX BURNER	0.04	LB/MMBTU	BACT-PSD	0.04	LB/MMBTU
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S53 / B53, 34 MMBTU/H	34	MMBTU/H	NATURAL GAS / PROPANE; LOW NOX BURNER	0.04	LB/MMBTU	BACT-PSD	0.04	LB/MMBTU
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S52/B52, 11 MMBTU/H	11	MMBTU/H	NATURAL GAS / PROPANE; LOW NOX BURNER	0.04	LB/MMBTU	BACT-PSD	0.04	LB/MMBTU
OR-0039	COB ENERGY FACILITY, LLC	OR	18-0029	12/30/2003	BOILERS, AUXILIARY, NATURAL GAS, (2)	80	MMBTU/H	LOW NOX BURNERS AND FLUE GAS RECIRCULATION	0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	BOILER, COMMERCIAL	70	MMBTU/H	DRY LOW NOX AND FLUE GAS RECIRCULATION	0.036	LB/MMBTU		0.036	LB/MMBTU
IN-0108	NUCOR STEEL	IN	107-16823-00038	11/21/2003	BOILER, NATURAL GAS, (2)	34	MMBTU/H	LOW NOX BURNERS, NATURAL GAS	0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
MI-0355	ABBOTT LABORATORIES, STURGIS PLANT	MI	64-03	9/16/2003	BOILER, GAS-FIRED	98.51	MMBTU/H	LOW NOX BURNERS AND FLUE GAS RECIRCULATION.	0.08	LB/MMBTU	BACT-PSD	0.08	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR SIEMENS TURBINES	55.34	MMBTU/H	LOW NOX BURNERS	0.036	LB/MMBTU	BACT-PSD	0.036	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR GE TURBINE	41	MMBTU/H	LOW NOX BURNERS	0.027	LB/MMBTU	BACT-PSD	0.027	LB/MMBTU
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	BOILER	30.6	MMBTU/H		1.08	LB/H	BACT-PSD	0.035	LB/MMBTU
TX-0458	JACK COUNTY POWER PLANT	TX	P1026	7/22/2003	AUXILIARY BOILER	36	mmbtu/h		1.3	LB/H	BACT-PSD	0.036	LB/MMBTU
GA-0098	RINCON POWER PLANT	GA	4911-103-0011-P-01-0	3/24/2003	AUXILIARY BOILER	83	MMBTU/H		0.055	LB/MMBTU	Other Case-by-Case	0.055	LB/MMBTU
OK-0090	DUKE ENERGY STEPHENS, LLC STEPHENS ENERGY	OK	2001-157-C M-1 PSD	3/21/2003	BOILER, AUXILIARY	33	MMBTU/H	LOW-NOX BURNERS	0.05	LB/MMBTU	BACT-PSD	0.05	LB/MMBTU
PA-0216	J & L SPECIALTY STEEL, INC.	PA	PA-04-00013B	1/13/2003	BOILER, DRAP LINE	33.5	MMBTU/H	ULTRA LOW NOX BURNER	30	PPM @ 3% O2	Other Case-by-Case	0.04	LB/MMBTU
WA-0291	WALLULA POWER PLANT	WA	EFSEC/2001-03	1/3/2003	BOILER, AUXILIARY	55.3	MMBTU/H	LNB PLUS FGR	30	PPMDV @ 3% O2	Other Case-by-Case	0.23	LB/MMBTU
TX-0389	BAYTOWN CARBON BLACK PLANT	TX	PSD-1010	12/31/2002	BACK-UP BOILER	13.4	MMBTU/H		1.4	LB/H	Other Case-by-Case	0.104	LB/MMBTU
TX-0354	ATOFINA CHEMICALS INCORPORATED	TX	PSD-TX-1016	12/19/2002	(2) STEAM BOILERS, X-426A AND X-426B	15.8	MMBTU/H	LOW NOX BURNERS	2.05	LB/H	Other Case-by-Case	0.13	LB/MMBTU
TX-0408	INDIAN ROCK GATHERING COMPANY LP	TX	PSD-TX-1002	11/22/2002	AUXILIARY BOILER, (2)	6	MMBTU/H		0.59	LB/H	BACT-PSD	0.098	LB/MMBTU

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - NOx

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VA-0260	HENRY COUNTY POWER	VA	21389	11/21/2002	AUXILIARY BOILER, (2)	40	MMBTU/H	LOW NOX BURNERS AND CLEAN FUEL.	3.2	LB/H	BACT-PSD	0.08	LB/MMBTU
GA-0101	MURRAY ENERGY FACILITY	GA	4911-213-0034-P-01-1	10/23/2002	BOILER, AUXILIARY	31.4	MMBTU/H	DRY LOW NOX BURNERS, FLUE GAS RECIRCULATION	30	PPM @ 3% O2	BACT-PSD	0.037	LB/MMBTU
AL-0192	HONDA MANUFACTURING OF ALABAMA, LLC	AL	309-0050 (X010-X014)	10/18/2002	BOILERS, NATURAL GAS, (3)	30	MMBTU/H	LOW NOX BURNERS, CLEAN FUEL, GOOD COMBUSTION	1.05	LB/H	BACT-PSD	0.035	LB/MMBTU
CA-1023	LA COUNTY INTERNAL SERVICES DEPT.	CA	405470	10/8/2002	BOILER, 39 MMBTU/H	39	MMBTU/H	ULTRA-LOW NOX BURNER WITH FGR	9	PPMVD @ 3% O2	N/A	0	
OH-0248	LAWRENCE ENERGY NORTHWEST PIPELINE CORPORATION MT. VERNON	OH	07-00505	9/24/2002	BOILER	99	MMBTU/H	LOW NOX BURNERS	4.95	LB/H	BACT-PSD	0.05	LB/MMBTU
WA-0297		WA	PSD 01-09	8/30/2002	BOILER	4.19	MMBTU/H	GOOD COMBUSTION PRACTICE LOW NOX OPTION (LOW NOX BURNER AND/OR FLUE GAS RECIRCULATION)	34	PPM @ 3% O2	BACT-PSD	0	
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-RO	8/23/2002	AUXILIARY BOILER	33	MMBTU/H		0.04	LB/MMBTU	BACT-PSD	0.04	LB/MMBTU
AL-0185	BARTON SHOALS ENERGY	AL	X001, X002	7/12/2002	TWO (2) 40 MMBTU/H AUXILIARY BOILERS	40	MMBTU/H	LOW NOX BURNERS	0.05	LB/MMBTU	BACT-PSD	0	
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	AUXILIARY BOILER	33	MMBTU/H	LOW NOX BURNERS	0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
OK-0072	REDBUD POWER PLT GREATER DES MOINES ENERGY CENTER	OK	2000-090-C M-1 PSD	5/6/2002	AUXILIARY BOILER	93	MMBTU/H	LOW NOX BURNERS	0.075	LB/MMBTU	BACT-PSD	0.075	LB/MMBTU
IA-0058		IA	77-13-002	4/10/2002	AUXILIARY BOILER	68	MMBTU/H		0.05	LB/MMBTU	BACT-PSD	0.05	LB/MMBTU
TN-0153	WILLIAMS REFINING & MARKETING, L.L.C.	TN	0101-08PC AND 1010-05PCR	4/3/2002	BOILER, NO. 9	95	MMBTU/H		0.084	LB/MMBTU	BACT-PSD	0.084	LB/MMBTU
TN-0153	WILLIAMS REFINING & MARKETING, L.L.C.	TN	0101-08PC AND 1010-05PCR	4/3/2002	HEATERS, (5)	50	MMBTU/H		0.03	LB/MMBTU	BACT-PSD	0.03	LB/MMBTU
AR-0051	DUKE ENERGY-JACKSON FACILITY	AR	1998-AOP-RO (34-0259)	4/1/2002	BOILER, AUXILIARY	33	MMBTU/H		0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
OK-0056	HORSESHOE ENERGY PROJECT	OK	2001-156-C PSD	2/12/2002	AUXILIARY BOILERS	0		GOOD COMBUSTION PRACTICES AND DESIGN	0.1	LB/MMBTU	BACT-PSD	0.1	LB/MMBTU
OK-0055	MUSTANG ENERGY PROJECT	OK	2001-132-C PSD	2/12/2002	AUXILIARY BOILER	31	MMBTU/H	COMBUSTION CONTROL	0.01	LB/MMBTU	Other Case-by-Case	0.01	LB/MMBTU
LA-0174	PORT HUDSON OPERATIONS	LA	PSD-LA-581 (M-2)	1/25/2002	POWER BOILER NO. 2	65.5	MMBTU/H	LOW-NOX BURNERS	61.34	LB/H	Other Case-by-Case	0.1	LB/MMBTU
NC-0094	GENPOWER EARLEYS, LLC	NC	09159R00	1/9/2002	BOILER, AUXILIARY, NATURAL GAS	83	MMBTU/H	LOW NOX BURNERS	4.07	LB/H	BACT-PSD	0.049	LB/MMBTU
OH-0257	JACKSON COUNTY POWER, LLC	OH	06-06313	12/27/2001	AUXILIARY BOILER	76	MMBTU/H	LOW NOX BURNERS INSTALLED	6.69	LB/H	BACT-PSD	0.08	LB/MMBTU
PA-0210	DART CONTAINER CORP OF PA	PA	36-05117	12/14/2001	BOILER, (2)	33.5	MMBTU/H	LO-NOX BURNERS	30	PPMDV @ 3% O2	N/A	0	
AL-0180	DUKE ENERGY DALE, LLC	AL	604-0023-X001, X002	12/11/2001	35 MMBTU/HR NAT. GAS FIRED AUXILIARY BOILER	35	MMBTU/H	LOW NOX BURNERS	0.108	LB/MMBTU	BACT-PSD	0	
IN-0095	ALLEGHENY ENERGY SUPPLY CO, LLC	IN	141-14198-00543	12/7/2001	AUXILLIARY BOILER	21	MMBTU/H	LOW NOX BURNERS	0.049	LB/MMBTU	BACT-PSD	0.049	LB/MMBTU
OH-0251	CENTRAL SOYA COMPANY INC.	OH	03-13369	11/29/2001	BOILER, NATURAL GAS	91.2	MMBTU/H	USE OF LOW-NOX BURNERS.	3.21	LB/H	N/A	0.0352	LB/MMBTU
TX-0378	LA PORTE POLYPROPYLENE PLANT	TX	PSD-TX-989	11/5/2001	PACKAGE BOILER BO-4	60	MMBTU/H	ULTRA LOW-NOX BURNERS	0.9	LB/H	Other Case-by-Case	0.015	LB/MMBTU
OK-0071	MCCLAIN ENERGY FACILITY	OK	99-213-C M-1 PSD	10/25/2001	AUXILIARY BOILER	22	MMBTU/H	NATURAL GAS FUEL AND GOOD COMBUSTION CONTROL	0.036	LB/MMBTU	BACT-PSD	0.036	LB/MMBTU
AL-0181	DUKE ENERGY AUTAUGA, LLC	AL	201-0012-X001, X002	10/23/2001	31.4 MMBTU/HR NATURAL GAS FIRED BOILER	31.4	MMBTU/H	LOW NOX BURNERS	0.108	LB/MMBTU	BACT-PSD	0	

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - NOx

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
WA-0292	SATSOP COMBUSTION TURBINE PROJECT	WA	EFSEC/2001-01	10/23/2001	AUXILIARY BOILER	29.3	MMBTU/H	FGR AND LOW-NOX BURNERS	1.03	LB/H	BACT-PSD	0.035	LB/MMBTU
OK-0043	WEBERS FALLS ENERGY FACILITY	OK	2000-278-C PSD	10/22/2001	AUXILIARY BOILER	30	MMBTU/H	LOW NOX BURNERS	0.05	LB/MMBTU	BACT-PSD	0.05	LB/MMBTU
OH-0265	DRESDEN ENERGY LLC	OH	06-06238	10/16/2001	BOILER, NATURAL GAS	49	MMBTU/H		4.9	LB/H	BACT-PSD	0.1	LB/MMBTU
IN-0110	COGENTRIX LAWRENCE CO., LLC	IN	093-12432-00021-4911	10/5/2001	BOILER, AUXILIARY, NATURAL GAS	35	MMBTU/H	CLEAN FUEL, LOW NOX BURNERS	0.08	LB/MMBTU	BACT-PSD	0.08	LB/MMBTU
AL-0179	TENASKA TALLADEGA GENERATING STATION	AL	309-0052-X001	10/3/2001	30 MMBTU/HR AUXILIARY BOILER	30	MMBTU/H	LOW NOX COMBUSTION	0.096	LB/MMBTU	BACT-PSD	0.096	LB/MMBTU
CA-1099	COSMETIC LABORATORIES	CA	385770	9/4/2001	BOILER: 5 TO < 33.5 MMBTU/HR	21.46	MMBTU/H	ULTRA LOW-NOX BURNER	9	PPMD @ 3% O2	BACT-PSD	0	
WV-0013	MARTINSBURG PLANT	WV	R14-12B	8/30/2001	BOILERS, 3	65.78	MMBTU/H	LOW-NOX BURNERS AND FLUE-GAS RECIRCULATION	0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
WV-0013	MARTINSBURG PLANT	WV	R14-12B	8/30/2001	BOILER	54.4	MMBTU/H	LOW NOX BURNERS AND FLUE-GAS RECIRCULATION	0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
OK-0054	QUAD GRAPHICS OKC FACILITY	OK	2000-306-C PSD	8/21/2001	BOILERS	62.77	MMBTU/H	LOW NOX BURNERS	0.035	LB/MMBTU	BACT-PSD	0.035	LB/MMBTU
OK-0044	SMITH POCOLA ENERGY PROJECT	OK	2000-115-C PSD	8/16/2001	AUXILIARY BOILERS, (2)	48	MMBTU/H	DRY LOW NOX BURNERS, OPERATES IN PRE-MIX MODE.	9.41	LB/H	BACT-PSD	0.1	LB/MMBTU
OH-0263	FREMONT ENERGY CENTER, LLC	OH	03-13549	8/9/2001	AUXILIARY BOILER	80	MMBTU/H	LOW NOX BURNERS	2.72	LB/H	BACT-PSD	0.034	LB/MMBTU
AK-0047	MILNE POINT PRODUCTION FACILITY	AK	0073-AC023	7/13/2001	HEATERS (2), H-5302A AND H-5302B	35	MMBTU/H EA	LIMIT EXTENDED FROM PREVIOUS PERMIT TO AVOID PSD REVIEW.	0.05	LB/MMBTU	N/A	0.05	LB/MMBTU
AK-0047	MILNE POINT PRODUCTION FACILITY	AK	0073-AC023	7/13/2001	HEATERS (2), H-5701A AND H-5701B	29	MMBTU/H EACH	BACT LIMIT EXTENDED FROM PREVIOUS PERMIT TO AVOID PSD REVIEW.	11.3	LB/H	Other Case-by-Case	0.08	LB/MMBTU
AK-0047	MILNE POINT PRODUCTION FACILITY	AK	0073-AC023	7/13/2001	HEATERS (2), H-2001A AND H-2001B	17.5	MMBTU/H EACH	BACT LIMIT EXTENDED FROM PREVIOUS PERMIT TO AVOID PSD REVIEW. DO NOT OPERATE HEATERS ON FUEL OIL AT ANY TIME. REPLACE BOTH HEATERS WITH LOW NOX BURNERS NO LATER THAN 180 D AFTER PERMIT ISSUANCE.	0.08	LB/MMBTU	Other Case-by-Case	0.08	LB/MMBTU
AK-0047	MILNE POINT PRODUCTION FACILITY	AK	0073-AC023	7/13/2001	HEATERS (2), H-4510A AND H-4510B	14.4	MMBTU/H EACH	LIMIT EXTENDED FROM PREVIOUS PERMIT TO AVOID PSD REVIEW.	0.08	LB/MMBTU	N/A	0.08	LB/MMBTU
IN-0087	DUKE ENERGY, VIGO LLC	IN	167-12481-00125	6/6/2001	AUXILIARY BOILER, NATURAL GAS (2)	46	MMBTU/H	GOOD COMBUSTION. LOW NOX BURNERS. LIMIT IS FOR EACH BOILER.	0.049	LB/MMBTU	BACT-PSD	0.049	LB/MMBTU
NV-0039	CHUCK LENZIE GENERATING STATION	NV	1513	6/1/2001	AUXILIARY BOILERS	44.1	MMBTU/H	GOOD COMBUSTION CONTROL	30	PPMVD@3% O2	BACT-PSD	0.118	LB/MMBTU
OK-0046	THUNDERBIRD POWER PLT	OK	2000-116-C PSD	5/17/2001	AUXILIARY BOILER	20	MMBTU/H	LOW NOX BURNERS	0.049	LB/MMBTU	BACT-PSD	0.049	LB/MMBTU
IN-0086	MIRANT SUGAR CREEK, LLC	IN	167-12208-00123	5/9/2001	AUXILIARY BOILER, NATURAL GAS (2)	35	MMBTU/H	LOW NOX BURNERS. GOOD COMBUSTION. NATURAL GAS. LB/H LIMIT IS FOR EACH BOILER.	0.049	LB/MMBTU	BACT-PSD	0.049	LB/MMBTU
OK-0074	KIAMICHI ENERGY FACILITY	OK	2000-103-C M-1 PSD	5/1/2001	AUXILIARY BOILER	27.5	MMBTU/H	LOW NOX BURNERS	0.1	LB/MMBTU	BACT-PSD	0.1	LB/MMBTU
MS-0045	NISSAN NORTH AMERICA, INC.	MS	1720-00073	4/2/2001	BOILER	35	MMBTU	LOW NOX BURNERS	0.12	LB/MMBTU	BACT-PSD	0.12	LB/MMBTU
OH-0255	AEP WATERFORD ENERGY LLC	OH	06-06739	3/29/2001	BOILER, NATURAL GAS	85.2	MMBTU/H		3.07	LB/H	BACT-PSD	0.036	LB/MMBTU
OH-0258	PRO TEC COATING COMPANY	OH	03-10957	2/15/2001	BOILERS (4)	20.9	MMBTU/H	LOW NOX BURNERS.	0.69	LB/H	N/A	0.033	LB/MMBTU
AL-0169	BLOUNT MEGAWATT FACILITY	AL	402-0010-X001 AND X002	2/5/2001	AUXILIARY BOILER	40	MMBTU/H	LOW NOX BURNERS	0.08	LB/MMBTU	BACT-PSD	0.08	LB/MMBTU
AL-0168	GENPOWER KELLEY LLC	AL	414-0014-X001 AND X002	1/12/2001	BOILER	83	MMBTU/H	LOW NOX BURNERS	0.05	LB/MMBTU	BACT-PSD	0.05	LB/MMBTU
AL-0178	ANNISTON ARMY DEPOT	AL	301-0050	1/5/2001	TWO (2) 13.4 MMBTU/H BOILERS	13.4	MMBTU/H	LOW NOX BURNERS	0.036	LB/MMBTU	BACT-PSD	0	

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - NOx

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AL-0178	ANNISTON ARMY DEPOT	AL	301-0050	1/5/2001	TWO (2) 11.7 MMBTU/H BOILERS	11.7	MMBTU/H	LOW NOX BURNERS	0.036	LB/MMBTU	BACT-PSD	0	

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - VOC

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*FL-0335	SUWANNEE MILL	FL	1210468-001-AC(PSD-FL-417)	9/5/2012	Four(4) Natural Gas Boilers - 46 MMBtu/hr	46	MMBtu/hr	Good Combustion Practice	0.003	LB/MMBTU	BACT-PSD	0	
*OH-0350	REPUBLIC STEEL	OH	P0109191 PSD-LA-747/1280-00141-V0	7/18/2012	Steam Boiler	65	MMBtu/H	Proper burner design and good combustion practices	0.35	LB/H	BACT-PSD	0.0054	LB/MMBTU
LA-0240	FLOPAM INC.	LA		6/14/2010	Boilers	25.1	MMBTU/H	Good equipment design and proper combustion techniques	0.003	LB/MMBTU	LAER	0	
NV-0050	MGM MIRAGE	NV	825	11/30/2009	BOILERS - UNITS CC001, CC002, AND CC003 AT CITY CENTER	41.64	MMBTU/H	LIMITING THE FUEL TO NATURAL GAS ONLY AND GOOD COMBUSTION PRACTICES	0.0024	LB/MMBTU	Other Case-by-Case	0.0024	LB/MMBTU
NV-0050	MGM MIRAGE	NV	825	11/30/2009	BOILERS - UNITS CC026, CC027 AND CC028 AT CITY CENTER	44	MMBTU/H	LIMITING THE FUEL TO NATURAL GAS ONLY AND GOOD COMBUSTION PRACTICES	0.0055	LB/MMBTU	Other Case-by-Case	0.0055	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT IP04	16.7	MMBTU/H	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0053	LB/MMBTU	Other Case-by-Case	0.0053	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT FL01	14.34	MMBTU/H	FLUE GAS RECIRCULATION	0.0054	LB/MMBTU	OTHER CASE-BY-CASE	0.0054	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT BA01	16.8	MMBTU/H	FLUE GAS RECIRCULATION	0.0054	LB/MMBTU	Other Case-by-Case	0.0054	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT BA03	31.38	MMBTU/H	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0054	LB/MMBTU	Other Case-by-Case	0.0054	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP01	35.4	MMBTU/H	FLUE GAS RECIRCULATION AND OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0054	LB/MMBTU	Other Case-by-Case	0.0054	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP03	33.48	MMBTU/H	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0054	LB/MMBTU	Other Case-by-Case	0.0054	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP26	24	MMBTU/H	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0054	LB/MMBTU	Other Case-by-Case	0.0054	LB/MMBTU
OK-0135	PRYOR PLANT CHEMICAL	OK	2008-100-C PSD	2/23/2009	BOILERS #1 AND #2	80	MMBTU/H		0.5	LB/H	BACT-PSD	0.0063	LB/MMBTU
SC-0115	GP CLARENDON LP	SC	0680-0046-CB	2/10/2009	NATURAL GAS SPACE HEATERS - 14 UNITS (ID 17)	20.89	MMBTU/H		0.11	LB/H	BACT-PSD	0.0053	LB/MMBTU
OK-0129	CHOUTEAU POWER PLANT	OK	2007-115-C(M-1)PSD	1/23/2009	AUXILIARY BOILER	33.5	MMBTU/H	GOOD COMBUSTION	0.54	LB/H	BACT-PSD	0.0161	LB/MMBTU
SC-0114	GP ALLENDALE LP	SC	0160-0020-CB	11/25/2008	NATURAL GAS SPACE HEATERS - 14 UNITS (ID 18)	20.89	MMBTU/H		0.11	LB/H	BACT-PSD	0.0053	LB/MMBTU
MD-0040	CPV ST CHARLES	MD	CPCN CASE NO. 9129	11/12/2008	BOILER	93	MMBTU/H		0.002	LB/MMBTU	LAER	0	
OH-0323	TITAN TIRE CORPORATION OF BRYAN	OH	03-17392	6/5/2008	BOILER	50.4	MMBTU/H		0.27	LB/H	BACT-PSD	0.0054	LB/MMBTU
AL-0230	THYSSENKRUPP STEEL AND STAINLESS USA, LLC	AL	503-0095-X001 THRU X026	8/17/2007	3 NATURAL GAS-FIRED BOILERS WITH ULNB & EGR (537-539)	64.9	MMBTU each		0.0055	LB/MMBTU	BACT-PSD	0	
OH-0309	TOLEDO SUPPLIER PARK-PAINT SHOP	OH	04-01358	5/3/2007	BOILER (2), NATURAL GAS	20.4	MMBTU/H		0.11	LB/H	LAER	0.0054	LB/MMBTU
MS-0085	DART CONTAINER CORPORATION LLC	MS	0440-00053	1/31/2007	NATURAL GAS FIRED BOILER	33.5	MMBTU/h		0.81	TONS/YR	BACT-PSD	0.0055	LB/MMBTU

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FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO GAS-FUELED 10 MMBTU/H PROCESS HEATERS	10	MMBTU/H			GR S/100 SCF 2 GAS	BACT-PSD	0	
NV-0044	HARRAH'S OPERATING COMPANY, INC.	NV	257	1/4/2007	COMMERCIAL/INSTITUTIONAL-SIZE BOILERS	35.4	MMBTU/H	GOOD COMBUSTION DESIGN	0.005	LB/MMBTU	BACT-PSD	0.005	LB/MMBTU
TX-0501	TEXSTAR GAS PROCESS FACILITY	TX	PSD-TX 55M3 AND 6051	7/11/2006	POWER STEAM BOILER PICKLE LINE BOILERS, SN-	93	MMBTU/H		0.46	LB/H	BACT-PSD	0.0049	LB/MMBTU
AR-0090	NUCOR STEEL, ARKANSAS	AR	1139-AOP-R6	4/3/2006	52 AUXILIARY THERMAL OIL HEATER	12.6	MMBTU EACH	GOOD COMBUSTION PRACTICE USE OF NATURAL GAS AS FUEL AND GOOD COMBUSTION PRACTICES	0.2	LB/H	BACT-PSD	0.0055	LB/MMBTU
LA-0203	OAKDALE OSB PLANT	LA	PSD-LA-710	6/13/2005		66.5	MMBTU/H		0.43	LB/H	BACT-PSD	0.0065	LB/MMBTU
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	BOILERS (2)	30.6	MMBTU/H		0.49	LB/H	BACT-PSD	0.016	LB/MMBTU
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	AUXILIARY BOILER	38	MMBTU/H		0.0033	LB/MMBTU	BACT-PSD	0	
WI-0227	PORT WASHINGTON GENERATING STATION	WI	04-RV-175	10/13/2004	NATURAL GAS FIRED AUXILIARY BOILER	97.1	MMBTU/H	NATURAL GAS FUEL, GOOD COMBUSTION PRACTICES	0.53	LB/H	BACT-PSD	0.0055	LB/MMBTU
AR-0077	BLUEWATER PROJECT	AR	2062-AOP-R0	7/22/2004	BOILERS	22	MMBTU/H	NATURAL GAS COMBUSTION ONLY	0.0055	LB/MMBTU	BACT-PSD	0	
CO-0058	CHEYENNE STATION	CO	03WE0910303-	6/12/2004	HEATERS	45	MMBTU/H	GOOD COMBUSTION PRACTICES	0.016	LB/MMBTU	BACT-PSD	0.016	LB/MMBTU
OH-0276	CHARTER STEEL	OH	13-04176	6/10/2004	BOILER FOR VACUUM OXYGEN DEGASSER VESSEL	28.6	MMBTU/H		0.15	LB/H	BACT-PSD	0.0052	LB/MMBTU
NV-0037	COPPER MOUNTAIN POWER	NV	15347	5/14/2004	AUXILIARY BOILER	60	MMBTU/H	EFFECTIVE COMBUSTION SYSTEM DESIGN, 10:1 TURNDOWN CAPABILITY AND LOW NOX BURNER TECHNOLOGY	0.4	LB/H	LAER	0.0067	LB/MMBTU
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S52/B52, 11 MMBTU/H	11	MMBTU/H	NATURAL GAS / PROPANE; GOOD COMBUSTION CONTROL	0.0054	LB/MMBTU	BACT-PSD	0	
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S53 / B53, 34 MMBTU/H	34	MMBTU/H	NATURAL GAS / PROPANE; GOOD COMBUSTION CONTROL	0.0054	LB/MMBTU	BACT-PSD	0	
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S50/B50, 60 MMBTU/H	60	MMBTU/H	NATURAL GAS / PROPANE, GOOD COMBUSTION CONTROLS	0.0054	LB/MMBTU	BACT-PSD	0	
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S51/B51, 80 MMBTU/H	80	MMBTU/H	NAT. GAS / PROPANE; GOOD COMBUSTION CONTROL	0.0054	LB/MMBTU	BACT-PSD	0	
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	BOILER, COMMERCIAL	70	MMBTU/H	GOOD COMBUSTION	0.007	LB/MMBTU	BACT-PSD	0	
IN-0108	NUCOR STEEL	IN	107-16823-00038	11/21/2003	BOILER, NATURAL GAS, (2)	34	MMBTU/H	COMPLIANCE BY USING NATURAL GAS	0.0026	LB/MMBTU	BACT-PSD	0.0026	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR GE TURBINE	41	MMBTU/H		0.01	LB/MMBTU	BACT-PSD	0	
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR SIEMENS TURBINES	55.34	MMBTU/H		0.01	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	BOILER	30.6	MMBTU/H		0.49	LB/H	BACT-PSD	0.016	LB/MMBTU
TX-0458	JACK COUNTY POWER PLANT	TX	P1026	7/22/2003	AUXILIARY BOILER	36	mmbtu/h		0.6	LB/H	BACT-PSD	0.0167	LB/MMBTU
GA-0098	RINCON POWER PLANT	GA	4911-103-0011-P-01-0	3/24/2003	AUXILIARY BOILER	83	MMBTU/H		0.004	LB/MMBTU	Other Case-by-Case	0	
OK-0090	DUKE ENERGY STEPHENS, LLC STEPHENS ENERGY	OK	2001-157-C M-1 PSD	3/21/2003	BOILER, AUXILIARY	33	MMBTU/H	BOILER DESIGN AND GOOD OPERATING PRACTICES	0.016	LB/MMBTU	BACT-PSD	0	
TX-0389	BAYTOWN CARBON BLACK PLANT	TX	PSD-1010	12/31/2002	BACK-UP BOILER	13.4	MMBTU/H		0.08	LB/H	Other Case-by-Case	0.0060	LB/MMBTU
IA-0062	EMERY GENERATING STATION	IA	02-357	12/20/2002	AUXILIARY BOILER	68	MMBTU/H	CATALYTIC OXIDATION	0.0054	LB/MMBTU	Other Case-by-Case	0	
TX-0354	ATOFINA CHEMICALS INCORPORATED	TX	PSD-TX-1016	12/19/2002	(2) STEAM BOILERS, X-426A AND X-426B	15.8	MMBTU/H	NONE INDICATED.	0.09	LB/H	Other Case-by-Case	0.0057	LB/MMBTU
VA-0255	VA POWER - POSSUM POINT	VA	70225	11/18/2002	BOILER, AUXILIARY	99	MMBTU/H	GOOD COMBUSTION PRACTICES.	0.4	LB/H	Other Case-by-Case	0.004	LB/MMBTU

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GA-0101	MURRAY ENERGY FACILITY	GA	4911-213-0034-P-01-1	10/23/2002	BOILER, AUXILIARY	31.4	MMBTU/H	GOOD COMBUSTION PRACTICE	0.0127	LB/MMBTU	BACT-PSD	0	
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	BOILER	99	MMBTU/H		0.545	LB/H	BACT-PSD	0.0055	LB/MMBTU
VA-0261	CPV CUNNINGHAM CREEK	VA	81382	9/6/2002	AUXILIARY BOILER	80	MMBTU/H	GOOD COMBUSTION PRACTICES.	0.42	LB/H	BACT-PSD	0.0053	
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	AUXILIARY BOILER	33	MMBTU/H	GOOD COMBUSTION PRACTICE	0.018	LB/MMBTU	BACT-PSD	0	
AL-0185	BARTON SHOALS ENERGY	AL	X001, X002	7/12/2002	TWO (2) 40 MMBTU/H AUXILIARY BOILERS	40	MMBTU/H	GOOD COMBUSTION PRACTICES	0.0054	LB/MMBTU	BACT-PSD	0	
TX-0437	HARTBURG POWER, LP	TX	PSD-TX-1009	7/5/2002	BOILERS, AUXILIARY	40	mmbtu/h	GOOD COMBUSTION PRACTICES PROPER DESIGN, CLEAN FUEL	0.02	LB/MMBTU	BACT-PSD	0	
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	AUXILIARY BOILER	33	MMBTU/H	BOILER DESIGN AND GOOD COMBUSTION PRACTICES	0.016	LB/MMBTU	BACT-PSD	0	
OK-0072	REDBUD POWER PLT	OK	2000-090-C M-1 PSD	5/6/2002	AUXILIARY BOILER	93	MMBTU/H	BOILER DESIGN AND GOOD OPERATING PRACTICES	0.0075	LB/MMBTU	BACT-PSD	0	
AR-0051	DUKE ENERGY-JACKSON FACILITY	AR	1998-AOP-R0 (34-0259)	4/1/2002	BOILER, AUXILIARY	33	MMBTU/H	GOOD OPERATING PRACTICE	0.016	LB/MMBTU	BACT-PSD	0.016	LB/MMBTU
OK-0055	MUSTANG ENERGY PROJECT	OK	2001-132-C PSD	2/12/2002	AUXILIARY BOILER	31	MMBTU/H	COMBUSTION CONTROL	0.0055	LB/MMBTU	Other Case-by-Case	0	
NC-0094	GENPOWER EARLEYS, LLC	NC	09159R00	1/9/2002	BOILER, AUXILIARY, NATURAL GAS	83	MMBTU/H	GOOD COMBUSTION PRACTICES AND DESIGN	0.45	LB/H	BACT-PSD	0.0054	LB/MMBTU
OH-0257	JACKSON COUNTY POWER, LLC	OH	06-06313	12/27/2001	AUXILIARY BOILER	76	MMBTU/H		0.92	LB/H	BACT-PSD	0.011	LB/MMBTU
AL-0180	DUKE ENERGY DALE, LLC	AL	604-0023-X001, X002	12/11/2001	35 MMBTU/HR NAT. GAS FIRED AUXILIARY BOILER	35	MMBTU/H	GOOD COMBUSTION	0.014	LB/MMBTU	BACT-PSD	0	
IN-0095	ALLEGHENY ENERGY SUPPLY CO. LLC	IN	141-14198-00543	12/7/2001	AUXILIARY BOILER	21	MMBTU/H	GOOD COMBUSTION PRACTICES	0.0054	LB/MMBTU	BACT-PSD	0.0054	LB/MMBTU
OH-0251	CENTRAL SOYA COMPANY INC.	OH	03-13369	11/29/2001	BOILER, NATURAL GAS	91.2	MMBTU/H		0.65	LB/H	BACT-PSD	0.0071	LB/MMBTU
TX-0378	LA PORTE POLYPROPYLENE PLANT	TX	PSD-TX-989	11/5/2001	PACKAGE BOILER BO-4	60	MMBTU/H	NONE INDICATED	0.35	LB/H	Other Case-by-Case	0.0058	LB/MMBTU
AL-0181	DUKE ENERGY AUTAUGA, LLC	AL	201-0012-X001, X002	10/23/2001	31.4 MMBTU/HR NATURAL GAS FIRED BOILER	31.4	MMBTU/H	EFFICIENT COMBUSTION.	0.0104	LB/MMBTU	BACT-PSD	0	
WA-0292	SATSOP COMBUSTION TURBINE PROJECT	WA	EFSEC/2001-01	10/23/2001	AUXILIARY BOILER	29.3	MMBTU/H		0.16	LB/H	BACT-PSD	0.0055	LB/MMBTU
OK-0043	WEBERS FALLS ENERGY FACILITY	OK	2000-278-C PSD	10/22/2001	AUXILIARY BOILER	30	MMBTU/H		0.016	LB/MMBTU	BACT-PSD	0.016	LB/MMBTU
OH-0265	DRESDEN ENERGY LLC	OH	06-06238	10/16/2001	BOILER, NATURAL GAS	49	MMBTU/H		0.29	LB/H	BACT-PSD	0.006	LB/MMBTU
IN-0110	COGENTRIX LAWRENCE CO., LLC	IN	093-12432-00021-4911	10/5/2001	BOILER, AUXILIARY, NATURAL GAS	35	MMBTU/H	CLEAN FUEL, GOOD COMBUSTION PRACTICE	0.011	LB/MMBTU	BACT-PSD	0	
AL-0179	TENASKA TALLADEGA GENERATING STATION	AL	309-0052-X001	10/3/2001	30 MMBTU/HR AUXILIARY BOILER	30	MMBTU/H	EFFICIENT COMBUSTION	0.004	LB/MMBTU	BACT-PSD	0.004	LB/MMBTU
MD-0033	KELSON RIDGE	MD	CPCN CASE NO. 8843	9/27/2001	AUXILIARY BOILER	40	MMBTU/H	EXCLUSIVE USE OF NATURAL GAS, ADVANCED DRY LOW-NOX BURNERS; GOOD COMBUSTION CONTROLS HEAT INPUT TO THE AUXILIARY BOILERS (2) SHALL BE LIMITED TO 210,240 MMBTU FOR ANY CONSECUTIVE 12-MONTH PERIOD	0		LAER	0	
OK-0054	QUAD GRAPHICS OKC FACILITY	OK	2000-306-C PSD	8/21/2001	BOILERS	62.77	MMBTU/H	GOOD COMBUSTION/MAINTENANCE	4.38	T/YR	BACT-PSD	0	
OK-0044	SMITH POCOLA ENERGY PROJECT	OK	2000-115-C PSD	8/16/2001	AUXILIARY BOILERS, (2)	48	MMBTU/H	COMBUSTION CONTROL	0.52	LB/H	BACT-PSD	0.0055	LB/MMBTU
OH-0263	FREMONT ENERGY CENTER, LLC	OH	03-13549	8/9/2001	AUXILIARY BOILER	80	MMBTU/H		0.44	LB/H	BACT-PSD	0.0055	

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - VOC

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
IN-0087	DUKE ENERGY, VIGO LLC	IN	167-12481-00125	6/6/2001	AUXILIARY BOILER, NATURAL GAS (2)	46	MMBTU/H	GOOD COMBUSTION. LIMIT IS FOR EACH BOILER.	0.0054	LB/MMBTU	BACT-PSD	0.0054	LB/MMBTU
NV-0039	CHUCK LENZIE GENERATING STATION	NV	1513	6/1/2001	AUXILIARY BOILERS	44.1	MMBTU/H	GOOD COMBUSTION CONTROL	0.8	LB/H	BACT-PSD	0.018	LB/MMBTU
OK-0046	THUNDERBIRD POWER PLT	OK	2000-116-C PSD	5/17/2001	AUXILIARY BOILER	20	MMBTU/H		0.005	LB/MMBTU	BACT-PSD	0.005	LB/MMBTU
IN-0086	MIRANT SUGAR CREEK, LLC	IN	167-12208-00123	5/9/2001	AUXILIARY BOILER, NATURAL GAS (2)	35	MMBTU/H	GOOD COMBUSTION. LB/H LIMIT IS FOR EACH BOILER.	0.0054	LB/MMBTU	BACT-PSD	0.0054	LB/MMBTU
OK-0074	KIAMICHI ENERGY FACILITY	OK	2000-103-C M-1 PSD	5/1/2001	AUXILIARY BOILER	27.5	MMBTU/H	GOOD COMBUSTION PRACTICES AND DESIGN	0.0055	LB/MMBTU	BACT-PSD	0	
OH-0255	AEP WATERFORD ENERGY LLC	OH	06-06739	3/29/2001	BOILER, NATURAL GAS	85.2	MMBTU/H		0.35	LB/H	BACT-PSD	0.0041	LB/MMBTU
OH-0258	PRO TEC COATING COMPANY	OH	03-10957	2/15/2001	BOILERS (4)	20.9	MMBTU/H		0.11	LB/H	N/A	0.005	LB/MMBTU
AL-0169	BLOUNT MEGAWATT FACILITY	AL	402-0010-X001 AND X002	2/5/2001	AUXILIARY BOILER	40	MMBTU/H	GOOD COMBUSTION PRACTICES	0.02	LB/MMBTU	BACT-PSD	0.02	LB/MMBTU
AL-0168	GENPOWER KELLEY LLC	AL	414-0014-X001 AND X002	1/12/2001	BOILER	83	MMBTU/H	EFFICIENT COMBUSTION	0.006	LB/MMBTU	BACT-PSD	0.006	LB/MMBTU

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - CO

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
*FL-0335	SUWANNEE MILL	FL	1210468-001-AC(PSD-FL-417)	9/5/2012	Four(4) Natural Gas Boilers - 46 MMBtu/hr	46	MMBtu/hr	Good Combustion Practice	0.039	LB/MMBTU	BACT-PSD	0	
*OH-0350	REPUBLIC STEEL	OH	P0109191	7/18/2012	Steam Boiler	65	MMBtu/H	Proper burner design and good combustion practices	0.04	LB/MMBTU	BACT-PSD	0	
LA-0240	FLOPAM INC.	LA	PSD-LA-747/1280-00141-V0	6/14/2010	Boilers	25.1	MMBTU/H	Good equipment design and proper combustion practices	0.93	LB/H	BACT-PSD	0.037	LB/MMBTU
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Heater	40	MMBtu/hr	OPERATIONAL RESTRICTION OF 1000 HR/YR	50	PPMVD	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Boiler	35	MMBtu/hr	OPERATIONAL RESTRICTION OF 500 HR/YR	50	PPMVD	BACT-PSD	0	
NV-0050	MGM MIRAGE	NV	825	11/30/2009	BOILERS - UNITS CC026, CC027 AND CC028 AT CITY CENTER	44	MMBTU/H	GOOD COMBUSTION PRACTICES INCLUDING THE USE OF PROPER AIR TO FUEL RATIO	0.0148	LB/MMBTU	LAER	0.0148	LB/MMBTU
NV-0050	MGM MIRAGE	NV	825	11/30/2009	BOILERS - UNITS CC001, CC002, AND CC003 AT CITY CENTER	41.64	MMBTU/H	GOOD COMBUSTION PRACTICES AND LIMITING THE FUEL TO NATURAL GAS ONLY	0.0184	LB/MMBTU	LAER	0.0184	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP01	35.4	MMBTU/H	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0073	LB/MMBTU	Other Case-by-Case	0.0073	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT IP04	16.7	MMBTU/H	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0074	LB/MMBTU	Other Case-by-Case	0.0074	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP03	33.48	MMBTU/H	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0075	LB/MMBTU	Other Case-by-Case	0.0075	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT BA03	31.38	MMBTU/H	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION.	0.0172	LB/MMBTU	Other Case-by-Case	0.0172	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT BA01	16.8	MMBTU/H	FLUE GAS RECIRCULATION	0.0173	LB/MMBTU	Other Case-by-Case	0.0173	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP26	24	MMBTU/H	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.037	LB/MMBTU	Other Case-by-Case	0.037	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT FL01	14.34	MMBTU/H	FLUE GAS RECIRCULATION	0.0705	LB/MMBTU	Other Case-by-Case	0.0705	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT PA15	21	MMBTU/H	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.848	LB/MMBTU	Other Case-by-Case	0.848	LB/MMBTU
OK-0135	PRYOR PLANT CHEMICAL	OK	2008-100-C PSD	2/23/2009	BOILERS #1 AND #2	80	MMBTU/H	GOOD COMBUSTION PRACTICES	6.6	LB/H	BACT-PSD	0.083	LB/MMBTU
SC-0115	GP CLARENDON LP	SC	0680-0046-CB	2/10/2009	NATURAL GAS SPACE HEATERS - 14 UNITS (ID 17)	20.89	MMBTU/H		1.67	LB/H	BACT-PSD	0.080	LB/MMBTU
OK-0129	CHOUTEAU POWER PLANT	OK	2007-115-C(M-1)PSD	1/23/2009	AUXILIARY BOILER	33.5	MMBTU/H	GOOD COMBUSTION	5.02	LB/H	N/A	0.150	LB/MMBTU
SC-0114	GP ALLENDALE LP	SC	0160-0020-CB	11/25/2008	NATURAL GAS SPACE HEATERS - 14 UNITS (ID 18)	20.89	MMBTU/H		1.67	LB/H	BACT-PSD	0.080	LB/MMBTU
MD-0040	CPV ST CHARLES	MD	CPCN CASE NO. 9129	11/12/2008	BOILER	93	MMBTU/H		0.02	LB/MMBTU	BACT-PSD	0	
OH-0323	TITAN TIRE CORPORATION OF BRYAN	OH	03-17392	6/5/2008	BOILER	50.4	MMBTU/H		4.15	LB/H	BACT-PSD	84	LB/MMSCF

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - CO

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MN-0070	MINNESOTA STEEL INDUSTRIES, LLC	MN	06100067-001	9/7/2007	SMALL BOILERS & HEATERS(<100 MMBTU/H)	99	MMBTU/H		0.08	LB/MMBTU	BACT-PSD	0	
AL-0230	THYSSENKRUPP STEEL AND STAINLESS USA, LLC	AL	503-0095-X001 THRU X026	8/17/2007	3 NATURAL GAS-FIRED BOILERS WITH ULNB & EGR (537-539)	64.9	MMBTU each		0.04	LB/MMBTU	BACT-PSD	0	
OH-0309	TOLEDO SUPPLIER PARK- PAINT SHOP	OH	04-01358	5/3/2007	BOILER (2), NATURAL GAS	20.4	MMBTU/H		1.7	LB/H	BACT-PSD	0.083	LB/MMBTU
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO GAS-FUELED 10 MMBTU/H PROCESS HEATERS	10	MMBTU/H		0.08	LB/MMBTU	BACT-PSD	0	
NV-0044	HARRAH'S OPERATING COMPANY, INC.	NV	257	1/4/2007	COMMERCIAL/INSTITUTIONAL-SIZE BOILERS	35.4	MMBTU/H	GOOD COMBUSTION DESIGN	0.036	LB/MMBTU	BACT-PSD	0.036	LB/MMBTU
TX-0501	TEXSTAR GAS PROCESS FACILITY	TX	PSD-TX 55M3 AND 6051	7/11/2006	POWER STEAM BOILER PICKLE LINE BOILERS, SN-52	93	MMBTU/H		7.05	LB/H	BACT-PSD	0.076	LB/MMBTU
AR-0090	NUCOR STEEL, ARKANSAS	AR	1139-AOP-R6	4/3/2006	AUXILIARY THERMAL OIL HEATER	12.6	MMBTU EACH	GOOD COMBUSTION PRACTICE USE OF NATURAL GAS AS FUEL AND GOOD COMBUSTION PRACTICES	3.2	LB/H	BACT-PSD	0.084	LB/MMBTU
LA-0203	OAKDALE OSB PLANT	LA	PSD-LA-710	6/13/2005	BOILERS (2)	66.5	MMBTU/H		6.57	LB/H	BACT-PSD	0.099	LB/MMBTU
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	WELLTON MOHAWK GENERATING STATION	30.6	MMBTU/H		1.13	LB/H	BACT-PSD	0.037	LB/MMBTU
AZ-0047	PORT WASHINGTON GENERATING STATION	AZ	1001653	12/1/2004	AUXILIARY BOILER	38	MMBTU/H		0.08	LB/MMBTU	BACT-PSD	0.08	LB/MMBTU
WI-0227	BLUEWATER PROJECT	WI	04-RV-175	10/13/2004	NATURAL GAS FIRED AUXILIARY BOILER	97.1	MMBTU/H	NATURAL GAS FUEL, GOOD COMBUSTION PRACTICES	7.77	LB/H	BACT-PSD	0.08	LB/MMBTU
AR-0077	CHEYENNE STATION	AR	2062-AOP-R0	7/22/2004	BOILERS	22	MMBTU/H	GOOD COMBUSTION PRACTICE	0.84	LB/MMBTU	BACT-PSD	0.84	LB/MMBTU
CO-0058	CHARTER STEEL	CO	03WE0910303-	6/12/2004	HEATERS	45	MMBTU/H	GOOD COMBUSTION PRACTICES	0.037	LB/MMBTU	BACT-PSD	0.037	LB/MMBTU
OH-0276	COPPER MOUNTAIN POWER	OH	13-04176	6/10/2004	BOILER FOR VACUUM OXYGEN DEGASSER VESSEL	28.6	MMBTU/H		2.35	LB/H	BACT-PSD	0.082	LB/MMBTU
NV-0037	ACE ETHANOL - STANLEY	NV	15347	5/14/2004	AUXILIARY BOILER	60	MMBTU/H	EFFECTIVE COMBUSTION SYSTEM DESIGN, 10:1 TURNDOWN CAPABILITY, AND LNB TECHNOLOGY	0.08	LB/MMBTU	LAER	0.08	LB/MMBTU
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S52/B52, 11 MMBTU/H	11	MMBTU/H	NATURAL GAS / PROPANE ; GOOD COMBUSTION CONTROL	0.08	LB/MMBTU	BACT-PSD	0.08	LB/MMBTU
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S53 / B53, 34 MMBTU/H	34	MMBTU/H	NATURAL GAS / PROPANE; GOOD COMBUSTION CONTROL	0.08	LB/MMBTU	BACT-PSD	0.08	LB/MMBTU
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S50/B50, 60 MMBTU/H	60	MMBTU/H	NATURAL GAS / PROPANE; GOOD COMBUSTION CONTROL	0.08	LB/MMBTU	BACT-PSD	0.08	LB/MMBTU
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S51/B51, 80 MMBTU/H	80	MMBTU/H	NAT. GAS / PROPANE, GOOD COMBUSTION CONTROL	0.08	LB/MMBTU	BACT-PSD	0.08	LB/MMBTU
OR-0039	COB ENERGY FACILITY, LLC	OR	18-0029	12/30/2003	BOILERS, AUXILIARY, NATURAL GAS, (2)	80	MMBTU/H	GOOD COMBUSTION	0.037	LB/MMBTU	BACT-PSD	0.037	LB/MMBTU
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	BOILER, COMMERCIAL	70	MMBTU/H	GOOD COMBUSTION	0.06	LB/MMBTU	BACT-PSD	0.06	LB/MMBTU
IN-0108	NUCOR STEEL	IN	107-16823-00038	11/21/2003	BOILER, NATURAL GAS, (2)	34	MMBTU/H	GOOD COMBUSTION PRACTICES, NATURAL GAS	0.061	LB/MMBTU	BACT-PSD	0.061	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR GE TURBINE	41	MMBTU/H		0.09	LB/MMBTU	BACT-PSD	0.09	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR SIEMENS TURBINES	55.34	MMBTU/H		0.14	LB/MMBTU	BACT-PSD	0.14	LB/MMBTU
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	BOILER	30.6	MMBTU/H		3.34	LB/H	BACT-PSD	0.109	LB/MMBTU
TX-0458	JACK COUNTY POWER PLANT	TX	P1026	7/22/2003	AUXILIARY BOILER	36	mmbtu/h		1.4	LB/H	BACT-PSD	0.039	LB/MMBTU
GA-0098	RINCON POWER PLANT	GA	4911-103-0011-P-01-0	3/24/2003	AUXILIARY BOILER	83	MMBTU/H		0.093	LB/MMBTU	Other Case-by-Case	0.093	LB/MMBTU

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - CO

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OK-0090	DUKE ENERGY STEPHENS, LLC STEPHENS ENERGY	OK	2001-157-C M-1 PSD	3/21/2003	BOILER, AUXILIARY	33	MMBTU/H	BOILER DESIGN AND GOOD OPERATING PRACTICES	0.085	LB/MMBTU	BACT-PSD	0.085	LB/MMBTU
PA-0216	J & L SPECIALTY STEEL, INC.	PA	PA-04-00013B	1/13/2003	BOILER, DRAP LINE	33.5	MMBTU/H		2.75	LB/H	Other Case-by-Case	0.08	LB/MMBTU
TX-0389	BAYTOWN CARBON BLACK PLANT	TX	PSD-1010	12/31/2002	BACK-UP BOILER	13.4	MMBTU/H		1.11	LB/H	Other Case-by-Case	0.083	LB/MMBTU
IA-0062	EMERY GENERATING STATION	IA	02-357	12/20/2002	AUXILIARY BOILER	68	MMBTU/H	CATALYTIC OXIDATION	0.0164	LB/MMBTU	Other Case-by-Case	0.0164	LB/MMBTU
TX-0354	ATOFINA CHEMICALS INCORPORATED	TX	PSD-TX-1016	12/19/2002	(2) STEAM BOILERS, X-426A AND X-426B	15.8	MMBTU/H	NONE INDICATED	1.33	LB/H	Other Case-by-Case	0.08	LB/MMBTU
VA-0260	HENRY COUNTY POWER VA POWER - POSSUM POINT	VA	21389	11/21/2002	AUXILIARY BOILER, (2)	40	MMBTU/H	GOOD COMBUSTION AND DESIGN. CLEAN FUEL.	2.9	LB/H	BACT-PSD	0.073	LB/MMBTU
VA-0255		VA	70225	11/18/2002	BOILER, AUXILIARY	99	MMBTU/H	GOOD COMBUSTION PRACTICES.	14.9	LB/H	Other Case-by-Case	0.15	LB/MMBTU
GA-0101	MURRAY ENERGY FACILITY	GA	4911-213-0034-P-01-1	10/23/2002	BOILER, AUXILIARY	31.4	MMBTU/H	GOOD COMBUSTION PRACTICE	0.037	LB/MMBTU	BACT-PSD	0.037	LB/MMBTU
AL-0192	HONDA MANUFACTURING OF ALABAMA, LLC	AL	309-0050 (X010-X014)	10/18/2002	BOILERS, NATURAL GAS, (3)	30	MMBTU/H	CLEAN FUEL, GOOD COMBUSTION PRACTICES.	2.52	LB/H	BACT-PSD	0.084	LB/MMBTU
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	BOILER	99	MMBTU/H		8.32	LB/H	BACT-PSD	0.084	LB/MMBTU
VA-0261	CPV CUNNINGHAM CREEK	VA	81382	9/6/2002	AUXILIARY BOILER	80	MMBTU/H	GOOD COMBUSTION PRACTICES.	6.42	LB/H	BACT-PSD	0.08	LB/MMBTU
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	AUXILIARY BOILER	33	MMBTU/H	GOOD COMBUSTION PRACTICE	0.04	LB/MMBTU	BACT-PSD	0.04	LB/MMBTU
AL-0185	BARTON SHOALS ENERGY	AL	X001, X002	7/12/2002	TWO (2) 40 MMBTU/H AUXILIARY BOILERS	40	MMBTU/H	GOOD COMBUSTION PRACTICES	0.082	LB/MMBTU	BACT-PSD	0	
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	AUXILIARY BOILER	33	MMBTU/H	BOILER DESIGN AND GOOD OPERATING PRACTICES	0.037	LB/MMBTU	BACT-PSD	0.037	LB/MMBTU
OK-0072	REDBUD POWER PLT	OK	2000-090-C M-1 PSD	5/6/2002	AUXILIARY BOILER	93	MMBTU/H	BOILER DESIGN AND GOOD OPERATING PRACTICES	0.07	LB/MMBTU	BACT-PSD	0.07	LB/MMBTU
IA-0058	GREATER DES MOINES ENERGY CENTER	IA	77-13-002	4/10/2002	AUXILIARY BOILER	68	MMBTU/H		0.084	LB/MMBTU	Other Case-by-Case	0.084	LB/MMBTU
AR-0051	DUKE ENERGY-JACKSON FACILITY	AR	1998-AOP-R0 (34-0259)	4/1/2002	BOILER, AUXILIARY	33	MMBTU/H	GOOD OPERATING PRACTICE	0.15	LB/MMBTU	BACT-PSD	0.15	LB/MMBTU
OK-0055	MUSTANG ENERGY PROJECT	OK	2001-132-C PSD	2/12/2002	AUXILIARY BOILER	31	MMBTU/H	COMBUSTION CONTROL	0.084	LB/MMBTU	BACT-PSD	0.084	LB/MMBTU
NC-0094	GENPOWER EARLEYS, LLC	NC	09159R00	1/9/2002	BOILER, AUXILIARY, NATURAL GAS	83	MMBTU/H	GOOD COMBUSTION PRACTICES AND DESIGN	6.84	LB/H	BACT-PSD	0.082	LB/MMBTU
OH-0257	JACKSON COUNTY POWER, LLC	OH	06-06313	12/27/2001	AUXILIARY BOILER	76	MMBTU/H		6.86	LB/H	BACT-PSD	0.082	LB/MMBTU
PA-0210	DART CONTAINER CORP OF PA	PA	36-05117	12/14/2001	BOILER, (2)	33.5	MMBTU/H	GOOD COMBUSTION PRACTICE	400	PPMDV @ 3% O2	Other Case-by-Case	0	
AL-0180	DUKE ENERGY DALE, LLC	AL	604-0023-X001, X002	12/11/2001	35 MMBTU/HR NAT. GAS FIRED AUXILIARY BOILER	35	MMBTU/H	GOOD COMBUSTION	0.135	LB/MMBTU	BACT-PSD	0	
IN-0095	ALLEGHENY ENERGY SUPPLY CO. LLC	IN	141-14198-00543	12/7/2001	AUXILIARY BOILER	21	MMBTU/H	GOOD COMBUSTION PRACTICES	0.082	LB/MMBTU	BACT-PSD	0.082	LB/MMBTU
OH-0251	CENTRAL SOYA COMPANY INC.	OH	03-13369	11/29/2001	BOILER, NATURAL GAS	91.2	MMBTU/H		12.2	LB/H	N/A	0.13	LB/MMBTU
TX-0378	LA PORTE POLYPROPYLENE PLANT	TX	PSD-TX-989	11/5/2001	PACKAGE BOILER BO-4	60	MMBTU/H	NONE INDICATED	4.84	LB/H	Other Case-by-Case	0.08	LB/MMBTU
OK-0071	MCCLAIN ENERGY FACILITY	OK	99-213-C M-1 PSD	10/25/2001	AUXILIARY BOILER	22	MMBTU/H	USE OF NATURAL GAS FUEL	0.37	LB/MMBTU	BACT-PSD	0.37	LB/MMBTU
AL-0181	DUKE ENERGY AUTAUGA, LLC	AL	201-0012-X001, X002	10/23/2001	31.4 MMBTU/HR NATURAL GAS FIRED BOILER	31.4	MMBTU/H	EFFICIENT COMBUSTION.	0.135	LB/MMBTU	BACT-PSD	0	
WA-0292	SATSOP COMBUSTION TURBINE PROJECT	WA	EFSEC/2001-01	10/23/2001	AUXILIARY BOILER	29.3	MMBTU/H		50	PPM @ 3% O2	BACT-PSD	0.037	LB/MMBTU

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - CO

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
OK-0043	WEBERS FALLS ENERGY FACILITY	OK	2000-278-C PSD	10/22/2001	AUXILIARY BOILER	30	MMBTU/H	BOILER DESIGN & GOOD OPERATING PRACTICES	0.085	LB/MMBTU	BACT-PSD	0.085	LB/MMBTU
OH-0265	DRESDEN ENERGY LLC	OH	06-06238	10/16/2001	BOILER, NATURAL GAS	49	MMBTU/H		4.12	LB/H	BACT-PSD	0.084	LB/MMBTU
IN-0110	COGENTRIX LAWRENCE CO., LLC	IN	093-12432-00021-4911	10/5/2001	BOILER, AUXILIARY, NATURAL GAS	35	MMBTU/H	CLEAN FUEL, GOOD COMBUSTION PRACTICE	0.082	LB/MMBTU	BACT-PSD	0.082	LB/MMBTU
AL-0179	TENASKA TALLADEGA GENERATING STATION	AL	309-0052-X001	10/3/2001	30 MMBTU/HR AUXILIARY BOILER	30	MMBTU/H	EFFICIENT COMBUSTION	0.073	LB/MMBTU	BACT-PSD	0.073	LB/MMBTU
OK-0054	QUAD GRAPHICS OKC FACILITY	OK	2000-306-C PSD	8/21/2001	BOILERS	62.77	MMBTU/H	GOOD COMBUSTION/MAINTENANCE	10.81	T/YR	BACT-PSD	0	
OK-0044	SMITH POCOLA ENERGY PROJECT	OK	2000-115-C PSD	8/16/2001	AUXILIARY BOILERS, (2)	48	MMBTU/H	COMBUSTION CONTROL	7.91	LB/H	BACT-PSD	0.084	LB/MMBTU
OH-0263	FREMONT ENERGY CENTER, LLC	OH	03-13549	8/9/2001	AUXILIARY BOILER	80	MMBTU/H		7.84	LB/H	BACT-PSD	0.098	LB/MMBTU
AK-0047	MILNE POINT PRODUCTION FACILITY	AK	0073-AC023	7/13/2001	HEATERS (2), H-5302A AND H-5302B	35	MMBTU/H EA	LIMIT EXTENDED FROM PREVIOUS PERMIT TO AVOID PSD REVIEW. FOLLOW PREVENTATIVE MAINTENANCE PROCEDURES.	0.2	LB/MMBTU	N/A	0.2	LB/MMBTU
IN-0087	DUKE ENERGY, VIGO LLC	IN	167-12481-00125	6/6/2001	AUXILIARY BOILER, NATURAL GAS (2)	46	MMBTU/H	GOOD COMBUSTION. LIMIT IS FOR EACH BOILER.	0.082	LB/MMBTU	BACT-PSD	0.082	LB/MMBTU
NV-0039	CHUCK LENZIE GENERATING STATION	NV	1513	6/1/2001	AUXILIARY BOILERS	44.1	MMBTU/H	GOOD COMBUSTION CONTROL	100	PPMVD@3% O2	BACT-PSD	0.036	LB/MMBTU
IN-0086	MIRANT SUGAR CREEK, LLC	IN	167-12208-00123	5/9/2001	AUXILIARY BOILER, NATURAL GAS (2)	35	MMBTU/H	GOOD COMBUSTION. LB/H LIMIT IS FOR EACH BOILER.	0.824	LB/MMBTU	BACT-PSD	0.824	LB/MMBTU
OK-0074	KIAMICHI ENERGY FACILITY	OK	2000-103-C M-1 PSD	5/1/2001	AUXILIARY BOILER	27.5	MMBTU/H	GOOD OPERATING PRACTICES AND DESIGN	0.084	LB/MMBTU	BACT-PSD	0.084	LB/MMBTU
OH-0255	AEP WATERFORD ENERGY LLC	OH	06-06739	3/29/2001	BOILER, NATURAL GAS	85.2	MMBTU/H		6.3	LB/H	BACT-PSD	0.074	LB/MMBTU
OH-0258	PRO TEC COATING COMPANY	OH	03-10957	2/15/2001	BOILERS (4)	20.9	MMBTU/H		0.23	LB/H	N/A	0.011	LB/MMBTU
AL-0169	BLOUNT MEGAWATT FACILITY	AL	402-0010-X001 AND X002	2/5/2001	AUXILIARY BOILER	40	MMBTU/H	GOOD COMBUSTION PRACTICES	0.08	LB/MMBTU	BACT-PSD	0.08	LB/MMBTU
AL-0168	GENPOWER KELLEY LLC	AL	414-0014-X001 AND X002	1/12/2001	BOILER	83	MMBTU/H	EFFICIENT COMBUSTION	0.085	LB/MMBTU	BACT-PSD	0.085	LB/MMBTU

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - PM, PM10 PM2.5

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
*FL-0335	SUWANNEE MILL	FL	1210468-001-AC(PSD-FL-417)	9/5/2012	Four(4) Natural Gas Boilers - 46 MMBtu/hour	46	MMBtu/hr	Particulate matter, total (TPM)	Good Combustion Practice	2	GR OF S/100 SCF	BACT-PSD	0	
*FL-0335	SUWANNEE MILL	FL	1210468-001-AC(PSD-FL-417)	9/5/2012	Four(4) Natural Gas Boilers - 46 MMBtu/hour	46	MMBtu/hr	Particulate matter, total < 10 µ (TPM10)	Good Combustion Practice	2	GR OF S/100 SCF	BACT-PSD	0	
*FL-0335	SUWANNEE MILL	FL	1210468-001-AC(PSD-FL-417)	9/5/2012	Four(4) Natural Gas Boilers - 46 MMBtu/hour	46	MMBtu/hr	Particulate matter, total < 2.5 µ (TPM2.5)	Good Combustion Practice	2	GR OF S/100 SCF	BACT-PSD	0	
*OH-0350	REPUBLIC STEEL	OH	P0109191	7/18/2012	Steam Boiler	65	MMBtu/H	Particulate matter, total < 10 µ (TPM10)		0.48	LB/H	N/A	0.007	LB/MMBTU
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	AUXILIARY BOILER	37.4	MMBTU/HR	Particulate matter, total (TPM)	USE PUC QUALITY NATURAL GAS, OPERATIONAL LIMIT OF 46,675 MMBTU/YR	0.0034	GR/DSCF	BACT-PSD	0	
*CA-1192	AVENAL ENERGY PROJECT	CA	SJ 08-01	6/21/2011	AUXILIARY BOILER	37.4	MMBTU/HR	Particulate matter, total < 10 µ (TPM10)	USE PUC QUALITY NATURAL GAS, OPERATIONAL LIMIT OF 46,675 MMBTU/YR	0.0034	GR/DSCF	BACT-PSD	0	
OR-0048	CARTY PLANT	OR	25-0016-ST-02	12/29/2010	NATURAL GAS-FIRED BOILER	91	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUEL	2.5	LB/MMCF	BACT-PSD	0.0025	LB/MMBTU
AK-0071	INTERNATIONAL STATION POWER PLANT	AK	AQ0164CPT01	12/20/2010	Sigma Thermal Auxiliary Heater (1)	12.5	MMBTU/H	Particulate matter, total (TPM)	Good Combustion Practices	7.6	LB/MMSCF	BACT-PSD	0.0076	LB/MMBTU
AK-0071	INTERNATIONAL STATION POWER PLANT	AK	AQ0164CPT01	12/20/2010	Sigma Thermal Auxiliary Heater (1)	12.5	MMBTU/H	Particulate matter, total < 10 µ (TPM10)	Good Combustion Practices	7.6	LB/MMSCF	BACT-PSD	0.0076	LB/MMBTU
AK-0071	INTERNATIONAL STATION POWER PLANT	AK	AQ0164CPT01	12/20/2010	Sigma Thermal Auxiliary Heater (1)	12.5	MMBTU/H	Particulate matter, total < 2.5 µ (TPM2.5)	Good Combustion Practices	7.6	LB/MMSCF	BACT-PSD	0.0076	LB/MMBTU
LA-0240	FLOPAM INC.	LA	PSD-LA-747/1280-00141-V0	6/14/2010	Boilers	25.1	MMBTU/H	Particulate matter, total < 10 µ (TPM10)	Good equipment design and proper combustion practices, fueled by natural gas/alcohol	0.1	LB/H	BACT-PSD	0.004	LB/MMBTU
LA-0240	FLOPAM INC.	LA	PSD-LA-747/1280-00141-V0	6/14/2010	Boilers	25.1	MMBTU/H	Particulate matter, total (TPM)	Good equipment design and proper combustion practices, fueled by natural gas/alcohol	0.13	LB/H	BACT-PSD	0.005	LB/MMBTU
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Heater	40	MMBtu/hr	Particulate matter, total (TPM)	OPERATIONAL RESTRICTION OF 1000 HR/YR, USE PUC QUALITY NATURAL GAS	0.2	GRANS PER 100 DSCF	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Heater	40	MMBtu/hr	Particulate matter, total < 2.5 µ (TPM2.5)	OPERATIONAL RESTRICTION OF 1000 HR/YR	0.2	DSCF	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Boiler	35	MMBtu/hr	Particulate matter, total (TPM)	OPERATIONAL RESTRICTION OF 500 HR/YR, USE PUC QUALITY NATURAL GAS	0.2	GRANS PER 100 DSCF	BACT-PSD	0	
*CA-1191	VICTORVILLE 2 HYBRID POWER PROJECT	CA	SE 07-02	3/11/2010	Auxiliary Boiler	35	MMBtu/hr	Particulate matter, total < 2.5 µ (TPM2.5)	OPERATIONAL RESTRICTION OF 500 HR/YR, USE PUC QUALITY NATURAL GAS	0.2	GRANS PER 100 DSCF	BACT-PSD	0	
NV-0050	MGM MIRAGE	NV	825	11/30/2009	BOILERS - UNITS CC026, CC027 AND CC028 AT CITY CENTER	44	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	LIMITING THE FUEL TO NATURAL GAS ONLY AND GOOD COMBUSTION PRACTICES	0.0075	LB/MMBTU	LAER	0.0075	LB/MMBTU
NV-0050	MGM MIRAGE	NV	825	11/30/2009	BOILERS - UNITS CC001, CC002, AND CC003 AT CITY CENTER	41.64	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	LIMITING THE FUEL TO NATURAL GAS ONLY AND GOOD COMBUSTION PRACTICES	0.0077	LB/MMBTU	Other Case-by-Case	0.0077	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT FLO1	14.34	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	FLUE GAS RECIRCULATION AND OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0075	LB/MMBTU	Other Case-by-Case	0.0075	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP03	33.48	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0075	LB/MMBTU	Other Case-by-Case	0.0075	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP26	24	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0075	LB/MMBTU	Other Case-by-Case	0.0075	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT BA03	31.38	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0076	LB/MMBTU	Other Case-by-Case	0.0076	LB/MMBTU

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - PM, PM10 PM2.5

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP01	35.4	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0076	LB/MMBTU	Other Case-by-Case	0.0076	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT PA15	21	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0076	LB/MMBTU	BACT-PSD	0.0076	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT BA01	16.8	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0077	LB/MMBTU	Other Case-by-Case	0.0077	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT IP04	16.7	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	OPERATING IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION	0.0078	LB/MMBTU	Other Case-by-Case	0.0078	LB/MMBTU
OK-0135	PRYOR PLANT CHEMICAL	OK	2008-100-C PSD	2/23/2009	BOILERS #1 AND #2	80	MMBTU/H	Particulate matter, total < 10 µ (TPM10)		0.5	LB/H	BACT-PSD	0.006	LB/MMBTU
OK-0135	PRYOR PLANT CHEMICAL	OK	2008-100-C PSD	2/23/2009	BOILERS #1 AND #2	80	MMBTU/H	Particulate matter, total (TPM)		0.6	LB/H	BACT-PSD	0.008	LB/MMBTU
SC-0115	GP CLARENDON LP	SC	0680-0046-CB	2/10/2009	NATURAL GAS SPACE HEATERS - 14 UNITS (ID 17)	20.89	MMBTU/H	Particulate matter, total (TPM)		0.15	LB/H	BACT-PSD	0.007	LB/MMBTU
SC-0115	GP CLARENDON LP	SC	0680-0046-CB	2/10/2009	NATURAL GAS SPACE HEATERS - 14 UNITS (ID 17)	20.89	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.15	LB/H	BACT-PSD	0.007	LB/MMBTU
SC-0114	GP ALLENDALE LP	SC	0160-0020-CB	11/25/2008	NATURAL GAS SPACE HEATERS - 14 UNITS (ID 18)	20.89	MMBTU/H	Particulate matter, total (TPM)		0.15	LB/H	BACT-PSD	0.007	LB/MMBTU
SC-0114	GP ALLENDALE LP	SC	0160-0020-CB	11/25/2008	NATURAL GAS SPACE HEATERS - 14 UNITS (ID 18)	20.89	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.15	LB/H	BACT-PSD	0.007	LB/MMBTU
MD-0040	CPV ST CHARLES	MD	CPCN CASE NO. 9129	11/12/2008	BOILER	93	MMBTU/H	Particulate Matter (PM)		0.005	LB/MMBTU	BACT-PSD	0	
MD-0040	CPV ST CHARLES	MD	CPCN CASE NO. 9129	11/12/2008	BOILER	93	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.005	LB/MMBTU	BACT-PSD	0	
MD-0040	CPV ST CHARLES	MD	CPCN CASE NO. 9129	11/12/2008	BOILER	93	MMBTU/H	Particulate matter, filterable < 2.5 µ (FPM2.5)		0.005	LB/MMBTU	LAER	0	
OH-0323	TITAN TIRE CORPORATION OF BRYAN	OH	03-17392	6/5/2008	BOILER	50.4	MMBTU/H	Particulate Matter (PM)		0.02	LB/MMBTU	N/A	0	
OH-0323	TITAN TIRE CORPORATION OF BRYAN	OH	03-17392	6/5/2008	BOILER	50.4	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.094	LB/H	N/A	1.9	LB/MMSCF
MN-0070	MINNESOTA STEEL INDUSTRIES, LLC	MN	06100067-001	9/7/2007	SMALL BOILERS & HEATERS(<100 MMBTU/H)	99	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.0025	GR/DSCF	BACT-PSD	0	
AL-0230	THYSSENKRUPP STEEL AND STAINLESS USA, LLC	AL	503-0095-X001 THRU X026	8/17/2007	3 NATURAL GAS-FIRED BOILERS WITH ULNB & EGR (537-539)	64.9	MMBTU each	Particulate matter, filterable < 10 µ (FPM10)		0.0076	LB/MMBTU	BACT-PSD	0	
OH-0309	TOLEDO SUPPLIER PARK-PAINT SHOP	OH	04-01358	5/3/2007	BOILER (2), NATURAL GAS	20.4	MMBTU/H	Particulate Matter (PM)		0.04	LB/H	BACT-PSD	0.0019	LB/MMBTU
OH-0309	TOLEDO SUPPLIER PARK-PAINT SHOP	OH	04-01358	5/3/2007	BOILER (2), NATURAL GAS	20.4	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.15	LB/H	BACT-PSD	0.0075	LB/MMBTU
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO GAS-FUELED 10 MMBTU/H PROCESS HEATERS	10	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)			GR S/100 SCF 2 GAS	BACT-PSD	0	
NV-0044	HARRAH'S OPERATING COMPANY, INC.	NV	257	1/4/2007	COMMERCIAL/INSTITUTIONAL-SIZE BOILERS	35.4	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	USE OF NATURAL GAS AS THE ONLY FUEL	0.0075	LB/MMBTU	BACT-PSD	0.0075	LB/MMBTU
TX-0501	TEXSTAR GAS PROCESS FACILITY	TX	PSD-TX 55M3 AND 6051	7/11/2006	POWER STEAM BOILER	93	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.64	LB/H	BACT-PSD	0	LB/MMBTU
NY-0095	CAITHNES BELLPORT ENERGY CENTER	NY	PSD-NY-0001	5/10/2006	AUXILIARY BOILER	29.4	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	LOW SULFUR FUEL	0.0033	LB/MMBTU	BACT-PSD	0	
AR-0090	NUCOR STEEL, ARKANSAS	AR	1139-AOP-R6	4/3/2006	PICKLE LINE BOILERS, SN-52	12.6	MMBTU EACH	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICE	0.3	LB/H	BACT-PSD	0.0076	LB/MMBTU

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - PM, PM10 PM2.5

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
LA-0203	OAKDALE OSB PLANT	LA	PSD-LA-710	6/13/2005	AUXILIARY THERMAL OIL HEATER	66.5	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	USE OF NATURAL GAS AS FUEL AND GOOD COMBUSTION PRACTICES	0.59	LB/H	BACT-PSD	0.009	LB/MMBTU
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	BOILERS (2)	30.6	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.31	LB/H	BACT-PSD	0.01	LB/MMBTU
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	AUXILIARY BOILER	38	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.0033	LB/MMBTU	BACT-PSD	0.0033	LB/MMBTU
WI-0227	PORT WASHINGTON GENERATING STATION	WI	04-RV-175	10/13/2004	NATURAL GAS FIRED AUXILIARY BOILER	97.1	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	NATURAL GAS FUEL, GOOD COMBUSTION PRACTICES	0.74	LB/H	BACT-PSD	0.0076	LB/MMBTU
WI-0226	WPS - WESTON PLANT	WI	04-RV-128	8/27/2004	NATURAL GAS FIRED BOILER	46.2	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	NATURAL GAS	0.8	LB/H	N/A	0.017	LB/MMBTU
AR-0077	BLUEWATER PROJECT	AR	2062-AOP-R0	7/22/2004	BOILERS	22	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	NATURAL GAS COMBUSTION ONLY	0.0076	LB/MMBTU	BACT-PSD	0.0076	LB/MMBTU
OH-0276	CHARTER STEEL	OH	13-04176	6/10/2004	BOILER FOR VACUUM OXYGEN DEGASSER VESSEL	28.6	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.21	LB/H	BACT-PSD	0.007	LB/MMBTU
NV-0037	COPPER MOUNTAIN POWER	NV	15347	5/14/2004	AUXILIARY BOILER	60	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	RESTRICTION OF OPERATION TO NATURAL GAS	0.5	LB/H	LAER	0.008	LB/MMBTU
AL-0191	HYUNDAI MOTOR MANUFACTURING OF ALABAMA, LLC	AL	209-0090-X001,X002,X003	3/23/2004	BOILERS, NATURAL GAS, (3)	50	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUEL	0.38	LB/H	BACT-PSD	0.0075	LB/MMBTU
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S52/B52, 11 MMBTU/H	11	MMBTU/H	Particulate Matter (PM)	NATURAL GAS / PROPANE: GOOD COMBUSTION CONTROL	0.0075	LB/MMBTU	BACT-PSD	0.0075	LB/MMBTU
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S53 / B53, 34 MMBTU/H	34	MMBTU/H	Particulate Matter (PM)	NATURAL GAS / PROPANE: GOOD COMBUSTION CONTROL	0.0075	LB/MMBTU	BACT-PSD	0.0075	LB/MMBTU
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S50/B50, 60 MMBTU/H	60	MMBTU/H	Particulate Matter (PM)	NATURAL GAS/ PROPANE: GOOD COMBUSTION CONTROL	0.0075	LB/MMBTU	BACT-PSD	0.0075	LB/MMBTU
WI-0207	ACE ETHANOL - STANLEY	WI	03-DCF-184	1/21/2004	BOILER, S51/B51, 80 MMBTU/H	80	MMBTU/H	Particulate Matter (PM)	NATURAL GAS, GOOD COMBUSTION CONTROL	0.0075	LB/MMBTU	BACT-PSD	0.0075	LB/MMBTU
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	BOILER, COMMERCIAL	70	MMBTU/H	Particulate Matter (PM)	CLEAN FUELS	0.008	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	BOILER, COMMERCIAL	70	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUELS	0.008	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
IN-0108	NUCOR STEEL	IN	107-16823-00038	11/21/2003	BOILER, NATURAL GAS, (2)	34	MMBTU/H	Particulate matter, filterable (FPM)	COMPLIANCE IS BY USING NATURAL GAS	0.0019	LB/MMBTU	BACT-PSD	0.0019	LB/MMBTU
IN-0108	NUCOR STEEL	IN	107-16823-00038	11/21/2003	BOILER, NATURAL GAS, (2)	34	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	COMPLIANCE BY USING NATURAL GAS	0.0076	LB/MMBTU	BACT-PSD	0.0076	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR GE TURBINE	41	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.015	LB/MMBTU	BACT-PSD	0.015	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR SIEMENS TURBINES	55.34	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.015	LB/MMBTU	BACT-PSD	0.015	LB/MMBTU
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	BOILER	30.6	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.31	LB/H	BACT-PSD	0.01	LB/MMBTU
TX-0458	JACK COUNTY POWER PLANT	TX	P1026	7/22/2003	AUXILIARY BOILER	36	mmbtu/h	Particulate matter, filterable < 10 µ (FPM10)		0.4	LB/H	BACT-PSD	0.011	LB/MMBTU
GA-0098	RINCON POWER PLANT	GA	4911-103-0011-P-01-0	3/24/2003	AUXILIARY BOILER	83	MMBTU/H	Particulate Matter (PM)		0.0084	LB/MMBTU	Other Case-by-Case	0.0084	LB/MMBTU
OK-0090	DUKE ENERGY STEPHENS, LLC STEPHENS ENERGY	OK	2001-157-C-M-1 PSD	3/21/2003	BOILER, AUXILIARY	33	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	USE OF LOW ASH FUEL AND EFFICIENT COMBUSTION	0.01	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
TX-0389	BAYTOWN CARBON BLACK PLANT	TX	PSD-1010	12/31/2002	BACK-UP BOILER	13.4	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.1	LB/H	Other Case-by-Case	0.007	LB/MMBTU
IA-0062	EMERY GENERATING STATION	IA	02-357	12/20/2002	AUXILIARY BOILER	68	MMBTU/H	Particulate Matter (PM)	LOW ASH FUEL, NG	0.0075	LB/MMBTU	Other Case-by-Case	0.0075	LB/MMBTU
IA-0062	EMERY GENERATING STATION	IA	02-357	12/20/2002	AUXILIARY BOILER	68	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	LOW ASH FUEL, NG	0.0075	LB/MMBTU	Other Case-by-Case	0.0075	LB/MMBTU
TX-0354	ATOFINA CHEMICALS INCORPORATED	TX	PSD-TX-1016	12/19/2002	(2) STEAM BOILERS, X-426A AND X-426B	15.8	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	NONE INDICATED	0.12	LB/H	Other Case-by-Case	0.008	LB/MMBTU

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - PM, PM10 PM2.5

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
TX-0408	INDIAN ROCK GATHERING COMPANY LP	TX	PSD-TX-1002	11/22/2002	AUXILIARY BOILER, (2)	6	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.05	LB/H	BACT-PSD	0.0083	LB/MMBTU
VA-0255	VA POWER - POSSUM POINT	VA	70225	11/18/2002	BOILER, AUXILIARY	99	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUEL AND GOOD COMBUSTION PRACTICES.	0.7	LB/H	Other Case-by-Case	0.007	LB/MMBTU
GA-0101	MURRAY ENERGY FACILITY	GA	4911-213-0034-P-01-1	10/23/2002	BOILER, AUXILIARY	31.4	MMBTU/H	Particulate Matter (PM)	GOOD COMBUSTION PRACTICE, CLEAN FUEL	0.01	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
AL-0192	HONDA MANUFACTURING OF ALABAMA, LLC	AL	309-0050 (X010-X014)	10/18/2002	BOILERS, NATURAL GAS, (3)	30	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUEL, GOOD COMBUSTION	0.228	LB/H	BACT-PSD	0.0076	LB/MMBTU
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	BOILER	99	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.76	LB/H	BACT-PSD	0.0076	LB/MMBTU
VA-0261	CPV CUNNINGHAM CREEK	VA	81382	9/6/2002	AUXILIARY BOILER	80	MMBTU/H	Particulate Matter (PM)	GOOD COMBUSTION PRACTICES.	0.58	LB/H	BACT-PSD	0.007	LB/MMBTU
VA-0261	CPV CUNNINGHAM CREEK	VA	81382	9/6/2002	AUXILIARY BOILER	80	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES.	0.58	LB/H	BACT-PSD	0.007	LB/MMBTU
AR-0070	GENOVA ARKANSAS I, LLC	AR	2009-AOP-R0	8/23/2002	AUXILIARY BOILER	33	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICE	0.012	LB/MMBTU	BACT-PSD	0.012	LB/MMBTU
AL-0185	BARTON SHOALS ENERGY	AL	X001, X002	7/12/2002	TWO (2) 40 MMBTU/H AUXILIARY BOILERS	40	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	NATURAL GAS ONLY	0.0075	LB/MMBTU	BACT-PSD	0	
OK-0070	GENOVA OK I POWER PROJECT	OK	2001-223-C PSD	6/13/2002	AUXILIARY BOILER	33	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	LOW ASH FUEL AND EFFICIENT COMBUSTION	0.01	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
OK-0072	REDBUD POWER PLT	OK	2000-090-C M-1 PSD	5/6/2002	AUXILIARY BOILER	93	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	USE OF NATURAL GAS/LOW ASH FUEL AND EFFICIENT COMBUSTION	0.0053	LB/MMBTU	BACT-PSD	0.0053	LB/MMBTU
IA-0058	GREATER DES MOINES ENERGY CENTER	IA	77-13-002	4/10/2002	AUXILIARY BOILER	68	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.0076	LB/MMBTU	BACT-PSD	0.0076	LB/MMBTU
TN-0153	WILLIAMS REFINING & MARKETING, L.L.C.	TN	0101-08PC AND 1010-05PCR	4/3/2002	HEATERS, (5)	50	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.005	LB/MMBTU	BACT-PSD	0.005	LB/MMBTU
TN-0153	WILLIAMS REFINING & MARKETING, L.L.C.	TN	0101-08PC AND 1010-05PCR	4/3/2002	BOILER, NO. 9	95	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.0075	LB/MMBTU	BACT-PSD	0.0075	LB/MMBTU
AR-0051	DUKE ENERGY-JACKSON FACILITY	AR	1998-AOP-R0 (34-0259)	4/1/2002	BOILER, AUXILIARY	33	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD OPERATING PRACTICE	0.01	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
OK-0056	HORSESHOE ENERGY PROJECT	OK	2001-156-C PSD	2/12/2002	AUXILIARY BOILERS	0		Particulate matter, filterable < 10 µ (FPM10)	LOW ASH FUEL (NATURAL GAS)	0.0076	LB/MMBTU	BACT-PSD	0.0076	LB/MMBTU
LA-0174	PORT HUDSON OPERATIONS	LA	PSD-LA-581 (M-2)	1/25/2002	POWER BOILER NO. 2	65.5	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	FIRED BY NATURAL GAS	3.33	LB/H	BACT-PSD	0.05	LB/MMBTU
LA-0174	PORT HUDSON OPERATIONS	LA	PSD-LA-581 (M-2)	1/25/2002	POWER BOILER NO. 2	65.5	MMBTU/H	Particulate Matter (PM)	FIRED BY NATURAL GAS	3.33	LB/H	BACT-PSD	0.05	LB/MMBTU
NC-0094	GENPOWER EARLEYS, LLC	NC	09159R00	1/9/2002	BOILER, AUXILIARY, NATURAL GAS	83	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION AND DESIGN	0.62	LB/H	BACT-PSD	0.0075	LB/MMBTU
OH-0257	JACKSON COUNTY POWER, LLC	OH	06-06313	12/27/2001	AUXILIARY BOILER	76	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		1.52	LB/H	BACT-PSD	0.02	LB/MMBTU
PA-0210	DART CONTAINER CORP OF PA	PA	36-05117	12/14/2001	BOILER, (2)	33.5	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.4	LB/MMBTU	N/A	0	
AL-0180	DUKE ENERGY DALE, LLC	AL	604-0023-X001, X002	12/11/2001	35 MMBTU/HR NAT. GAS FIRED AUXILIARY BOILER	35	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	NATURAL GAS AS EXCLUSIVE FUEL.	0.009	LB/MMBTU	BACT-PSD	0	
IN-0095	ALLEGHENY ENERGY SUPPLY CO. LLC	IN	141-14198-00543	12/7/2001	AUXILIARY BOILER	21	MMBTU/H	Particulate Matter (PM)	NATURAL GAS AS SOLE FUEL	0.0075	LB/MMBTU	BACT-PSD	0.0075	LB/MMBTU
OH-0251	CENTRAL SOYA COMPANY INC.	OH	03-13369	11/29/2001	BOILER, NATURAL GAS	91.2	MMBTU/H	Particulate Matter (PM)		0.46	LB/H	BACT-PSD	0.005	LB/MMBTU
TX-0378	LA PORTE POLYPROPYLENE PLANT	TX	PSD-TX-989	11/5/2001	PACKAGE BOILER BO-4	60	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	NONE INDICATED	0.48	LB/H	N/A	0.008	LB/MMBTU
OK-0071	MCCLAINE ENERGY FACILITY	OK	99-213-C M-1 PSD	10/25/2001	AUXILIARY BOILER	22	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	USE OF LOW ASH FUELS	0.009	LB/MMBTU	BACT-PSD	0.009	LB/MMBTU
AL-0181	DUKE ENERGY AUTAUGA, LLC	AL	201-0012-X001, X002	10/23/2001	31.4 MMBTU/HR NATURAL GAS FIRED BOILER	31.4	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	NATURAL GAS IS EXCLUSIVE FUEL.	0.009	LB/MMBTU	BACT-PSD	0	

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - PM, PM10 PM2.5

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	POLLUTANT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
WA-0292	SATSOP COMBUSTION TURBINE PROJECT	WA	EFSEC/2001-01	10/23/2001	AUXILIARY BOILER	29.3	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		7	LB/D	Other Case-by-Case	0	
OK-0043	WEBERS FALLS ENERGY FACILITY	OK	2000-278-C PSD	10/22/2001	AUXILIARY BOILER	30	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	USE OF LOW ASH FUEL & EFFICIENT COMBUSTION	0.01	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
OH-0265	DRESDEN ENERGY LLC	OH	06-06238	10/16/2001	BOILER, NATURAL GAS	49	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.38	LB/H	BACT-PSD	0.0077	LB/MMBTU
IN-0110	COGENTRIX LAWRENCE CO., LLC	IN	093-12432-00021-4911	10/5/2001	BOILER, AUXILIARY, NATURAL GAS	35	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	CLEAN FUEL, GOOD COMBUSTION PRACTICES	0.02	LB/MMBTU	Other Case-by-Case	0.02	LB/MMBTU
AL-0179	TENASKA TALLADEGA GENERATING STATION	AL	309-0052-X001	10/3/2001	30 MMBTU/HR AUXILIARY BOILER	30	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	NATURAL GAS AS EXCLUSIVE FUEL	0.005	LB/MMBTU	BACT-PSD	0.005	LB/MMBTU
OK-0054	QUAD GRAPHICS OKC FACILITY	OK	2000-306-C PSD	8/21/2001	BOILERS	62.77	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	NATURAL GAS FUEL, GOOD COMBUSTION PRACTICE	0.63	LB/H	BACT-PSD	0	
OK-0044	SMITH POCOLA ENERGY PROJECT	OK	2000-115-C PSD	8/16/2001	AUXILIARY BOILERS, (2)	48	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	USE OF LOW ASH FUEL AND EFFICIENT COMBUSTION	0.72	LB/H	BACT-PSD	0.0076	LB/MMBTU
OH-0263	FREMONT ENERGY CENTER, LLC	OH	03-13549	8/9/2001	AUXILIARY BOILER	80	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.41	LB/H	BACT-PSD	0.0051	LB / MMBTU
AK-0047	MILNE POINT PRODUCTION FACILITY	AK	0073-AC023	7/13/2001	HEATERS (2), H-5701A AND H-5701B	29	MMBTU/H EACH	Particulate Matter (PM)		0.05	GR/DSCF	N/A	0.0071	LB/MMBTU
AK-0047	MILNE POINT PRODUCTION FACILITY	AK	0073-AC023	7/13/2001	HEATERS (2), H-4510A AND H-4510B	14.4	MMBTU/H EACH	Particulate Matter (PM)		0.05	GR/DSCF	N/A	0.0071	LB/MMBTU
AK-0047	MILNE POINT PRODUCTION FACILITY	AK	0073-AC023	7/13/2001	HEATERS (2), H-5302A AND H-5302B	35	MMBTU/H EA	Particulate Matter (PM)		0.05	GR/DSCF	N/A	0.0071	LB/MMBTU
IN-0087	DUKE ENERGY, VIGO LLC	IN	167-12481-00125	6/6/2001	AUXILIARY BOILER, NATURAL GAS (2)	46	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION. LB/H LIMIT IS FOR EACH BOILER.	0.0075	LB/MMBTU	BACT-PSD	0.0075	LB/MMBTU
NV-0039	CHUCK LENZIE GENERATING STATION	NV	1513	6/1/2001	AUXILIARY BOILERS	44.1	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	USE OF PIPELINE-QUALITY NATURAL GAS AND GOOD COMBUSTION CONTROL	0.4	LB/H	BACT-PSD	0.009	LB/MMBTU
OK-0046	THUNDERBIRD POWER PLT	OK	2000-116-C PSD	5/17/2001	AUXILIARY BOILER	20	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	USE OF LOW ASH FUEL	0.0074	LB/MMBTU	BACT-PSD	0.0074	LB/MMBTU
IN-0086	MIRANT SUGAR CREEK, LLC	IN	167-12208-00123	5/9/2001	AUXILIARY BOILER, NATURAL GAS (2)	35	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION. LB/H LIMIT IS FOR EACH BOILER.	0.008	LB/MMBTU	BACT-PSD	0.008	LB/MMBTU
OK-0074	KIAMICHI ENERGY FACILITY	OK	2000-103-C M-1 PSD	5/1/2001	AUXILIARY BOILER	27.5	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES AND DESIGN	0.0076	LB/MMBTU	BACT-PSD	0.0076	LB/MMBTU
OH-0255	AEP WATERFORD ENERGY LLC	OH	06-06739	3/29/2001	BOILER, NATURAL GAS	85.2	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.43	LB/H	BACT-PSD	0.005	LB/MMBTU
OH-0258	PRO TEC COATING COMPANY	OH	03-10957	2/15/2001	BOILERS (4)	20.9	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)		0.04	LB/H	N/A	0.02	LB/MMBTU
AL-0169	BLOUNT MEGAWATT FACILITY	AL	402-0010-X001 AND X002	2/5/2001	AUXILIARY BOILER	40	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	GOOD COMBUSTION PRACTICES	0.02	LB/MMBTU	BACT-PSD	0.02	LB/MMBTU
AL-0168	GENPOWER KELLEY LLC	AL	414-0014-X001 AND X002	1/12/2001	BOILER	83	MMBTU/H	Particulate matter, filterable < 10 µ (FPM10)	EFFICIENT COMBUSTION	0.01	LB/MMBTU	BACT-PSD	0.01	LB/MMBTU
AL-0178	ANNISTON ARMY DEPOT	AL	301-0050	1/5/2001	TWO (2) 13.4 MMBTU/H BOILERS	13.4	MMBTU/H	Particulate Matter (PM)		0.0076	LB/MMBTU	BACT-PSD	0	
AL-0178	ANNISTON ARMY DEPOT	AL	301-0050	1/5/2001	TWO (2) 11.7 MMBTU/H BOILERS	11.7	MMBTU/H	Particulate Matter (PM)		0.0076	LB/MMBTU	BACT-PSD	0	

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - SO2

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT UT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
*FL-0335	SUWANNEE MILL	FL	1210468-001-AC(PSD-FL-417)	9/5/2012	Four(4) Natural Gas Boilers - 46 MMBtu/hour	46	MMBtu/hr	Good Combustion Practice		GR OF S/100 2 SCF	OTHER CASE-BY-CASE	0.003	LB/MMBTU
*OH-0350	REPUBLIC STEEL	OH	P0109191	7/18/2012	Steam Boiler	65	MMBtu/H		0.037	LB/H	N/A	0.0006	LB/MMBTU
NV-0050	MGM MIRAGE	NV	825	11/30/2009	BOILERS - UNITS CC001, CC002, AND CC003 AT CITY CENTER	41.64	MMBTU/H	LIMITING THE FUEL TO NATURAL GAS ONLY.	0.0007	LB/MMBTU	BACT-PSD	0.0007	LB/MMBTU
NV-0050	MGM MIRAGE	NV	825	11/30/2009	BOILERS - UNITS CC026, CC027 AND CC028 AT CITY CENTER	44	MMBTU/H	LIMITING THE FUEL TO NATURAL GAS ONLY	0.0007	LB/MMBTU	BACT-PSD	0.0007	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT FL01	14.34	MMBTU/H	FUEL IS LIMITED TO NATURAL GAS.	0.0006	LB/MMBTU	BACT-PSD	0.0006	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT BA01	16.8	MMBTU/H	FUEL IS LIMITED TO NATURAL GAS.	0.0042	LB/MMBTU	BACT-PSD	0.0042	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT BA03	31.38	MMBTU/H	FUEL IS LIMITED TO NATURAL GAS.	0.0006	LB/MMBTU	BACT-PSD	0.0006	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP01	35.4	MMBTU/H	FUEL IS LIMITED TO NATURAL GAS.	0.0006	LB/MMBTU	BACT-PSD	0.0006	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP03	33.48	MMBTU/H	FUEL IS LIMITED TO NATURAL GAS.	0.0006	LB/MMBTU	BACT-PSD	0.0006	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT CP26	24	MMBTU/H	FUEL IS LIMITED TO NATURAL GAS.	0.0006	LB/MMBTU	BACT-PSD	0.0006	LB/MMBTU
NV-0049	HARRAH'S OPERATING COMPANY, INC.	NV	257	8/20/2009	BOILER - UNIT IP04	16.7	MMBTU/H	FUEL IS LIMITED TO NATURAL GAS.	0.0006	LB/MMBTU	BACT-PSD	0.0006	LB/MMBTU
OK-0135	PRYOR PLANT CHEMICAL	OK	2008-100-C PSD	2/23/2009	BOILERS #1 AND #2	80	MMBTU/H		0.2	LB/H	BACT-PSD	0.0025	LB/MMBTU
SC-0115	GP CLARENDON LP	SC	0680-0046-CB	2/10/2009	NATURAL GAS SPACE HEATERS - 14 UNITS (ID 17)	20.89	MMBTU/H		0.01	LB/H	BACT-PSD	0.0005	LB/MMBTU
OK-0129	CHOUTEAU POWER PLANT	OK	2007-115-C(M-1)PSD	1/23/2009	AUXILIARY BOILER	33.5	MMBTU/H	LOW SULFUR FUEL	0.03	LB/H	N/A	0.0009	LB/MMBTU
SC-0114	GP ALLENDALE LP	SC	0160-0020-CB	11/25/2008	NATURAL GAS SPACE HEATERS - 14 UNITS (ID 18)	20.89	MMBTU/H		0.01	LB/H	BACT-PSD	0.0005	LB/MMBTU
AL-0230	THYSSENKRUPP STEEL AND STAINLESS USA, LLC	AL	503-0095-X001 THRU X026	8/17/2007	3 NATURAL GAS-FIRED BOILERS WITH ULNB & EGR (537-539)	64.9	MMBTU each		0.0006	LB/MMBTU	BACT-PSD	0	
OH-0309	TOLEDO SUPPLIER PARK-PAINT SHOP	OH	04-01358	5/3/2007	BOILER (2), NATURAL GAS	20.4	MMBTU/H		0.01	LB/H	BACT-PSD	0.0006	LB/MMBTU
FL-0286	FPL WEST COUNTY ENERGY CENTER	FL	PSD-FL-354 AND 0990646-001-AC	1/10/2007	TWO GAS-FUELED 10 MMBTU/H PROCESS HEATERS	10	MMBTU/H			GS/100 SCF 2 GAS	BACT-PSD	0.003	LB/MMBTU
NV-0044	HARRAH'S OPERATING COMPANY, INC.	NV	257	1/4/2007	COMMERCIAL/INSTITUTIONAL-SIZE BOILERS	35.4	MMBTU/H	USE OF NATURAL GAS AS THE ONLY FUEL	0.001	LB/MMBTU	BACT-PSD	0.001	LB/MMBTU
TX-0501	TEXSTAR GAS PROCESS FACILITY	TX	PSD-TX 55M3 AND 6051	7/11/2006	POWER STEAM BOILER	93	MMBTU/H		0.05	LB/H	BACT-PSD	0.0005	LB/MMBTU
NY-0095	CAITHNES BELLPORT ENERGY CENTER	NY	PSD-NY-0001	5/10/2006	AUXILIARY BOILER	29.4	MMBTU/H	LOW SULFUR FUEL	0.0005	LB/MMBTU	BACT-PSD	0	LB/MMBTU
AR-0090	NUCOR STEEL, ARKANSAS	AR	1139-AOP-R6	4/3/2006	PICKLE LINE BOILERS, SN-52	12.6	MMBTU EACH		0.1	LB/H	N/A	0.0006	LB/MMBTU
LA-0203	OAKDALE OSB PLANT	LA	PSD-LA-710	6/13/2005	AUXILIARY THERMAL OIL HEATER	66.5	MMBTU/H	USE OF NATURAL GAS AS FUEL AND GOOD COMBUSTION PRACTICES	0.05	LB/H	BACT-PSD	0.001	LB/MMBTU
OH-0252	DUKE ENERGY HANGING ROCK ENERGY FACILITY	OH	07-00503	12/28/2004	BOILERS (2)	30.6	MMBTU/H	THE MAXIMUM S CONTENT OF THE NATURAL GAS SHALL NOT EXCEED 2 GRAINS PER 100 CUBIC FEET.	0.031	LB/H	BACT-PSD	0.001	LB/MMBTU

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - SO2

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
AZ-0047	WELLTON MOHAWK GENERATING STATION	AZ	1001653	12/1/2004	AUXILIARY BOILER	38	MMBTU/H		0.0023	LB/MMBTU	BACT-PSD	0.0023	LB/MMBTU
WI-0227	PORT WASHINGTON GENERATING STATION	WI	04-RV-175	10/13/2004	NATURAL GAS FIRED AUXILLIARY BOILER	97.1	MMBTU/H	NATURAL GAS FUEL	0.06	LB/H	BACT-PSD	0.006	LB/MMBTU
WI-0226	WPS - WESTON PLANT	WI	04-RV-128	8/27/2004	NATURAL GAS FIRED BOILER	46.2	MMBTU/H	NATURAL GAS FUEL ONLY	0.05	LB/H	N/A	0.0011	LB/MMBTU
AR-0077	BLUEWATER PROJECT	AR	2062-AOP-R0	7/22/2004	BOILERS	22	MMBTU/H	NATURAL GAS COMBUSTION ONLY	0.0006	LB/MMBTU	BACT-PSD	0.0006	LB/MMBTU
OH-0276	CHARTER STEEL	OH	13-04176	6/10/2004	BOILER FOR VACUUM OXYGEN DEGASSER VESSEL	28.6	MMBTU/H		0.02	LB/H	BACT-PSD	0.0007	LB/MMBTU
NV-0037	COPPER MOUNTAIN POWER	NV	15347	5/14/2004	AUXILIARY BOILER	60	MMBTU/H	USE OF LOW-SULFUR NATURAL GAS	0.04	LB/H	BACT-PSD	0.0007	LB/MMBTU
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	BOILER, COMMERCIAL	70	MMBTU/H	LOW SULFUR FUEL COMPLIANCE BY USING NATURAL GAS	0.001	LB/MMBTU	BACT-PSD	0.001	LB/MMBTU
IN-0108	NUCOR STEEL	IN	107-16823-00038	11/21/2003	BOILER, NATURAL GAS, (2)	34	MMBTU/H		0.0006	LB/MMBTU	BACT-PSD	0.0006	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR GE TURBINE	41	MMBTU/H		0.0025	LB/MMBTU	BACT-PSD	0.0025	LB/MMBTU
AZ-0049	LA PAZ GENERATING FACILITY	AZ	1001743	9/4/2003	AUXILIARY BOILER FOR SIEMENS TURBINES	55.34	MMBTU/H		0.0025	LB/MMBTU	BACT-PSD	0.0025	LB/MMBTU
OH-0254	DUKE ENERGY WASHINGTON COUNTY LLC	OH	06-06792	8/14/2003	BOILER	30.6	MMBTU/H		0.031	LB/H	BACT-PSD	0.001	LB/MMBTU
TX-0458	JACK COUNTY POWER PLANT	TX	P1026	7/22/2003	AUXILIARY BOILER	36	mmbtu/h		0.3	LB/H	BACT-PSD	0.0083	LB/MMBTU
OK-0090	DUKE ENERGY STEPHENS, LLC STEPHENS ENERGY	OK	2001-157-C M-1 PSD	3/21/2003	BOILER, AUXILIARY	33	MMBTU/H	BACT IS USE OF PIPE-LINE QUALITY NATURAL GAS	0.2	LB/H	BACT-PSD	0.006	LB/MMBTU
TX-0389	BAYTOWN CARBON BLACK PLANT	TX	PSD-1010	12/31/2002	BACK-UP BOILER	13.4	MMBTU/H		0.01	LB/H	Other Case-by-Case	0.0007	LB/MMBTU
IA-0062	EMERY GENERATING STATION	IA	02-357	12/20/2002	AUXILIARY BOILER	68	MMBTU/H	LOW SULFUR FUEL, NG FUEL GAS SHALL BE SWEET NATURAL GAS CONTAINING NO MORE THAN 5 GR S/100 DSCF.	0.0006	LB/MMBTU	Other Case-by-Case	0.0006	LB/MMBTU
TX-0354	ATOFINA CHEMICALS INCORPORATED	TX	PSD-TX-1016	12/19/2002	(2) STEAM BOILERS, X-426A AND X-426B	15.8	MMBTU/H		0.01	LB/H	Other Case-by-Case	0.0006	LB/MMBTU
TX-0408	INDIAN ROCK GATHERING COMPANY LP	TX	PSD-TX-1002	11/22/2002	AUXILIARY BOILER, (2)	6	MMBTU/H		0.01	LB/H	BACT-PSD	0.0017	LB/MMBTU
VA-0255	VA POWER - POSSUM POINT	VA	70225	11/18/2002	BOILER, AUXILIARY	99	MMBTU/H	LOW SULFUR FUEL AND GOOD COMBUSTION PRACTICES.	0.1	LB/H	Other Case-by-Case	0.001	LB/MMBTU
OH-0248	LAWRENCE ENERGY	OH	07-00505	9/24/2002	BOILER	99	MMBTU/H		0.56	LB/H	BACT-PSD	0.0057	LB/MMBTU
LA-0174	PORT HUDSON OPERATIONS	LA	PSD-LA-581 (M-2)	1/25/2002	POWER BOILER NO. 2	65.5	MMBTU/H	FIRING NATURAL GAS	0.26	LB/H	BACT-PSD	0.004	LB/MMBTU
OH-0257	JACKSON COUNTY POWER, LLC	OH	06-06313	12/27/2001	AUXILIARY BOILER	76	MMBTU/H	LOW SULFUR FUEL, NATURAL GAS SULFUR LIMIT - 2 GR/100 SCF	0.5	LB/H	BACT-PSD	0.006	LB/MMBTU
PA-0210	DART CONTAINER CORP OF PA	PA	36-05117	12/14/2001	BOILER, (2)	33.5	MMBTU/H	LOW SULFUR FUEL	4	LB/MMBTU	N/A	0	LB/MMBTU
AL-0180	DUKE ENERGY DALE, LLC	AL	604-0023-X001, X002	12/11/2001	35 MMBTU/HR NAT. GAS FIRED AUXILIARY BOILER	35	MMBTU/H	NATURAL GAS	0.0057	LB/MMBTU	BACT-PSD	0	LB/MMBTU
IN-0095	ALLEGHENY ENERGY SUPPLY CO. LLC	IN	141-14198-00543	12/7/2001	AUXILLIARY BOILER	21	MMBTU/H	LOW SULFUR CONTENT NATURAL GAS	0.0006	LB/MMBTU	BACT-PSD	0.0006	LB/MMBTU
OH-0251	CENTRAL SOYA COMPANY INC.	OH	03-13369	11/29/2001	BOILER, NATURAL GAS	91.2	MMBTU/H		0.055	LB/H	N/A	0.0006	LB/MMBTU

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - SO2

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TX-0378	LA PORTE POLYPROPYLENE PLANT	TX	PSD-TX-989	11/5/2001	PACKAGE BOILER BO-4	60	MMBTU/H	NONE INDICATED	0.95	LB/H	N/A	0.02	LB/MMBTU
OK-0071	MCCLAIN ENERGY FACILITY	OK	99-213-C M-1 PSD	10/25/2001	AUXILIARY BOILER	22	MMBTU/H	USE OF PIPELINE QUALITY NATURAL GAS	0.001	LB/MMBTU	BACT-PSD	0.001	LB/MMBTU
AL-0181	DUKE ENERGY AUTAUGA, LLC	AL	201-0012-X001, X002	10/23/2001	31.4 MMBTU/HR NATURAL GAS FIRED BOILER	31.4	MMBTU/H	NATURAL GAS IS EXCLUSIVE FUEL.	0.0057	LB/MMBTU	BACT-PSD	0	LB/MMBTU
WA-0292	SATSOP COMBUSTION TURBINE PROJECT	WA	EFSEC/2001-01	10/23/2001	AUXILIARY BOILER	29.3	MMBTU/H		0.07	LB/H	BACT-PSD	0.0024	LB/MMBTU
OK-0043	WEBERS FALLS ENERGY FACILITY	OK	2000-278-C PSD	10/22/2001	AUXILIARY BOILER	30	MMBTU/H	USE OF NATURAL GAS	150	PPM	BACT-PSD	0	LB/MMBTU
OH-0265	DRESDEN ENERGY LLC	OH	06-06238	10/16/2001	BOILER, NATURAL GAS	49	MMBTU/H	THE MAXIMUM SULFUR CONTENT OF THE NATURAL GAS SHALL NOT EXCEED 0.3 GRAINS PER 100 STANDARD CUBIC FEET.	0.05	LB/H	BACT-PSD	0.001	LB/MMBTU
IN-0110	COGENTRIX LAWRENCE CO., LLC	IN	093-12432-00021-4911	10/5/2001	BOILER, AUXILIARY, NATURAL GAS	35	MMBTU/H	GOOD COMBUSTION PRACTICE	0.006	LB/MMBTU	BACT-PSD	0.006	LB/MMBTU
OK-0044	SMITH POCOLA ENERGY PROJECT	OK	2000-115-C PSD	8/16/2001	AUXILIARY BOILERS, (2)	48	MMBTU/H	USE OF PIPELINE NATURAL GAS W/SULFUR CONTENT 2 GRAINS SULFUR/100 SCF	0.57	LB/H	BACT-PSD	0.2	LB/MMBTU
OH-0263	FREMONT ENERGY CENTER, LLC	OH	03-13549	8/9/2001	AUXILIARY BOILER	80	MMBTU/H		0.48	LB/H	BACT-PSD	0.006	LB/MMBTU
AK-0047	MILNE POINT PRODUCTION FACILITY	AK	0073-AC023	7/13/2001	HEATERS (2), H-5701A AND H-5701B	29	MMBTU/H EACH	BURN NATURAL GAS WITH NO GREATER THAN 100 PPM H2S. BURN FUEL OIL WITH NO GREATER THAN 0.30 % SULFUR BY WEIGHT.	500	PPM	N/A	2.55	LB/MMBTU
AK-0047	MILNE POINT PRODUCTION FACILITY	AK	0073-AC023	7/13/2001	HEATERS (2), H-4510A AND H-4510B	14.4	MMBTU/H EACH	USE FUEL OIL WITH NO GREATER THAN 0.3% SULFUR BY WEIGHT AND NATURAL GAS WITH NO GREATER THAN 100 PPMVD.	500	PPM	N/A	2.55	LB/MMBTU
AK-0047	MILNE POINT PRODUCTION FACILITY	AK	0073-AC023	7/13/2001	HEATERS (2), H-5302A AND H-5302B	35	MMBTU/H EA	BURN NATURAL GAS WITH NO GREATER THAN 100 PPM H2S. BURN FUEL OIL WITH NO GREATER THAN 0.30 % SULFUR BY WEIGHT.	500	PPM	N/A	2.55	LB/MMBTU
IN-0087	DUKE ENERGY, VIGO LLC	IN	167-12481-00125	6/6/2001	AUXILIARY BOILER, NATURAL GAS (2)	46	MMBTU/H	NATURAL GAS AS FUEL. LIMIT IS FOR EACH BOILER.	0.0006	LB/MMBTU	BACT-PSD	0.0006	LB/MMBTU
NV-0039	CHUCK LENZIE GENERATING STATION	NV	1513	6/1/2001	AUXILIARY BOILERS	44.1	MMBTU/H	USE OF PIPELINE-QUALITY NATURAL GAS	0.4	LB/H	BACT-PSD	0.009	LB/MMBTU
IN-0086	MIRANT SUGAR CREEK, LLC	IN	167-12208-00123	5/9/2001	AUXILIARY BOILER, NATURAL GAS (2)	35	MMBTU/H	LOW SULFUR NATURAL GAS ONLY (LESS THAN 0.8% BY WEIGHT). LB/H LIMIT IS FOR EACH BOILER.	0.0006	LB/MMBTU	BACT-PSD	0.0006	LB/MMBTU
OK-0074	KIAMICHI ENERGY FACILITY	OK	2000-103-C M-1 PSD	5/1/2001	AUXILIARY BOILER	27.5	MMBTU/H	USE OF NATURAL GAS WITH LOW SULFUR CONTENT	2	GR/100 SCF	BACT-PSD	0.003	LB/MMBTU
OH-0255	AEP WATERFORD ENERGY LLC	OH	06-06739	3/29/2001	BOILER, NATURAL GAS	85.2	MMBTU/H	LOW S NATURAL GAS, 2 GR/100 SCF	0.05	LB/H	BACT-PSD	0.0006	LB/MMBTU
AL-0169	BLOUNT MEGAWATT FACILITY	AL	402-0010-X001 AND X002	2/5/2001	AUXILIARY BOILER	40	MMBTU/H	GOOD COMBUSTION PRACTICES	0.006	LB/MMBTU	BACT-PSD	0.006	LB/MMBTU
AL-0168	GENPOWER KELLEY LLC	AL	414-0014-X001 AND X002	1/12/2001	BOILER	83	MMBTU/H		0.001	LB/MMBTU	BACT-PSD	0.001	LB/MMBTU

RBLC REVIEW FOR ALL BOILERS (< 100 MMBTU/HR AND >10 MMBTU/HR) - H2SO4

RBLCID	FACILITY NAME	FACILITY STATE	PERMIT NUMBER	PERMIT ISSUANCE DATE	PROCESS NAME	THROUGHPUT	THROUGHPUT UNIT	CONTROL METHOD DESCRIPTION	EMISSION LIMIT 1	EMISSION LIMIT 1 UNIT	CASE-BY-CASE BASIS	STANDARD EMISSION LIMIT	STANDARD EMISSION LIMIT UNIT
MD-0040	CPV ST CHARLES	MD	CPCN CASE NO.	11/12/2008	BOILER	93	MMBTU/H		0.0001	LB/MMBTU	BACT-PSD	0	
MN-0054	MANKATO ENERGY CENTER	MN	01300098-001	12/4/2003	BOILER, COMMERCIAL	70	MMBTU/H	LOW SULFUR FUEL	0.8	GR/100 SCF	BACT-PSD	0	