

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 8-5736-00004/00013 Renewal Number: 1



07/10/2007

Facility Identification Data

Name: AES GREENIDGE LLC
Address: 590 PLANT RD
DRESDEN, NY 14441

Owner/Firm

Name: AES EASTERN ENERGY LP
Address: 130 E SENECA ST - STE 505
ITHACA, NY 14850, USA
Owner Classification: Corporation/Partnership

Permit Contacts

Division of Environmental Permits:
Name: ROGER T MCDONOUGH
Address: 6274 EAST AVON LIMA RD
AVON, NY 14414-9519

Division of Air Resources:
Name: FRANC GRABAR
Address: 6274 EAST AVON-LIMA ROAD
AVON, NY 14414
Phone:5852262466

Air Permitting Contact:
Name: DOUGLAS J ROLL
Address: AES GREENIDGE LLC
PO BOX 187
DRESDEN, NY 14441-0187

Permit Description

Introduction

The Title V operating air permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes, that makes the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose for this permit review report is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This report will also include background narrative and explanations of regulatory decisions made by the reviewer. It should be emphasized that this permit review report, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

Summary Description of Proposed Project

AES GREENIDGE LLC IS APPLYING FOR A RENEWAL OF ITS TITLE V FACILITY OPERATING PERMIT.

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Attainment Status

AES GREENIDGE LLC is located in the town of TORREY in the county of YATES. The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

Criteria Pollutant	Attainment Status
Particulate Matter (PM)	ATTAINMENT
Particulate Matter < 10µ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone* ATTAINMENT)	TRANSPORT REGION (NON-ATTAINMENT)
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

* Ozone is regulated in terms of the emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NOx) which are ozone precursors.

** NOx has a separate ambient air quality standard in addition to being an ozone precursor

Facility Description

SEE ATTACHED "MARK-UP" OF CURRENT PERMIT.

Permit Structure and Description of Operations

The Title V permit for AES GREENIDGE LLC

is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process.

A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device.

[NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to

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identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types:

- combustion - devices which burn fuel to generate heat, steam or power
- incinerator - devices which burn waste material for disposal
- control - emission control devices
- process - any device or contrivance which may emit air contaminants that is not included in the above categories.

AES GREENIDGE LLC is defined by the following emission unit(s):

Emission unit G00004 - SEE ATTACHED MARK-UP OF CURRENT PERMIT.

Emission unit G00004 is associated with the following emission points (EP):
00004

It is further defined by the following process(es):

Process: P61 is located at Building BOILER - EMISSION SOURCE B0006 FIRES BITUMINOUS COAL AS ITS PRIMARY BASELINE FUEL (0-100% BY WEIGHT OF TOTAL FUEL ENTERING THE BOILER). NITROGEN OXIDES EMISSIONS ARE CONTROLLED THROUGH THE USE OF OVERFIRE AIR COMBUSTION PRACTICES IN CONJUNCTION WITH SELECTIVE NON - CATALYTIC REDUCTION (SNCR) AND SELECTIVE CATALYTIC REDUCTION (SCR). MERCURY EMISSIONS ARE CONTROLLED USING POWDERED ACTIVATED CARBON INJECTION AND SULFUR DIOXIDE EMISSIONS ARE CONTROLLED USING A LIME SPRAY DRY REACTOR SYSTEM. PARTICULATE MATTER EMISSIONS ARE CONTROLLED BY THE USE OF A BAGHOUSE. SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) ON EMISSION POINT 00004. PARTICULATE MATTER EMISSIONS ARE MEASURED BY STACK TESTING (WHEN REQUESTED BY NYSDEC) EMISSION POINT 00004.

Process: P62 is located at Building BOILER - EMISSION SOURCE B00006 USES NO. 2 FUEL OIL AS A STARTUP FUEL AND FOR FLAME STABILIZATION. IT IS USED ON AN AS NEEDED BASIS. PARTICULATE MATTER EMISSIONS ARE CONTROLLED BY THE USE OF A BAGHOUSE. THERE ARE NO SPECIFIC FUEL OIL CONTROLS FOR SULFUR DIOXIDE OR NITROGEN OXIDES EMISSIONS. SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) ON EMISSION POINT 00004.

Process: P63 is located at Building BOILER - EMISSION SOURCE B0006 IS PERMITTED TO FIRE WASTE OIL. IT IS USED ON AN OCCASIONAL BASIS. EMISSION SOURCE B0006 IS LIMITED TO BURNING WASTE OIL AT A MAXIMUM RATE OF 5 GALLONS PER MINUTE. THE WASTE OIL MUST MEET THE SPECIFICATIONS OF 6 NYCRR PART 225-2. PARTICULATE MATTER EMISSIONS ARE CONTROLLED BY THE USE OF A BAGHOUSE. WHEN WASTE OIL ONLY IS BEING FIRED, THERE ARE NO SPECIFIC EMISSION CONTROLS FOR NITROGEN OXIDES AND SULFUR DIOXIDE. HOWEVER, WHEN WASTE OIL IS BEING BURNED ALONG WITH BASELINE FUELS, THE NITROGEN OXIDES AND SULFUR DIOXIDE EMISSION CONTROL SYSTEMS ARE IN USE. SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) ON EMISSION POINT 00004.]

Process: P64 is located at Building BOILER - EMISSION SOURCE B0006 IS PERMITTED TO FIRE

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SUB-BITUMINOUS (REDUCED SULFUR) COAL AS A SUPPLEMENTAL FUEL AT UP TO 30% BY WEIGHT OF THE TOTAL FUEL ENTERING THE BOILER. NITROGEN OXIDES EMISSIONS ARE CONTROLLED THROUGH THE USE OF OVERFIRE AIR COMBUSTION PRACTICES IN CONJUNCTION WITH SELECTIVE NON-CATALYTIC REDUCTION (SNCR) AND SELECTIVE CATALYTIC REDUCTION (SCR). MERCURY EMISSIONS ARE CONTROLLED USING POWDERED ACTIVATED CARBON INJECTION AND SULFUR DIOXIDE EMISSIONS ARE CONTROLLED USING A LIME SPRAY DRY REACTOR SYSTEM. PARTICULATE MATTER EMISSIONS ARE CONTROLLED BY THE USE OF A BAGHOUSE. SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) ON EMISSION POINT 00004. PARTICULATE MATTER EMISSIONS ARE MEASURED BY STACK TESTING (WHEN REQUESTED BY NYSDEC) EMISSION POINT 00004.

Process: P65 is located at Building BOILER - EMISSION SOURCE B0006 IS PERMITTED TO FIRE CLEAN UNADULTERATED WOOD AS A SUPPLEMENT TO BITUMINOUS COAL (% BY WEIGHT OF TOTAL FUEL ENTERING THE BOILER OTHERWISE UNRESTRICTED). NITROGEN OXIDES EMISSIONS ARE CONTROLLED THROUGH THE USE OF OVERFIRE AIR COMBUSTION PRACTICES IN CONJUNCTION WITH SELECTIVE NON-CATALYTIC REDUCTION (SNCR) AND SELECTIVE CATALYTIC REDUCTION (SCR). MERCURY EMISSIONS ARE CONTROLLED USING POWDERED ACTIVATED CARBON INJECTION AND SULFUR DIOXIDE EMISSIONS ARE CONTROLLED USING A LIME SPRAY DRY REACTOR SYSTEM. PARTICULATE MATTER EMISSIONS ARE CONTROLLED BY THE USE OF A BAGHOUSE. SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) ON EMISSION POINT 0004. PARTICULATE MATTER EMISSIONS ARE MEASURED BY STACK TESTING (WHEN REQUESTED BY NYSDEC) EMISSION POINT 0004.

Process: P69 is located at Building BOILER - EMISSION SOURCE B0006 USES DIESEL FUEL OR KEROSENE AS A STARTUP FUEL AND FOR FLAME STABILIZATION. IT IS USED ON AN AS NEEDED BASIS. PARTICULATE MATTER EMISSIONS ARE CONTROLLED BY THE USE OF A BAGHOUSE. THERE ARE NO SPECIFIC FUEL OIL CONTROLS FOR SULFUR DIOXIDE OR NITROGEN OXIDES EMISSIONS. SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) ON EMISSION POINT 00004.

Process: P6A EMISSION SOURCE B0006 IS PERMITTED TO FIRE WASTE WOOD PRODUCT FROM THE LAMINATED PARTICLE BOARD FURNITURE MANUFACTURING PROCESS AS A SUPPLEMENT TO BITUMINOUS COAL, SUB-BITUMINOUS COAL AND/OR CLEAN UNADULTERATED WOOD AT UP TO 30% BY WEIGHT OF THE TOTAL FUEL ENTERING THE BOILER. WASTE WOOD PRODUCT MAY NOT BE MIXED WITH ANY OTHER ALTERNATIVE FUEL. NITROGEN OXIDES EMISSIONS ARE CONTROLLED THROUGH THE USE OF OVERFIRE AIR COMBUSTION PRACTICES IN CONJUNCTION WITH SELECTIVE NON-CATALYTIC REDUCTION (SNCR) AND SELECTIVE CATALYTIC REDUCTION (SCR). MERCURY EMISSIONS ARE CONTROLLED USING POWDERED ACTIVATED CARBON INJECTION AND SULFUR DIOXIDE EMISSIONS ARE CONTROLLED USING A LIME SPRAY DRY REACTOR SYSTEM. PARTICULATE MATTER EMISSIONS ARE CONTROLLED BY THE USE OF A BAGHOUSE. SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) ON EMISSION POINT 0004. PARTICULATE MATTER EMISSIONS ARE MEASURED BY STACK

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TESTING (WHEN REQUESTED BY NYSDEC) EMISSION POINT 0004.

Process: P6BEMISSION SOURCE B00006 USES NATURAL GAS FOR A PORTION OF THE BOILER'S HEAT INPUT WHEN OPERATING IN GAS REBURN MODE. WHILE THERE IS NO SPECIFIC LIMIT ON THE AMOUNT OF NATURAL GAS THAT MAY BE BURNED, EMISSION SOURCE B00006 IS ONLY CAPABLE OF USING NATURAL GAS FOR APPROXIMATELY 20% OF THE TOTAL BOILER HEAT INPUT.

Process: P6X is located at GROUND - Emission source B0006 is permitted to fire a variety of fuels in various mixtures; the individual fuels and any applicable limits regarding their use are described separately. Process P6X has been created to calculate emissions for the various mixtures. Processes P61, P65 and P6B can be combusted alone or in any combination; P6A can be combusted (within certain limits as detailed in the process description) with any combination of P61/P65/P6B. Because the processes are not mutually exclusive, it is appropriate to create a combined process description.

Emission unit G00005 - SEE ATTACHED MARK-UP OF CURRENT PERMIT.

It is further defined by the following process(es):

Process: CHS is located at Building CPILE1 - ALL POTENTIAL PROCESS OPERATIONS ASSOCIATED WITH COAL STORAGE AND HANDLING. ALL EMISSIONS ARE FUGITIVE.

Process: WHS is located at Building WOODPILE - ALL POTENTIAL PROCESS OPERATIONS ASSOCIATED WITH WOOD STORAGE AND HANDLING. ALL EMISSIONS ARE FUGITIVE.

Emission unit G00006 - GREENIDGE STATION IS AN ELECTRIC GENERATING STATION CONSISTING OF TWO GENERATOR UNITS. THE FOLLOWING IDENTIFIERS WILL BE USED IN RELATION TO THIS EMISSION UNIT. ASH HANDLING SYSTEM: EMISSION UNIT G00006; FLYASH STORAGE SILO: EMISSION SOURCE FLS1; ASH DI SPOSAL LANDFILL: EMISSION SOURCE LNDFL; FLYASH AND BOTTOM ASH HANDLING AND DISPOSAL: PROCESS ASH. FLYASH COLLECTED BY THE BOILER NOS. 4 AND 5 MULTICLONES AND ELECTROSTATIC PRECIPATOR, THE BOILER NO. 6 ECONOMIZER AND AIR HEATER HOPPERS, AND THE BOILER NO. 6 BAGHOUSE IS PNEUMATICALLY CONVEYED TO THE FLYASH STORAGE SILO (FLYS1) WHICH IS EQUIPPED WITH A BIN VENT BAGHOUSE. THE FLYASH IS THEN MIXED WITH WATER IN A PUGMILL PRIOR TO BEING DISCHARGED INTO AWAITING TRUCKS FOR TRANSPORT TO THE ON-SITE ASH DISPOSAL LANDFILL (LNDFL), WHERE IT IS DUMPED, GRADED, COMPACTED AND COVERED. BOTTOM ASH FROM EACH BOILER IS QUENCHED AND PUMPED TO A SETTLING POIND. SETTLED ASH IS PERIODICALLY DREDGED AND PLACED ON A PILE TO DRY BEFORE BEING SOLD FOR REUSE UNDER A BENEFICIAL USE DETERMINATION (BUD). THE FLYASH STORAGE VENT IS CONTROLLED BY A BAGHOUSE AND IS AN EXEMPT SOURCE IN ACCORDANCE WITH 6 NYCRR PART 201-3.2(c)(27). ALL OTHER POTENTIAL EMISSIONS FROM THIS EMISSION UNIT (PARTICULATE MATTER AND POSSIBLY AMMONIA) ARE FUGITIVE AND THERE ARE NO EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS (I.E., ONLY FACILITY-WIDE REQUIREMENTS APPLY).

It is further defined by the following process(es):

Process: ASH is located at Building YARD - ALL PROCESS OPERATIONS ASSOCIATED WITH FLYASH AND BOTTOM ASH HANDLING AND DISPOSAL. ALL NON-EXEMPT EMISSIONS ARE FUGITIVE.

Emission unit G00007 - GREENIDGE STATION IS AN ELECTRIC GENERATING STATION

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CONSISTING OF TWO GENERATOR UNITS. THE FOLLOWING IDENTIFIERS WILL BE USED IN RELATION TO THIS EMISSION UNIT. LIME HYDRATING SYSTEM (FOR THE GAS DESULFURIZATION SYSTEM): EMISSION UNIT G00007; LIME HYDRA TPR" EMISSION SOURCE HYD07; AIR CLASSIFIER: EMISSION SOURCE SPR07; LIME HYDRATOR WET SCRUBBER: EMISSION CONTROL SBR07; AIR CLASSIFIER BAGHOUSE: EMISSION SOURCE BAG07. QUICKTIME (CaO) IS DELIVERED BY TRUCK AND PNEUMATICALLY UNLOADED TO A STORAGE SILO EQUIP PED WITH A BIN VENT FILTER. THE QUICKLIME IS TRANSFERRED TO THE LIME HYDRATOR (HYD07) VIA A BELT CONVEYOR WHERE IT IS MIXED WITH WATER. HYDRATED LIME IS DICHARGED THROUGH A SCREW FEEDER AND TRANSFERRED TO THE AIR CLASSIFIER (SPRO07) VIA BUCKET ELEVATOR. CLASSIFIED HYDRATED MATERIAL IS PNEUMATICALLY TRANSFERRED TO A STORAGE SILO EQUIPPED WITH A BIN VENT FILTER FOR USE AS FEED TO THE FLUE GAS DESULFURIZATION SYSTEM SPRAY DRY REACTOR. OVERSIZE MATERIAL IS RECIRCULATED TO THE HYDRATOR AND GRIT IS REMOVED A ND DISPOSED OF. EMISSIONS FROM THE LIME HYDRATOR (HYD07) ARE CONTROLLED BY A WET SCRUBBER (SBR07) AND DISCHARGE ED THROUGH EMISSION POINT 00071. EXHAUST FROM THE AIR CLASSIFIER (SPR07) IS PASSED THROUGH A BAGHOUSE (BAG07) AND IS DISCHARGED THROUGH EMISS ION POINT 00072. THE QUICKLIME AND HYDRATED LIME STORAGE SILOS ARE EXEMPT SOURCES IN ACCORDANCE WITH 6 NYCRR PART 201-3.2(c)(27).

Emission unit G00007 is associated with the following emission points (EP): 00071, 00072

It is further defined by the following process(es):

Process: P7L is located at Building BOILER - ALL PROCESS OPERATIONS ASSOCIATED WITH LIME HYDRATING SYSTEM.

Emission unit G00008 - Aqueous urea system

It is further defined by the following process(es):

Process: P8U is located at Building BOILER - Aqueous urea system

Emission unit G00003 - Emission unit 3 consists of two Babcock & Wilson dry bottom wall fired pulverized coal boilers rated at 380 mmBTU/hr. The boilers (4 and 5) fire mainly bituminous coal, but can also burn clean wood and natural gas. Number 2 oil and diesel fuel is used for startup and flame stabilization as needed. Particulate control is provided by a multiclone mechanical particulate collector, and by an electrostatic precipitator. Unit 3 is sometimes operated as a synchronous condenser, rather than as a generating unit. In this mode, the generator acts like a motor, absorbing power from the grid and helping smooth out suden changes in system voltage caused by changes in demand. The spinning generator causes the turbine to spin, and cooling steam is needed to prevent damage to the turbine. The small amount of dsteam needed for this is supplied by burning fuel oil in boilers 4 and 5.

It is further defined by the following process(es):

Process: P41 is located at GROUND, Building BOILER - EMISSION SOURCE B0004 FIRES BITUMINOUS COAL AS ITS PRIMARY BASELINE FUEL (0-100% BY WEIGHT OF TOTAL FUEL ENTERING THE BOILER). PARTICULATE MATTER EMISSIONS ARE CONTROLLED BY THE USE OF A MULTICLONE MECHANICAL COLLECTOR AND AN ELECTROSTATIC PRECIPITATOR AND MEASURED (WHEN REQUESTED BY DEC) AT EMISSION POINT 00003. SULFUR DIOXIDE EMISSIONS ARE CONTROLLED BY LIMITING THE SULFUR CONTENT OF

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THE TOTAL FUEL, NITROGEN OXIDES EMISSIONS ARE CONTROLLED THROUGH GOOD COMBUSTION PRACTICES. NITROGEN OXIDES LIMITS ON A SYSTEM-WIDE BASIS ARE ESTABLISHED IN NYSEG'S TITLE 1 NOX COMPLIANCE PLAN. SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSION MONITORING SYSTEM ON EMISSION POINT 00003.

Process: P42 is located at GROUND, Building BOILER - EMISSION SOURCE B0004 USES NO. 2 FUEL OIL AS A STARTUP FUEL AND FOR FLAME STABILIZATION. IT IS USED ON AN AS-NEEDED BASIS. THERE ARE NO SPECIFIC FUEL OIL CONTROLS FOR SULFUR DIOXIDE OR NITROGEN OXIDES EMISSIONS. WHEN OPERATING AS A GENERATOR, SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSION MONITORING SYSTEM ON EMISSION POINT 00003; WHEN OPERATED AS A SYNCHRONOUS CONDENSER, SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY ALTERNATIVE METHODS DETAILED IN THE GREENIDGE STATION UNIT 3 CEM MONITORING PLAN (MARCH 1996).

Process: P43 is located at GROUND, Building BOILER - EMISSION SOURCE B0004 IS PERMITTED TO FIRE WASTE OIL. IT IS USED ON AN OCCASIONAL BASIS. WHEN WASTE OIL ONLY IS BEING FIRED, THE ELECTROSTATIC PRECIPITATORS ARE NOT ENERGIZED. THE PRECIPITATORS ARE ENERGIZED, HOWEVER, WHEN WASTE OIL IS BEING BURNED ALONG WITH BASELINE FUELS. EMISSION SOURCE B0004 IS LIMITED TO BURNING WASTE OIL AT A MAXIMUM RATE OF 5 GALLONS PER MINUTE. THE WASTE OIL MUST MEET THE SPECIFICATIONS OF 6 NYCRR 225-2. WHEN OPERATING AS A GENERATOR, SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSION MONITORING SYSTEM ON EMISSION POINT 00003; WHEN OPERATED AS A SYNCHRONOUS CONDENSER, SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY ALTERNATIVE METHODS DETAILED IN THE GREENIDGE STATION UNIT 3 CEM MONITORING PLAN.

Process: P44 is located at Building BOILER - Burning of sub-bituminous (reduced sulfur) coal as a supplemental fuel at up to 30% by weight entering the boiler B0004 (boiler 4.)

Process: P45 is located at GROUND, Building BOILER - EMISSION SOURCE B0004 IS PERMITTED TO FIRE CLEAN UNADULTERATED WOOD AS A PRIMARY BASELINE FUEL (0-100% BY WEIGHT OF TOTAL FUEL ENTERING THE BOILER). PARTICULATE MATTER EMISSIONS ARE CONTROLLED BY THE USE OF A MULTICLONE MECHANICAL COLLECTOR AND AN ELECTROSTATIC PRECIPITATOR AND MEASURED (WHEN REQUESTED BY DEC) AT EMISSION POINT 00003. SULFUR DIOXIDE EMISSIONS ARE CONTROLLED BY LIMITING THE SULFUR CONTENT OF THE TOTAL FUEL. NITROGEN OXIDES EMISSIONS ARE CONTROLLED THROUGH GOOD COMBUSTION PRACTICES. NITROGEN OXIDES LIMITS ON A SYSTEM-WIDE BASIS ARE ESTABLISHED IN NYSEG'S TITLE 1 NOX COMPLIANCE PLAN. SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSION MONITORING SYSTEM ON EMISSION POINT 00003.

Process: P49 is located at GROUND, Building BOILER - EMISSION SOURCE B0004 USES DIESEL FUEL AS A STARTUP FUEL AND FOR FLAME STABILIZATION. IT IS USED ON AN AS-NEEDED BASIS. THERE ARE NO SPECIFIC DIESEL FUEL CONTROLS FOR SULFUR DIOXIDE OR NITROGEN OXIDES EMISSIONS. WHEN OPERATING AS A GENERATOR, SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSION MONITORING SYSTEM ON EMISSION POINT 00003; WHEN OPERATED AS A

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SYNCHRONOUS CONDENSER, SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY ALTERNATIVE METHODS DETAILED IN THE GREENIDGE STATION UNIT 3 CEM MONITORING PLAN.

Process: P4A is located at GROUND, Building BOILER - EMISSION SOURCE B0004 IS PERMITTED TO FIRE THE WASTE WOOD PRODUCT FROM BUSH INDUSTRY'S FURNITURE MANUFACTURING PROCESS (BUSH WOOD) WITH COAL AND/OR CLEAN UNADULTERATED WOOD (BASELINE FUELS); BUSH WOOD MAY NOT BE MIXED WITH ANY OTHER ALTERNATE FUEL. BUSH WOOD MAY BE FIRED AT A CONCENTRATION UP TO 30% BY WEIGHT OF TOTAL FUEL ENTERING THE BOILER. PARTICULATE MATTER EMISSIONS ARE CONTROLLED BY THE USE OF A MULTICLONE MECHANICAL COLLECTOR AND AN ELECTROSTATIC PRECIPITATOR AND MEASURED (WHEN REQUESTED BY DEC) AT EMISSION POINT 00003. SULFUR DIOXIDE EMISSIONS ARE CONTROLLED BY LIMITING THE SULFUR CONTENT OF THE TOTAL FUEL. NITROGEN OXIDES EMISSIONS ARE CONTROLLED THROUGH GOOD COMBUSTION PRACTICES. NITROGEN OXIDES LIMITS ON A SYSTEM-WIDE BASIS ARE ESTABLISHED IN NYSEG'S TITLE 1 NOX COMPLIANCE PLAN. SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSION MONITORING SYSTEM ON EMISSION POINT 00003.

Process: P4X is located at GROUND - Emission source B0004 is permitted to fire a variety of fuels in various mixtures; the individual fuels and any applicable limits regarding their use are described separately. Process P4X has been created to calculate emissions for the various mixtures. Processes P41 and P45 can be combusted alone or in any combination; P4A can be combusted (with certain limits as detailed in the process description) with any combination of P41/P45. Because the processes are not mutually exclusive, it is appropriate to create a combined process description.

Process: P51 is located at GROUND, Building BOILER - EMISSION SOURCE B0005 FIRES BITUMINOUS COAL AS ITS PRIMARY BASELINE FUEL (0-100% BY WEIGHT OF TOTAL FUEL ENTERING THE BOILER). PARTICULATE MATTER EMISSIONS ARE CONTROLLED BY THE USE OF A MULTICLONE MECHANICAL COLLECTOR AND AN ELECTROSTATIC PRECIPITATOR AND MEASURED (WHEN REQUESTED BY DEC) AT EMISSION POINT 00003. SULFUR DIOXIDE EMISSIONS ARE CONTROLLED BY LIMITING THE SULFUR CONTENT OF THE TOTAL FUEL. NITROGEN OXIDES EMISSIONS ARE CONTROLLED THROUGH GOOD COMBUSTION PRACTICES. NITROGEN OXIDES LIMITS ON A SYSTEM-WIDE BASIS ARE ESTABLISHED IN NYSEG'S TITLE 1 NOX COMPLIANCE PLAN. SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSION MONITORING SYSTEM ON EMISSION POINT 00003.

Process: P52 is located at GROUND, Building BOILER - EMISSION SOURCE B0005 USES NO. 2 FUEL OIL AS A STARTUP FUEL AND FOR FLAME STABILIZATION. IT IS USED ON AN AS-NEEDED BASIS. THERE ARE NO SPECIFIC FUEL OIL CONTROLS FOR SULFUR DIOXIDE OR NITROGEN OXIDES EMISSIONS. WHEN OPERATING AS A GENERATOR, SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSION MONITORING SYSTEM ON EMISSION POINT 00003; WHEN OPERATED AS A SYNCHRONOUS CONDENSER, SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY ALTERNATIVE METHODS DETAILED IN THE GREENIDGE STATION UNIT 3 CEM MONITORING PLAN.

Process: P53 is located at GROUND, Building BOILER - EMISSION SOURCE B0005 IS PERMITTED TO FIRE WASTE OIL. IT IS USED ON AN OCCASIONAL BASIS. WHEN WASTE

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OIL ONLY IS BEING FIRED, THE ELECTROSTATIC PRECIPITATORS ARE NOT ENERGIZED. THE PRECIPITATORS ARE ENERGIZED, HOWEVER, WHEN WASTE OIL IS BEING BURNED ALONG WITH BASELINE FUELS. EMISSION SOURCE B0005 IS LIMITED TO BURNING WASTE OIL AT A MAXIMUM RATE OF 5 GALLONS PER MINUTE. THE WASTE OIL MUST MEET THE SPECIFICATIONS OF 6 NYCRR 225-2. THERE ARE NO SPECIFIC CONTROLS FOR SULFUR DIOXIDE OR NITROGEN OXIDES EMISSIONS. WHEN OPERATING AS A GENERATOR, SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSION MONITORING SYSTEM ON EMISSION POINT 00003; WHEN OPERATED AS A SYNCHRONOUS CONDENSER, SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY ALTERNATIVE METHODS DETAILED IN THE GREENIDGE STATION UNIT 3 CEM MONITORING PLAN.

Process: P54 is located at Building BOILER - Burning of sub-bituminous coal at up to 30% by weight in emission source B0005 (boiler 5.)

Process: P55 is located at GROUND, Building BOILER - EMISSION SOURCE B0005 IS PERMITTED TO CLEAN UNADULTERATED WOOD AS A PRIMARY BASELINE FUEL (0-100% BY WEIGHT OF TOTAL FUEL ENTERING THE BOILER). PARTICULATE MATTER EMISSIONS ARE CONTROLLED BY THE USE OF A MULTICLONE MECHANICAL COLLECTOR AND AN ELECTROSTATIC PRECIPITATOR AND MEASURED (WHEN REQUESTED BY DEC) AT EMISSION POINT 00003. SULFUR DIOXIDE EMISSIONS ARE CONTROLLED BY LIMITING THE SULFUR CONTENT OF THE TOTAL FUEL. NITROGEN OXIDES EMISSIONS ARE CONTROLLED THROUGH GOOD COMBUSTION PRACTICES. NITROGEN OXIDES LIMITS ON A SYSTEM-WIDE BASIS ARE ESTABLISHED IN NYSEG'S TITLE 1 NOX COMPLIANCE PLAN. SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSION MONITORING SYSTEM ON EMISSION POINT 00003.

Process: P59 is located at GROUND, Building BOILER - EMISSION SOURCE B0005 USES DIESEL FUEL AS A STARTUP FUEL AND FOR FLAME STABILIZATION. IT IS USED ON AN AS-NEEDED BASIS. THERE ARE NO SPECIFIC DIESEL FUEL CONTROLS FOR SULFUR DIOXIDE OR NITROGEN OXIDES EMISSIONS. WHEN OPERATING AS A GENERATOR, SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSION MONITORING SYSTEM ON EMISSION POINT 00003; WHEN OPERATED AS A SYNCHRONOUS CONDENSER, SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY ALTERNATIVE METHODS DETAILED IN THE GREENIDGE STATION UNIT 3 CEM MONITORING PLAN.

Process: P5A is located at GROUND, Building BOILER - EMISSION SOURCE B0005 IS PERMITTED TO FIRE THE WASTE WOOD PRODUCT FROM BUSH INDUSTRY'S FURNITURE MANUFACTURING PROCESS (BUSH WOOD) WITH COAL AND/OR CLEAN UNADULTERATED WOOD (BASELINE FUELS); BUSH WOOD MAY NOT BE MIXED WITH ANY OTHER ALTERNATE FUEL. BUSH WOOD MAY BE FIRED AT A CONCENTRATION UP TO 30% BY WEIGHT OF TOTAL FUEL ENTERING THE BOILER. PARTICULATE MATTER EMISSIONS ARE CONTROLLED BY THE USE OF A MULTICLONE MECHANICAL COLLECTOR AND AN ELECTROSTATIC PRECIPITATOR AND MEASURED (WHEN REQUESTED BY DEC) AT EMISSION POINT 00003. SULFUR DIOXIDE EMISSIONS ARE CONTROLLED BY LIMITING THE SULFUR CONTENT OF THE TOTAL FUEL. NITROGEN OXIDES EMISSIONS ARE CONTROLLED THROUGH GOOD COMBUSTION PRACTICES. NITROGEN OXIDES LIMITS ON A SYSTEM-WIDE BASIS ARE ESTABLISHED IN NYSEG'S

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TITLE 1 NOX COMPLIANCEPLAN. SULFUR DIOXIDE AND NITROGEN OXIDES EMISSIONS ARE MEASURED BY THE CONTINUOUS EMISSION MONITORING SYSTEM ON EMISSION POINT 00003.

Process: P5X is located at GROUND - Emission source B005 is permitted to fir a variety of fuels in various mixtures; the individual fuels and any applicable limits regarding their use are described separately. Process P5X has been created to calculate emissions for the various mixtures. Processes P51 and P55 can be combusted alone or in any combination; P5A can be combusted (within certain limits as detailed in the process description) with any combination of P51/P55. Because the processes are not mutually exclusive, it is appropriate to create a combined process description.

Title V/Major Source Status

AES GREENIDGE LLC is subject to Title V requirements. This determination is based on the following information:

The facility is Title 5 major.

Program Applicability

The following chart summarizes the applicability of AES GREENIDGE LLC with regards to the principal air pollution regulatory programs:

Regulatory Program	Applicability
PSD	YES
NSR (non-attainment)	NO
NESHAP (40 CFR Part 61)	NO
NESHAP (MACT - 40 CFR Part 63)	NO
NSPS	NO
TITLE IV	NO
TITLE V	YES
TITLE VI	NO
RACT	YES
SIP	YES

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PSD Prevention of Significant Deterioration (40 CFR 52) - requirements which pertain to major stationary sources located in areas which are in attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NSR New Source Review (6 NYCRR Part 231) - requirements which pertain to major stationary sources located in areas which are in non-attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NESHAP National Emission Standards for Hazardous Air Pollutants (40 CFR 61) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's)

MACT Maximum Achievable Control Technology (40 CFR 63) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.

NSPS New Source Performance Standards (40 CFR 60) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations have been proposed by publication in the Federal Register and only to the specific contaminant(s) listed in the regulation.

Title IV Acid Rain Control Program (40 CFR 72 thru 78) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subparts A thru G) - federal requirements that apply to sources which use a minimum quantity of CFC's (chlorofluorocarbons), HCFC's (hydrofluorocarbons) or other ozone depleting substances or regulated substitute substances in equipment such as air conditioners, refrigeration equipment or motor vehicle air conditioners or appliances.

RACT Reasonably Available Control Technology (6 NYCRR Parts 212.10, 226, 227-2, 228, 229, 230, 232, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

SIP State Implementation Plan (40 CFR 52, Subpart HH) - as per the CAAA, all states are empowered and required to devise the specific combination of controls that, when implemented, will bring about attainment of ambient air quality standards established by the federal government and the

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individual state. This specific combination of measures is referred to as the SIP. The term here refers to those state regulations that are approved to be included in the SIP and thus are considered federally enforceable.

Compliance Status

Facility is in compliance with all requirements

SIC Codes

SIC or Standard Industrial Classification code is an industrial code developed by the federal Office of Management and Budget for use, among other things, in the classification of establishments by the type of activity in which they are engaged. Each operating establishment is assigned an industry code on the basis of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Larger facilities typically have more than one SIC code.

SIC Code	Description
4911	ELECTRIC SERVICES

SCC Codes

SCC or Source Classification Code is a code developed and used by the USEPA to categorize processes which result in air emissions for the purpose of assessing emission factor information. Each SCC represents a unique process or function within a source category logically associated with a point of air pollution emissions. Any operation that causes air pollution can be represented by one or more SCC's.

SCC Code	Description
1-01-002-03	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - BITUMINOUS COAL CYCLONE FURNACE (BITUMINOUS COAL)
1-01-002-02	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - BITUMINOUS COAL PULVERIZED COAL: DRY BOTTOM (BITUMINOUS COAL)
1-01-005-01	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - DISTILLATE OIL Grades 1 and 2 Oil
1-01-003-04	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - LIGNITE Traveling Grate (Overfeed) Stoker
1-01-013-02	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - LIQUID WASTE Waste Oil
1-01-006-04	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - NATURAL GAS Tangentially Fired Units
1-01-012-01	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - SOLID WASTE Specify Waste Material in Comments
1-01-009-03	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - WOOD/BARK WASTE



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1-02-002-02 Wood-Fired Boiler
EXTERNAL COMBUSTION BOILERS - INDUSTRIAL
INDUSTRIAL BOILER - SUBBITUMINOUS COAL
Pulverized Coal: Dry Bottom
3-99-999-99 MISCELLANEOUS MANUFACTURING INDUSTRIES
MISCELLANEOUS INDUSTRIAL PROCESSES
SEE COMMENT **

Facility Emissions Summary

In the following table, the CAS No. or Chemical Abstract Series code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.'s contain a 'NY' designation within them. These are not true CAS No.'s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.'s do not do. As an example, volatile organic compounds or VOC's are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE Range represents an emission range for a contaminant. Any PTE quantity that is displayed represents a facility-wide emission cap or limitation for that contaminant. If no PTE quantity is displayed, the PTE Range is provided to indicate the approximate magnitude of facility-wide emissions for the specified contaminant in terms of tons per year (tpy). The term 'HAP' refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own specific CAS No. and is identified in the list below by the (HAP) designation.

Table with 3 columns: Cas No., Contaminant Name, and PTE. The PTE column is further divided into lbs/yr and Range. Rows include CARBON MONOXIDE, HAP, HYDROGEN CHLORIDE (HAP), LEAD (HAP), OXIDES OF NITROGEN, PARTICULATES, PM-10, SULFUR DIOXIDE, and VOC.

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6NYCRR Part 201-1.5

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

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(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;

(2) The equipment at the permitted facility causing the emergency was at the time being properly operated;

(3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

Item B: Public Access to Recordkeeping for Title V Facilities - 6NYCRR Part 201-1.10(b)

The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

Item C: Timely Application for the Renewal of Title V Permits - 6 NYCRR Part 201-6.3(a)(4)

Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

Item D: Certification by a Responsible Official - 6 NYCRR Part 201-6.3(d)(12)

Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state

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that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Item E: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.5(a)(2)

The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

Item F: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.5(a)(3)

This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Item G: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR Part 201-6.5(a)(5)

It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.

Item H: Property Rights - 6 NYCRR Part 201-6.5(a)(6)

This permit does not convey any property rights of any sort or any exclusive privilege.

Item I: Severability - 6 NYCRR Part 201-6.5(a)(9)

If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

Item J: Permit Shield - 6 NYCRR Part 201-6.5(g)

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements

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are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;
- ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. The applicable requirements of Title IV of the Act;
- iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

Item K: Reopening for Cause - 6 NYCRR Part 201-6.5(i)

This Title V permit shall be reopened and revised under any of the following circumstances:

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.
- ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

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iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

Item L: Permit Exclusion - ECL 19-0305

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item M: Federally Enforceable Requirements - 40 CFR 70.6(b)

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being

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enforceable under only state regulations.

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: **General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5**

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Regulatory Analysis

Location Facility/EU/EP/Process/ES	Regulation	Short Description	Condition
FACILITY	ECL 19-0301	Powers and Duties of the Department with respect to air pollution control	54
FACILITY	40CFR 52-A.21	Prevention of Significant Deterioration	34
FACILITY	40CFR 64	COMPLIANCE ASSURANCE MONITORING	35
FACILITY	40CFR 68	Chemical accident prevention provisions	21
FACILITY	40CFR 82-F	Protection of Stratospheric Ozone - recycling and emissions reduction	22
FACILITY	6NYCRR 200.6	Acceptable ambient air quality.	1
FACILITY	6NYCRR 200.7	Maintenance of equipment.	10
FACILITY	6NYCRR 201-1.4	Unavoidable noncompliance and violations	55
FACILITY	6NYCRR 201-1.7	Recycling and Salvage	11
FACILITY	6NYCRR 201-1.8	Prohibition of reintroduction of collected contaminants to the air	12

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FACILITY	6NYCRR 201-3.2(a)	Exempt Activities - Proof of eligibility	13
FACILITY	6NYCRR 201-3.3(a)	Trivial Activities - proof of eligibility	14
FACILITY	6NYCRR 201-6	Title V Permits and the Associated Permit Conditions	23, 36, 37
FACILITY	6NYCRR 201-6.5(a)(4)	General conditions	15
FACILITY	6NYCRR 201-6.5(a)(7)	General conditions	
Fees 2			
FACILITY	6NYCRR 201-6.5(a)(8)	General conditions	16
FACILITY	6NYCRR 201-6.5(c)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	3
FACILITY	6NYCRR 201-6.5(c)(2)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	4
FACILITY	6NYCRR 201-6.5(c)(3)(ii)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	5
FACILITY	6NYCRR 201-6.5(d)(5)	Compliance schedules	17
FACILITY	6NYCRR 201-6.5(e)	Compliance Certification	6
FACILITY	6NYCRR 201-6.5(f)(6)	Off Permit Changes	18
FACILITY	6NYCRR 202-1.1	Required emissions tests.	19
FACILITY	6NYCRR 202-2.1	Emission Statements - Applicability	7
FACILITY	6NYCRR 202-2.5	Emission Statements - record keeping requirements.	8
FACILITY	6NYCRR 211.2	General Prohibitions - air pollution prohibited.	56
FACILITY	6NYCRR 211.3	General Prohibitions - visible emissions limited	20
FACILITY	6NYCRR 215	Open Fires	9
G-00003	6NYCRR 225-1.2(d)	Sulfur-in-fuel limitations - Table 2	38, 39, 40
G-00004	6NYCRR 225-1.2(d)	Sulfur-in-fuel limitations - Table 2	46
G-00004/00004	6NYCRR 225-1.2(d)	Sulfur-in-fuel limitations - Table 2	52, 53
FACILITY	6NYCRR 225-1.8	Reports, sampling and analysis.	24
FACILITY	6NYCRR 225-2.3(b)	Eligibility to burn waste fuel A.	25
FACILITY	6NYCRR 225-2.4(b)	Eligibility to burn waste fuels A and B.	26, 27, 28, 29
G-00003	6NYCRR 225-2.4(b)	Eligibility to burn waste fuels A and B.	41
G-00004	6NYCRR 225-2.4(b)	Eligibility to burn waste fuels A and B.	47
FACILITY	6NYCRR 225-2.7(a)	Reports, sampling and analysis of waste fuels A and B.	30
FACILITY	6NYCRR 225-2.7(d)	Reports, sampling and analysis of waste fuels A and B.	31
FACILITY	6NYCRR 225-2.7(e)	Reports, sampling and analysis of waste fuels A	32



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G-00003	6NYCRR 227-1.2(a)(4)	and B. Particulate Emissions Firing Solid Fuels.	42
G-00004	6NYCRR 227-1.2(a)(4)	Particulate Emissions Firing Solid Fuels.	48
FACILITY	6NYCRR 227-1.3	Smoke Emission Limitations.	33
G-00003	6NYCRR 227-1.3(a)	Smoke Emission Limitations.	43
G-00004	6NYCRR 227-1.3(a)	Smoke Emission Limitations.	49
G-00003	6NYCRR 227-1.5	Fuel mixtures.	44
G-00004	6NYCRR 227-1.5	Fuel mixtures.	50
G-00003	6NYCRR 227-2.5(b)	System-wide averaging option.	45
G-00004	6NYCRR 227-2.5(b)	System-wide averaging option.	51

Applicability Discussion:

Mandatory Requirements: The following facility-wide regulations are included in all Title V permits:

ECL 19-301.

This section of the Environmental Conservation Law establishes the powers and duties assigned to the Department with regard to administering the air pollution control program for New York State.

6NYCRR Part 200-.6

Acceptable ambient air quality - prohibits contravention of ambient air quality standards without mitigating measures

6NYCRR Part 200-.7

Anyone owning or operating an air contamination source which is equipped with an emission control device must operate the control consistent with ordinary and necessary practices, standards and procedures, as per manufacturer's specifications and keep it in a satisfactory state of maintenance and repair so that it operates effectively

6NYCRR Part 201-1.4

This regulation specifies the actions and recordkeeping and reporting requirements for any violation of an applicable state enforceable emission standard that results from a necessary scheduled equipment maintenance, start-up, shutdown, malfunction or upset in the event that these are unavoidable.

6NYCRR Part 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6NYCRR Part 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

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6NYCRR Part 201-3.2(a)

An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6NYCRR Part 201-3.3(a)

The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6NYCRR Part 201-6

This regulation applies to those terms and conditions which are subject to Title V permitting. It establishes the applicability criteria for Title V permits, the information to be included in all Title V permit applications as well as the permit content and terms of permit issuance. This rule also specifies the compliance, monitoring, recordkeeping, reporting, fee, and procedural requirements that need to be met to obtain a Title V permit, modify the permit and demonstrate conformity with applicable requirements as listed in the Title V permit. For permitting purposes, this rule specifies the need to identify and describe all emission units, processes and products in the permit application as well as providing the Department the authority to include this and any other information that it deems necessary to determine the compliance status of the facility.

6NYCRR 201-6.5(a)(4)

This mandatory requirement applies to all Title V facilities. It requires the permittee to provide information that the Department may request in writing, within a reasonable time, in order to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The request may include copies of records required to be kept by the permit.

6NYCRR 201-6.5(a)(7)

This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

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6NYCRR 201-6.5(a)(8)

This is a mandatory condition for all facilities subject to Title V requirements. It allows the Department to inspect the facility to determine compliance with this permit, including copying records, sampling and monitoring, as necessary.

6NYCRR Part 201-6.5(c)

This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

6NYCRR Part 201-6.5(c)(2)

This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of sampling, measurement, report or application. Support information is defined as including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

6NYCRR Part 201-6.5(c)(3)(ii)

This regulation specifies any reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

6NYCRR 201-6.5(d)(5)

This condition applies to every Title V facility subject to a compliance schedule. It requires that reports, detailing the status of progress on achieving compliance with emission standards, be submitted semiannually.

6NYCRR Part 201-6.5(e)

Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

6NYCRR 201-6.5(f)(6)

This condition allows changes to be made at the facility, without modifying the permit, provided the changes do not cause an emission limit contained in this permit to be exceeded. The owner or operator of the facility must notify the Department of the change. It is applicable to all Title V permits which may be subject to an off

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permit change.

6NYCRR Part 202-1.1

This regulation allows the department the discretion to require an emission test for the purpose of determining compliance. Furthermore, the cost of the test, including the preparation of the report are to be borne by the owner/operator of the source.

6NYCRR Part 202-2.1

Requires that emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year.

6NYCRR Part 202-2.5

This rule specifies that each facility required to submit an emission statement must retain a copy of the statement and supporting documentation for at least 5 years and must make the information available to department representatives.

6NYCRR Part 211-.2

This regulation prohibits any emissions of air contaminants to the outdoor atmosphere which may be detrimental to human, plant or animal life or to property, or which unreasonably interferes with the comfortable enjoyment of life or property regardless of the existence of any specific air quality standard or emission limit.

6 NYCRR Part 211.3

This condition requires that the opacity (i.e., the degree to which emissions other than water reduce the transmission of light) of the emissions from any air contamination source be less than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent.

6 NYCRR Part 215

Prohibits open fires at industrial and commercial sites.

40 CFR Part 68.

This Part lists the regulated substances and their applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.

40 CFR Part 82, Subpart F

Subpart F requires the reduction of emissions of class I and class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with section 608 of the Clean Air Act Amendments of 1990. This subpart applies to any person servicing, maintaining, or repairing appliances except for motor vehicle air conditioners. It also applies to persons disposing of appliances, including motor vehicle air conditioners, refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment. Those individuals, operations, or activities affected by this rule, may

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be required to comply with specified disposal, recycling, or recovery practices, leak repair practices, recordkeeping and/or technician certification requirements.

Facility Specific Requirements

In addition to Title V, AES GREENIDGE LLC has been determined to be subject to the following regulations:

40CFR 52-A.21

This citation applies to facilities that are subject to Prevention of Significant Deterioration provisions; ie: facilities that are located in an attainment area and that emit pollutants which are listed in 40 CFR 52.21(b)(23)(i) .

40CFR 64

The federal Compliance Assurance Monitoring (CAM) rule, 40 CFR Part 64, requires monitoring of control device, capture system, and/or process parameters to provide a reasonable assurance of compliance with emission limitations or standards. It applies to emission units that use a control device to comply with certain standards and limitations and that have potential pre-control device emissions equal to or greater than a major source threshold.

Acid Rain program requirements; stratospheric ozone protection requirements; post-1990 New Source Performance Standards, Emission Guidelines, and National Emission Standards for Hazardous Air Pollutants; and some other limitations are exempt from CAM. However, many of the exempt requirements are subject to less stringent periodic monitoring under 40 CFR Part 70 and 6NYCRR Subpart 201-6.

6NYCRR 225-1.2 (d)

The sulfur-in-fuel limitations for residual and distillate oil and for solid fuel are listed in Tables 1,2 and 3 or 6 NYCRR Part 225-1.2(c), (d) and (e)

6NYCRR 225-1.8

This regulation requires an owner or operator of a facility which purchases and fires coal and/or oil to submit reports to the commissioner containing fuel analysis data, information on the quantity of the fuel received, burned, and results of any stack sampling, stack monitoring and any other procedures to ensure compliance with the provisions of 6 NYCRR Part 225-1.

6NYCRR 225-2.3 (b)

This regulation requires that each piece of equipment which fires Waste Fuel A demonstrate, at a minimum, 99% combustion efficiency in burning Waste fuel A.

6NYCRR 225-2.4 (b)

This regulation sets the limits for the compounds that may be in Waste Fuel A or B. These are: PCB less than 50 parts per million (ppm); Total Halogens less than 1,000 ppm; Sulfur less than the limits in Part 225-1; Lead less than 250 ppm; and a minimum gross heat content of 125,000 BTU/Gallon



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6NYCRR 225-2.7 (a)

This regulation requires the owner or operator of the facility burning the waste fuel to sample and analyze all shipments of the fuel received, monitor the emissions from the burning of the fuel and maintain records of the quantities of the fuel received.

6NYCRR 225-2.7 (d)

This regulation requires the owner or operator to maintain the records required under 6 NYCRR Part 225-2 and make them available for inspectors from the NYSDEC.

6NYCRR 225-2.7 (e)

This regulation requires the owner or operator to sample and analyze the waste fuel in a manner acceptable to the Department.

6NYCRR 227-1.2 (a) (4)

This regulation establishes a particulate emission limit in terms of lbs per mmBtu of heat input for stationary combustion units which fire solid fuels at variable sizes of heat input (mmBtu/hr).

6NYCRR 227-1.3

This regulation requires a limitation and compliance monitoring for opacity from a stationary combustion installation.

6NYCRR 227-1.3 (a)

This regulation prohibits any person from operating a stationary combustion installation which emits smoke equal to or greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity.

6NYCRR 227-1.5

This regulation provides for determination of a permissible particulate emission rate from combustion devices using more than one type of fuel simultaneously.

6NYCRR 227-2.5 (b)

The system-wide average shall consist of a weighted average allowable emission rate based upon the weighted average of actual emissions from units that are operating. Excess reductions utilized in the system-wide average may only be counted from the lowest allowable emission rate. Simply put, if there is a more stringent emission limit than RACT already in place on the unit, then excess reductions may only be counted from below that emission rate.

Compliance Certification

Summary of monitoring activities at AES GREENIDGE LLC:

Location Facility/EU/EP/Process/ES	Type of Monitoring	Cond No.
FACILITY	record keeping/maintenance procedures	34
FACILITY	record keeping/maintenance procedures	35
FACILITY	record keeping/maintenance procedures	5
FACILITY	record keeping/maintenance procedures	6
FACILITY	record keeping/maintenance procedures	7



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G-00003	continuous emission monitoring (cem)	38
G-00003	continuous emission monitoring (cem)	39
G-00003	continuous emission monitoring (cem)	40
G-00004	continuous emission monitoring (cem)	46
G-00004/00004	continuous emission monitoring (cem)	52
G-00004/00004	continuous emission monitoring (cem)	53
FACILITY	record keeping/maintenance procedures	24
FACILITY	monitoring of process or control device parameters as surrogate	25
FACILITY	work practice involving specific operations	26
FACILITY	work practice involving specific operations	27
FACILITY	work practice involving specific operations	28
FACILITY	work practice involving specific operations	29
G-00003	work practice involving specific operations	41
G-00004	work practice involving specific operations	47
FACILITY	record keeping/maintenance procedures	30
G-00003	monitoring of process or control device parameters as surrogate	42
G-00004	monitoring of process or control device parameters as surrogate	48
FACILITY	record keeping/maintenance procedures	33
G-00003	monitoring of process or control device parameters as surrogate	43
G-00004	monitoring of process or control device parameters as surrogate	49
G-00003	record keeping/maintenance procedures	45
G-00004	record keeping/maintenance procedures	51

Basis for Monitoring

Renewal of Title 5 operating permit.