



**New York State Department of Environmental Conservation
Permit Review Report**

Permit ID: 2-6301-00185/00009

Renewal Number: 1

Modification Number: 2 06/30/2011

Facility Identification Data

Name: ASTORIA GENERATING STATION

Address: 18-01 20TH AVE

ASTORIA, NY 11105

Owner/Firm

Name: ASTORIA GENERATING COMPANY LP

Address: 18-01 20TH AVE

LONG ISLAND CITY, NY 11105-4271, USA

Owner Classification: Corporation/Partnership

Permit Contacts

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18-01 20TH AVE

LONG ISLAND CITY, NY 11105-4271

Phone:7182043918

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

The Luyster Creek Energy Project is located at the AGS Fuel Oil Tank Farm (FOTF) on a parcel of approximately 12 acres that is approximately 2,400 feet to the northeast of the existing units. These parcels are connected by utilities and easements and have been deemed contiguous for air permitting purposes by the NYSDEC. A new combined cycle unit is proposed to be installed at the FOTF and occupy approximately 7.5 acres on this parcel.



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A new above ground fuel oil tank would also be constructed on the FOTF for the storage of ultra low sulfur diesel (ULSD).

The principal components of the LCEP consists of one Siemens H Class combined-cycle turbine, a fin fan cooler, an air cooled condenser, a natural gas compressor, a step up transformer, a water demineralization system, a demineralized water storage tank, fire water storage tank, an aqueous ammonia storage tank, an exhaust stack, and utility interconnection. The Siemens H combustion turbine in combined cycle operation is nominally rated to produce approximately 410 MW of electric power under typical operating conditions. With this proposal the overall increase in electric generating capacity of Astoria Generating Station will be approximately 235 MW.

The Siemens H Class turbine will have the following state-of-the-art emission control technologies: dry low NOx combustors, water injection to reduce the formation of NOx within the gas turbine, a selective catalytic reduction (SCR) system to further reduce NOx emissions, and a CO oxidation catalyst to minimize CO and VOC emissions. Emissions of SO2 and PM will be minimized through the use of natural gas as a primary fuel and ULSD as a backup fuel. The exhaust gases will be vented through a new stack, approximately 205 feet tall with an inside diameter of 24 feet.

An auxiliary boiler will also be included to provide steam to the combined cycle unit for start up and as otherwise required. The auxiliary boiler will operate on natural gas and the exhaust gases will be vented through a new stack, approximately 130 feet tall.

The facility proposes to create future emission reduction credits (ERCs) which will be used as offsets to net the facility's emissions of all criteria contaminants below the significant increase thresholds. The ERCs used for netting will be generated by the shutdown of boiler 20(Emission source in Emission Unit AS0002)a and the curtailment of operations of boilers 40 and 50 through federally enforceable permit limits. The total proposed ERCs in tons per year (tpy) to be created are: 81.1 NOx, 44.17 PM, 44.17 PM-10, 44.17 PM-2.5, and 2.23 VOC. Along with these ERCs the new project will cap to the following emission levels in tpy: 105.6 NOx, 54.07 PM, 54.07 PM-10, 54.07 PM-2.5, 26.23 VOC.

Attainment Status

ASTORIA GENERATING STATION is located in the town of QUEENS in the county of QUEENS. 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
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Particulate Matter (PM)	ATTAINMENT
Particulate Matter< 10µ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	SEVERE NON-ATTAINMENT
Oxides of Nitrogen (NOx)**	ATTAINMENT



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Carbon Monoxide (CO)	ATTAINMENT
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* 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:

The existing AGS generating units are located on approximately 17 acres at 18-01 20th Avenue in Astoria, Queens, New York have four boilers (Nos. 20, 30, 40, and 50), that currently operate on natural gas and No. 6 fuel oil and provide a total electric generating capacity of approximately 1,300 megawatts (MW). Electricity generated by the existing AGS units is transmitted to Con Edison’s Astoria East or Astoria West substations at 138,000 volts. A small simple-cycle combustion turbine is also located at the existing AGS facility and supplies electricity to North Queens via a 27,000 volt cable.

- Emission Unit A-S0001 is a natural gas fired 1,795 MMBtu/hr Babcock & Wilcox boiler, Boiler 20 (Emission Source 00020), with one emission (Emission Point 00021).
- Emission Unit A-S0002 is a natural gas & residual oil fired 3,984 MMBtu/hr Babcock & Wilcox boiler, Boiler 30 (Emission Source 00030) with two emission stacks(Emission Points 00031 & 00032).
- Emission Unit A-S0003 is a natural gas & residual oil fired 4,074 MMBtu/hr Combustion Engineering boiler, Boiler 40 (Emission Source 00040) with two emission stacks(Emission Points 00041 & 00042).
- Emission Unit A-S0004 is a natural gas & residual oil fired 4,094 MMBtu/hr Combustion Engineering boiler, Boiler 50 (Emission Source 00050) with two emission stacks (Emission Points 00051 & 00052).
- Emission Unit A-S0005 is a natural gas fired 243 MMBtu/hr GE Model 5000L simple-cycle combustion turbine, GT001 (Emission Source GT001) with one emission stack (Emission Point GT001).

In this modification, LCEP, Astoria Generating Station proposes to add one Siemens H Class combined-cycle, with a duct burner . The Siemens H combustion turbine in combined cycle operation is nominally rated to produce approximately 410 MW of electric power under typical operating conditions. With this proposal the overall increase in electric generating capacity of Astoria Generating Station will be approximately 235 MW.

Permit Structure and Description of Operations

The Title V permit for ASTORIA GENERATING STATION 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 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



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control - emission control devices
process - any device or contrivance which may emit air contaminants
that is not included in the above categories.

ASTORIA GENERATING STATION is defined by the following emission unit(s):

Emission unit AS0006 - Emission Unit A-S0006 consists on one SCCS-8000H Siemens combustion turbine (Emission Source GT002) & duct burner (Emission Source DB001), and a Auxiliary boiler(with a steam capacity of approximately 30,000 pounds per hour provide start up steam to the combined cycle unit).

The Siemens H combustion turbine in combined cycle operation is nominally rated to produce approximately 410 MW of electric power under typical operating conditions.

The combustion turbine and duct burner will utilize dry low NOx combustors and SCR to limit NOx emissions when firing natural gas and will utilize water injection and SCR to limit NOx emissions to when firing ULSD, and a CO oxidation catalyst to minimize CO and VOC emissions.

The emissions from turbine duct burner unit are exhausted through a single exhaust stack (Emission Point00061). The auxiliary boiler has a seperate stack(Emission point 000071).

Emission unit AS0006 is associated with the following emission points (EP):
00061, 00071

Process: 001 is located at Ground level, Building GTE - Combustion turbine firing natural gas - no duct burner (expected annual operation: 3695 hrs)

Process: 002 is located at Ground Level, Building HRSG - Combustion turbine firing natural gas with duct burner firing on natural gas (expected annual operation: 3914 hrs).

Building GTE/HRSG

Process: 003 is located at Ground Level, Building GTE - Combustion turbine firing ULSD - no duct burner (expected annual operation:712hrs)

Process: 004 Auxiliary boiler firing natural gas (expected annual operation: 1,500 hrs)

Emission unit AS0001 - Emission Unit A-S0001 consists of one very large (1,795 MM Btu/hr) Babcock & Wilcox boiler, Boiler 20 (Emission Source 00020), which combusts only natural gas (Process NG3). A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour. Boiler 20 was constructed and began operating on 1/1/1953 in the Boiler House, was removed from operation on 12/31/1993, and was reactivated on 9/1/2000. Boiler 20 is a single furnace with only one stack. Emissions from Boiler 20 are exhausted through one stack, which is identified as Emission Point 00021.

Boiler 20's emission cap is as follows: 24.5 tpy of Particulates, 14.5 tpy of PM-10, 39.5 tpy of Sulfur Dioxide, 98 tpy of Carbon Monoxide, 110 tpy of NOx, 24 tpy of VOC, 0.0003 tpy of Beryllium, and 0.05 tpy of Mercury.



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Emission unit AS0001 is associated with the following emission points (EP):
00021

Process: NG3 is located at 1-4, Building BOILERHS - Process NG3 consists of one face fired very large (1,795 MM Btu/hr) Babcock & Wilcox boiler, Boiler 20 (Emission Source 00020) in Emission Unit A-S0001 burning only natural gas. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour. Boiler 20 was constructed and began operating on 1/1/1953 in the Boiler House, was removed from operation on 12/31/1993, and was reactivated on 9/1/2000. Boiler 20 is a single furnace with only one stack. Emissions from Boiler 20 are exhausted through one stack, which is identified as Emission Point 00021.

Boiler 20 has the following emission limits:

NOx - 110 tpy

VOC - 24 tpy

CO - 98 tpy

PM-10 - 14.5 tpy

Particulates - 24.5 tpy

SO2 - 39.5 tpy

Beryllium - 0.0003 tpy

Mercury - 0.05 tpy

Emission unit AS0003 - Emission Unit A-S0003 consists of one very large (4,074 MM Btu/hr) Combustion Engineering, Boiler 40 (Emission Source 00040), which has the capability to burn residual oil (Process RO2) and natural gas (Process NG2) and can fire these fuels in various combinations. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour. Boiler 40 was constructed and began operating on 9/1/1958 in the Boiler House. Boiler 40 is twin furnace boiler with two stacks/emission points. Emissions from Boiler 40 are exhausted through two different stacks, which are identified as Emission Points 00041 & 00042.

Emission unit AS0003 is associated with the following emission points (EP):
00041, 00042

Process: NG2 is located at 1-4, Building BOILERHS - Process NG2 is the combustion of natural gas in Boiler 40 (Emission Source 00040 in Emission Unit A-S0003). This very large boiler is one tangentially fired Combustion Engineering boiler and is rated at 4,074 million BTU/hr and covers the combustion of natural gas in this boiler. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour.

Boiler 40 (Emission Source 00040) has the capability to burn residual oil (Process RO2) and natural gas (Process NG2) and can fire these fuels in various combinations. Boiler 40 (Emission Source 00040) was



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constructed and began operating on 9/1/1958 in the Boiler House. Emissions from Boiler 40 (Emission Source 00040) are exhausted through two different stacks, which are identified as Emission Points 00041 & 00042.

Process: RO2 is located at 1-4, Building BOILERHS - Process RO2 is the combustion of residual oil in Boiler 40 (Emission Source 00040 in Emission Unit A-S0003. This very large boiler is one tangentially fired Combustion Engineering boiler and is rated at 4,074 million BTU/hr and covers the combustion of natural gas in this boiler. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour.

Boiler 40 (Emission Source 00040) has the capability to burn residual oil (Process RO2) and natural gas (Process NG2) and can fire these fuels in various combinations. Boiler 40 (Emission Source 00040) was constructed and began operating on 9/1/1958 in the Boiler House. Emissions from Boiler 40 (Emission Source 00040) are exhausted through two different stacks, which are identified as Emission Points 00041 & 00042.

Emission unit AS0004 - Emission Unit A-S0004 consists of one very large (4,094 MM Btu/hr) Combustion Engineering, Boiler 50 (Emission Source 00050), which has the capability to burn residual oil (Process RO3) and natural gas (Process NG4) and can fire these fuels in various combinations. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour. Boiler 50 was constructed and began operating on 5/1/1962 in the Boiler House. Boiler 50 is twin furnace boiler with two stacks/emission points. Emissions from Boiler 50 are exhausted through two different stacks, which are identified as Emission Points 00051 & 00052.

Emission unit AS0004 is associated with the following emission points (EP):
00051, 00052

Process: NG4 is located at 1-4, Building BOILERHS - Process NG4 is the combustion of natural gas in Boiler 50 (Emission Source 00050 in Emission Unit A-S0004. This very large boiler is one tangentially fired Combustion Engineering boiler and is rated at 4,094 million BTU/hr and covers the combustion of natural gas in this boiler. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour.

Boiler 50 (Emission Source 00050) has the capability to burn residual oil (Process RO3) and natural gas (Process NG4) and can fire these fuels in various combinations. Boiler 50 (Emission Source 00050) was constructed and began operating on 5/1/1962 in the Boiler House. Emissions from Boiler 50 (Emission Source 00050) are exhausted through two different stacks, which are identified as Emission Points 00051 & 00052.

Process: RO3 is located at 1-4, Building BOILERHS - Process RO3 is the combustion of residual oil in Boiler 50 (Emission Source 00050 in Emission Unit A-S0004. This very large boiler is one tangentially fired Combustion Engineering boiler and is rated at 4,094 million BTU/hr and covers the combustion of natural gas in this boiler. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour.



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Boiler 50 (Emission Source 00050) has the capability to burn residual oil (Process RO3) and natural gas (Process NG4) and can fire these fuels in various combinations. Boiler 50 (Emission Source 00050) was constructed and began operating on 5/1/1962 in the Boiler House. Emissions from Boiler 50 (Emission Source 00050) are exhausted through two different stacks, which are identified as Emission Points 00051 & 00052.

Emission unit AS0002 - Emission Unit A-S0002 consists of one very large (3,984 MM Btu/hr) Babcock & Wilcox boiler, Boiler 30 (Emission Source 00030), which has the capability to burn residual oil (Process RO1) and natural gas (Process NG1) and can fire these fuels in various combinations. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour. Boiler 30 was constructed and began operating on 9/1/1958 in the Boiler House. Boiler 30 is twin furnace boiler with two stacks/emission points. Emissions from Boiler 30 are exhausted through two different stacks, which are identified as Emission Points 00031 & 00032. Boiler 30 uses Flue Gas Recirculation (FGR) to control NOx emissions.

The NOx emissions from Boiler 30 are limited to 1,764 tons/yr and the CO emissions from Boiler 30 are limited to 1,435 tons/yr.

Emission unit AS0002 is associated with the following emission points (EP):
00031, 00032

Process: NG1 is located at 1-4, Building BOILERHS - Process NG1 is the combustion of natural gas in Boiler 30 (Emission Source 00030 in Emission Unit A-S0002. This very large boiler is one face fired Babcock & Wilcox boiler and is rated at 3,984 million BTU/hr and covers the combustion of natural gas in this boiler. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour.

Boiler 30 (Emission Source 00030) has the capability to burn residual oil (Process RO1) and natural gas (Process NG1) and can fire these fuels in various combinations. Boiler 30 (Emission Source 00030) was constructed and began operating on 9/1/1958 in the Boiler House. Emissions from Boiler 30 (Emission Source 00030) are exhausted through two different stacks, which are identified as Emission Points 00031 & 00032. Boiler 30 uses Flue Gas Recirculation (FGR) to control NOx emissions. The NOx emissions from Boiler 30 are limited to 1,764 tons/yr and the CO emissions from Boiler 30 are limited to 1,435 tons/yr.

Process: RO1 is located at 1-4, Building BOILERHS - Process RO1 is the combustion of residual oil in Boiler 30 (Emission Source 00030 in Emission Unit A-S0002. This very large boiler is one face fired Babcock & Wilcox boiler and is rated at 3,984 million BTU/hr and covers the combustion of natural gas in this boiler. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour.

Boiler 30 (Emission Source 00030) has the capability to burn residual oil (Process RO1) and natural gas (Process NG1) and can fire these fuels in various combinations. Boiler 30 (Emission Source 00030) was constructed and began operating on 9/1/1958 in the Boiler House. Emissions from Boiler 30 (Emission Source 00030) are exhausted through two different stacks, which are identified as Emission Points 00031 & 00032. Boiler 30 uses Flue Gas Recirculation (FGR) to control NOx emissions. The NOx emissions from Boiler 30 are limited to 1,764 tons/yr and the CO emissions from Boiler 30 are limited to 1,435 tons/yr.

Emission unit AS0005 - Emission Unit A-S0005 consists of one 243 MM Btu/hr General Electric Model 5000L simple cycle combustion turbine, GT001 (Emission Source GT001), utilized to generate electricity.



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The combustion turbine burns only natural gas (Process GTN) and has a diesel starter engine. Combustion Turbine GT001 was constructed and began operating on 7/1/1967 in the Gas Turbine Facility (GTFAC). Emissions from GT001 are exhausted through one stack, which is identified as Emission Point GT001.

GT001

Process: GTN is located at Building GTFAC - Process GTN is the combustion of natural gas in the General Electric Model 5000L simple cycle combustion turbine GT001 (Emission Source GT001) in Emission Unit A-S0005. This combustion turbine is rated at 243 MM BTU/hr and is utilized to generate electricity.

The combustion turbine burns only natural gas (Process GTN) and has a diesel starter engine. Combustion Turbine GT001 was constructed and began operating on 7/1/1967 in the Gas Turbine Facility (GTFAC). Emissions from GT001 are exhausted through one stack, which is identified as Emission Point GT001.

Title V/Major Source Status

ASTORIA GENERATING STATION is subject to Title V requirements. This determination is based on the following information:

The Astoria Generating Station (AGS) is subject to Title V requirements. This determination is based on the following information:

The Astoria generating Station is a major facility because the potential emissions of particulates, sulfur dioxide, oxides of nitrogen, carbon monoxide, and volatile organic compounds and HAP are greater than the major source thresholds (100 tons/year for both particulates and sulfur dioxide, 25 tons/year for both oxides of nitrogen and volatile organic compounds, and 100 tons/year for carbon monoxide and 25 tpy for total HAPs).

Program Applicability

The following chart summarizes the applicability of ASTORIA GENERATING STATION with regards to the principal air pollution regulatory programs:

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



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NOTES:

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 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



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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
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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

1-01-004-01	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION
	ELECTRIC UTILITY BOILER - RESIDUAL OIL Grade 6 Oil: Normal Firing
1-01-004-04	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION
	ELECTRIC UTILITY BOILER - RESIDUAL OIL Grade 6 Oil: Tangential Firing
1-01-006-01	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION
	ELECTRIC UTILITY BOILER - NATURAL GAS Boilers > 100 MBtu/Hr except Tangential
1-01-006-04	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION
	ELECTRIC UTILITY BOILER - NATURAL GAS Tangentially Fired Units
1-02-006-02	EXTERNAL COMBUSTION BOILERS - INDUSTRIAL INDUSTRIAL BOILER - NATURAL GAS
	10-100 MMBtu/Hr
2-01-001-01	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION
	ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL)
	Turbine
2-01-002-01	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION
	ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - NATURAL GAS
	Turbine

Facility Emissions Summary

In the following table, the CAS No. or Chemical Abstract Service code is an identifier assigned to every

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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 of 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.

Cas No.	Contaminant Name	PTE	
		lbs/yr	Range
007664-41-7	AMMONIA		>= 50 tpy but < 100 tpy
007440-41-7	BERYLLIUM		> 0 but < 10 tpy
000630-08-0	CARBON MONOXIDE		>= 250 tpy but < 75,000 tpy
000050-00-0	FORMALDEHYDE		>= 10 tpy
007439-92-1	LEAD		> 0 but < 10 tpy
007439-97-6	MERCURY		> 0 but < 10 tpy
0NY210-00-0	OXIDES OF NITROGEN		>= 250 tpy but < 75,000 tpy
0NY075-00-0	PARTICULATES		>= 250 tpy but < 75,000 tpy
0NY075-02-5	PM 2.5		>= 250 tpy but < 75,000 tpy
0NY075-00-5	PM-10		>= 250 tpy but < 75,000 tpy
007446-09-5	SULFUR DIOXIDE		>= 250 tpy but < 75,000 tpy
0NY998-00-0	VOC		>= 100 tpy but < 250 tpy

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6 NYCRR 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.

(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



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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 - 6 NYCRR 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 6 NYCRR 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 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 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.



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Item H: Property Rights - 6 NYCRR 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 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.
- iii. The Department or the Administrator determines that the Title V permit



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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 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

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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	Condition	Short Description
-- FACILITY	ECL 19-0301	80	Powers and Duties of the Department with respect to air pollution control
A-S0001/-/NG3/00020	40CFR 52-A.21	54, 55, 56, 57, 58	Prevention of Significant Deterioration
FACILITY	40CFR 60-A.13	2 -12	General provisions - Monitoring requirements
A-S0006	40CFR 60-A.13 (b)	2 -29	General provisions - Monitoring requirements
FACILITY	40CFR 60-A.13 (h)	2 -13	General provisions - Monitoring requirements
A-S0006	40CFR 60-A.7 (a)	2 -27	Notification and Recordkeeping
FACILITY	40CFR 60-A.7 (b)	2 -7	Notification and Recordkeeping
FACILITY	40CFR 60-A.7 (c)	2 -8	Notification and Recordkeeping
FACILITY	40CFR 60-A.7 (d)	2 -9	Notification and Recordkeeping
FACILITY	40CFR 60-A.7 (f)	2 -10	Notification and Recordkeeping
A-S0006	40CFR 60-A.8 (a)	2 -28	Performance Tests
FACILITY	40CFR 60-A.8 (b)	2 -11	Performance Tests
A-S0006/-/004/AB001	40CFR 60-Dc.48c (a)	2 -73	Reporting and Recordkeeping Requirements.
A-S0006/-/001/GT002	40CFR 60-KKKK.4320 (a)	2 -54	Stationary Combustion Turbine NSPS - Table 1 NOx emission limits
A-S0006/-/003/GT002	40CFR 60-KKKK.4320 (a)	2 -70	Stationary Combustion Turbine NSPS - Table 1 NOx emission limits
A-S0006	40CFR 60-KKKK.4335	2 -30	Stationary Combustion Turbine NSPS - NOx compliance demonstration when using water or steam injection
A-S0006	40CFR 60-KKKK.4345	2 -31	Stationary Combustion Turbine NSPS - CEM system equipment requirements
A-S0006	40CFR 60-KKKK.4350	2 -32	Stationary Combustion Turbine NSPS - identifying excess



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A-S0006	40CFR 60-KKKK.4365	2	-33	emissions using CEM equipment Stationary Combustion Turbine NSPS - exempting monitoring for the total sulfur content of the combustion fuel
A-S0006	40CFR 60-KKKK.4370	2	-34	Stationary Combustion Turbine NSPS - determining fuel sulfur content
A-S0006	40CFR 60-KKKK.4405	2	-35	Stationary Combustion Turbine NSPS - performance test requirement for NOx diluent CEMs
A-S0006	40CFR 60-KKKK.4415	2	-36	Stationary Combustion Turbine NSPS - conducting performance tests for sulfur
A-S0006	40CFR 63-YYYY.6100	2	-37	Stationary Combustion Turbine NESHAP - Emission and Operating Limits
A-S0006	40CFR 63-YYYY.6110(a)	2	-38	Stationary Combustion Turbine NESHAP - Initial Performance Tests
A-S0006	40CFR 63-YYYY.6120	2	-39	Stationary Combustion Turbine NESHAP - Performance Tests and Procedures
A-S0006	40CFR 63-YYYY.6125(a)	2	-40	Stationary Combustion Turbine NESHAP - Monitor installation, operating, and maintenance requirements
FACILITY	40CFR 68		21	Chemical accident prevention provisions
FACILITY	40CFR 72		45	Permits regulation
FACILITY	40CFR 75		46	Continuous emission monitoring
FACILITY	40CFR 82-F		22	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.6		1, 23, 24, 25	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7		10	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4		81, 2	-79 Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7		11	Recycling and Salvage
FACILITY	6NYCRR 201-1.8		12	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2(a)		13	Exempt Activities - Proof of eligibility



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FACILITY	6NYCRR 201-3.3 (a)	14	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	26, 47, 48	Title V Permits and the Associated Permit Conditions
A-S0006/-/001/GT002	6NYCRR 201-6	2 -41, 2 -42, 2 -43, 2 -44, 2 -45, 2 -46, 2 -47, 2 -48, 2 -49, 2 -50, 2 -51, 2 -52	Title V Permits and the Associated Permit Conditions
A-S0006/-/002/GT002	6NYCRR 201-6	2 -55, 2 -56, 2 -57, 2 -58, 2 -59, 2 -60	Title V Permits and the Associated Permit Conditions
A-S0006/-/003/GT002	6NYCRR 201-6	2 -62, 2 -63, 2 -64, 2 -65, 2 -66, 2 -67, 2 -68	Title V Permits and the Associated Permit Conditions
A-S0006/-/004/AB001	6NYCRR 201-6	2 -71, 2 -72	Title V Permits and the Associated Permit Conditions
A-S0006/00061	6NYCRR 201-6	2 -74, 2 -75	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.5 (a) (4)	15	General conditions
FACILITY	6NYCRR 201-6.5 (a) (7)	2, 2 -1	General conditions Fees
FACILITY	6NYCRR 201-6.5 (a) (8)	16	General conditions
FACILITY	6NYCRR 201-6.5 (c)	3	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (c) (2)	4	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (c) (3) (ii)	5	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (d) (5)	17	Compliance schedules
FACILITY	6NYCRR 201-6.5 (e)	6	Compliance Certification
FACILITY	6NYCRR 201-6.5 (f) (6)	18	Off Permit Changes
FACILITY	6NYCRR 201-7	28, 29, 49	Federally Enforceable Emissions Caps
A-S0001/-/NG3/00020	6NYCRR 201-7	54, 55, 56, 57, 58	Federally Enforceable Emissions Caps
A-S0006	6NYCRR 201-7	2 -21, 2 -22, 2 -23, 2 -24, 2 -25	Federally Enforceable Emissions Caps
A-S0006/-/001/GT002	6NYCRR 201-7	2 -53	Federally Enforceable Emissions Caps
A-S0006/-/002/GT002	6NYCRR 201-7	2 -61	Federally Enforceable Emissions Caps
A-S0006/-/003/GT002	6NYCRR 201-7	2 -69	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 202-1.1	19, 2 -3	Required emissions tests.
FACILITY	6NYCRR 202-1.2	2 -4	Notification.
FACILITY	6NYCRR 202-1.3 (a)	2 -5	Acceptable procedures - reference methods
FACILITY	6NYCRR 202-2.1	7	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	8	Emission Statements - record keeping requirements.



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FACILITY	6NYCRR 207	39	Control Measures for an Air Pollution Episode
FACILITY	6NYCRR 211.1	2 -6	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	82, 2 -80	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 215	9	Open Fires
FACILITY	6NYCRR 215.2	2 -2	Open Fires - Prohibitions
FACILITY	6NYCRR 225-1.2 (a) (2)	40	Sulfur in Fuel Limitations Post 12/31/87.
FACILITY	6NYCRR 225-1.7 (c)	41	Emission and fuel monitoring.
FACILITY	6NYCRR 225-1.8	42	Reports, sampling and analysis.
A-S0002/-/RO1/00030	6NYCRR 227.2 (b) (1)	66	Particulate emissions.
A-S0003/-/RO2/00040	6NYCRR 227.2 (b) (1)	70	Particulate emissions.
A-S0004/-/RO3/00050	6NYCRR 227.2 (b) (1)	75	Particulate emissions.
A-S0006/00061/003/GT002 FACILITY	6NYCRR 227.2 (b) (1)	2 -77	Particulate emissions.
	6NYCRR 227-1.3	43	Smoke Emission Limitations.
A-S0002/00031	6NYCRR 227-1.3	67	Smoke Emission Limitations.
A-S0002/00032	6NYCRR 227-1.3	68	Smoke Emission Limitations.
A-S0003/00041	6NYCRR 227-1.3	71	Smoke Emission Limitations.
A-S0003/00042	6NYCRR 227-1.3	72	Smoke Emission Limitations.
A-S0004/00051	6NYCRR 227-1.3	76	Smoke Emission Limitations.
A-S0004/00052	6NYCRR 227-1.3	77	Smoke Emission Limitations.
A-S0001/00021	6NYCRR 227-1.3 (a)	61	Smoke Emission Limitations.
A-S0006/00061	6NYCRR 227-1.3 (a)	2 -76	Smoke Emission Limitations.
A-S0006/00071	6NYCRR 227-1.3 (a)	2 -78	Smoke Emission Limitations.
FACILITY	6NYCRR 227-2.5 (b)	44	System-wide averaging option.
A-S0005	6NYCRR 227-2.6	78, 79	Testing, monitoring, and reporting requirements
A-S0001	6NYCRR 227-2.6 (a) (1)	50	Testing, monitoring, and reporting requirements for very large boilers.
A-S0002	6NYCRR 227-2.6 (a) (1)	62	Testing, monitoring, and reporting requirements for very large boilers.
A-S0003	6NYCRR 227-2.6 (a) (1)	69	Testing, monitoring, and reporting requirements for very large boilers.



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A-S0004	6NYCRR 227-2.6 (a) (1)	73		Testing, monitoring, and reporting requirements for very large boilers.
A-S0001/-/NG3/00020	6NYCRR 231-10.5	2 -14		Permit requirements
A-S0003	6NYCRR 231-10.5	2 -15, 2 -16, 2 -17		Permit requirements
A-S0004	6NYCRR 231-10.5	2 -18, 2 -19, 2 -20		Permit requirements
FACILITY	6NYCRR 231-2.3 (b)	28, 29		Prohibitions
A-S0001/-/NG3/00020	6NYCRR 231-2.4 (a) (1)	59, 60		Permit Requirements
A-S0001	6NYCRR 231-2.6	51, 52, 53		Emission reduction credits
A-S0002	6NYCRR 231-2.6	63, 64, 65		Emission reduction credits
A-S0004	6NYCRR 231-2.6	74		Emission reduction credits
A-S0006	6NYCRR 231-3.9	2 -26		Facility shakedown period
A-S0006	6NYCRR 231-6	2 -22, 2 -24		Mods to Existing Major Facilities in Nonattainment and Attainment Areas of the State in the OTR
A-S0006	6NYCRR 231-6.4	2 -21, 2 -25	2 -23, 2 -	Permit content and terms of issuance
A-S0006/-/001/GT002	6NYCRR 231-6.4	2 -53		Permit content and terms of issuance
A-S0006/-/002/GT002	6NYCRR 231-6.4	2 -61		Permit content and terms of issuance
A-S0006/-/003/GT002	6NYCRR 231-6.4	2 -69		Permit content and terms of issuance
FACILITY	6NYCRR 242-1.5	2 -81, 2 -83	2 -82, 2 -	CO2 Budget Trading Program - Standard requirements
FACILITY	6NYCRR 243-1.6 (a)	1 -1		Permit Requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-1.6 (b)	1 -2		Monitoring Requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-1.6 (c)	1 -3		NOx Ozone Season Emission Requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-1.6 (d)	1 -4		Excess Emission Requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-1.6 (e)	1 -5		Recordkeeping and reporting requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-2.1	1 -6		Authorization and responsibilities - CAIR Designated Representative Certificate of representation - CAIR Designated Representative
FACILITY	6NYCRR 243-2.4	1 -7		



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FACILITY	6NYCRR 243-8.1	1	-8, 1	-9	General Requirements - Monitoring and Reporting
FACILITY	6NYCRR 243-8.3	1	-10		Out of control periods - Monitoring and Reporting
FACILITY	6NYCRR 243-8.5 (d)	1	-11		Quarterly reports re: recordkeeping and reporting -
FACILITY	6NYCRR 243-8.5 (e)	1	-12		Monitoring and Reporting Compliance certification re: recordkeeping and reporting -
FACILITY	6NYCRR 244-1	1	-13		Monitoring and Reporting CAIR NOx Ozone Annual Trading Program
FACILITY	6NYCRR 244-2	1	-14		General Provisions CAIR Designated Representative for CAIR NOx Sources
FACILITY	6NYCRR 244-8	1	-15		Monitoring and Reporting CAIR NOx Allowances
FACILITY	6NYCRR 245-1	1	-16		CAIR SO2 Trading Program General Provisions
FACILITY	6NYCRR 245-2	1	-17		CAIR Designated Representative for CAIR SO2 Sources
FACILITY	6NYCRR 245-8	1	-18		Monitoring and Reporting for CAIR SO2 Trading Program

Applicability Discussion:

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

ECL 19-0301

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.

6 NYCRR 200.6

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

6 NYCRR 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

6 NYCRR 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.



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6 NYCRR 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 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.

6 NYCRR 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.

6 NYCRR Subpart 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.

6 NYCRR 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.

6 NYCRR 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.

6 NYCRR 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.

6 NYCRR 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,



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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.

6 NYCRR 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.

6 NYCRR 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.

6 NYCRR 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.

6 NYCRR 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.

6 NYCRR 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 permit change.

6 NYCRR 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.

6 NYCRR 202-2.1

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

6 NYCRR 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.

6 NYCRR 211.2

This regulation limits opacity from sources to less than or equal to 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.



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6 NYCRR Part 215

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

6 NYCRR 215.2

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

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 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, ASTORIA GENERATING STATION has been determined to be subject to the following regulations:

40 CFR 52.21

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) .

40 CFR 60.13

This regulation specifies how monitoring shall be performed and which methods and appendices are used to determine if the monitoring is adequate and in compliance with the regulated standards.

40 CFR 60.13 (b)

This condition states: All the continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under §60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation,

40 CFR 60.13 (h)

This regulation specifies the data averaging requirements for continuous monitoring systems subject to 40 CFR Part 60.



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40 CFR 60.4320 (a)

This condition limits NOx Turbine NOx emissions.

40 CFR 60.4335

This condition specifies CEM requirements for turbine.

40 CFR 60.4345

This condition Specifies CEM requirements.

40 CFR 60.4350

This regulation outlines the procedures used to identify excess emissions from data supplied by a continuous emissions monitor.

40 CFR 60.4365

This condition limits sulfur content of the fuel used in turbine not exceed 26ng SO₂/J (0.060 lb SO₂/MMBtu) heat input.

40 CFR 60.4370

This regulation specifies the frequency of monitoring the sulfur content of fuel used in a combustion turbine.

40 CFR 60.4405

This regulation allows for different performance testing for facilities that use diluent continuous emissions monitors for NOx monitoring.

40 CFR 60.4415

This condition specifies initial and subsequent performance testing requirements for sulfur.

40 CFR 60.48c (a)

This regulation requires the owner and operator of each affected facility to submit notification of the date of construction or reconstruction, anticipated startup, and actual startup of the facility. The notification must include the following information:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c., or 40 CFR 60.43c.



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(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

40 CFR 60.7 (a)

This regulation requires any owner or operator subject to a New Source Performance Standard (NSPS) to furnish the Administrator with notification of the dates of: construction or reconstruction, initial startup, any physical or operational changes, commencement of performance testing for continuous monitors and anticipated date for opacity observations as required.

40 CFR 60.7 (b)

This regulation requires the owner or operator to maintain records of the occurrence and duration of any startup, shutdown, or malfunction of the source or control equipment or continuous monitoring system.

40 CFR 60.7 (c)

This requirement details the information to be submitted in excess emissions and monitoring systems performance reports which must be submitted at least semi-annually for sources with compliance monitoring systems.

40 CFR 60.7 (d)

This condition specifies the required information and format for a summary report form and details when either a summary form and/or excess emissions reports are required.

40 CFR 60.7 (f)

This condition specifies requirements for maintenance of files of all measurements, including continuous monitoring system (CMS), monitoring device, and performance testing measurements; all CMS performance evaluations; all CMS or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices for at least two years.

40 CFR 60.8 (a)

This regulation contains the requirements for the completion date and reporting of Performance Testing (stack testing), at the facility. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, the owner or operator of the facility must conduct performance test(s) and furnish a written report of the test results.

40 CFR 60.8 (b)

This regulation contains the requirements for Performance test methods and procedures, to be used by the owner or operator, of the affected facility.

40 CFR 63.6100



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This condition sets Formaldehyde emission limit with with annual stack testing requirement.

40 CFR 63.6110 (a)

This condition requires facility to perform initial performance test or initial compliance demonstration in Table 4 of subpart YYYY within 180 calendar days after the compliance date that is specified in 40 CFR 63.6095 and according to the provisions in 40 CFR 63.7(a)(2).

40 CFR 63.6120

This condition specifies the stack testing requirements.

40 CFR 63.6125 (a)

If the facility is operating a stationary combustion turbine that is required to comply with the formaldehyde emission limit and the facility uses an oxidation catalyst emission control device, the facility must monitor on a continuous basis the catalyst inlet temperature and maintain the 4-hour rolling average of the inlet temperature within the range suggested by the catalyst manufacturer in order to comply with the operating limits in Table 2.

40 CFR Part 72

In order to reduce acid rain the the U.S. and Canada, Title IV of the Clean Air Act Amendments of 1990 requires the establishment of a program to reduce emissions of SO₂ and NO_x (sulfur dioxide and oxides of nitrogen). Fossil fuel burning electric utility companies are a major source of these contaminants in the US. These sources where regulated in a phased approach. Phase I, which began in 1995, requires 110 of the higher-emitting utility plants in the eastern and Midwest states to meet intermediate SO₂ emission limitations. Phase II, which began in 2000, tightens the emission limitations and expands the coverage to most fossil fuel burning utilities. The utilities are given "allowances" which is a limited authorization to emit one ton of SO₂. The utilities are required to limit SO₂ emissions to the number of allowances they hold. Some can benefit however by reducing their emissions and selling their excess allowances. Part 72 contains the means of implementing this portion of Title IV of the Clean Air Act.

40 CFR Part 75

Part 75 establishes the requirements for the monitoring, record keeping, and reporting for sulfur dioxide (SO₂), nitrogen oxides (NO_x), and carbon dioxide (CO₂) emissions and other data to be gathered by facilities affected by the Acid Rain Program

6 NYCRR 202-1.2

This regulation specifies that the department is to be notified at least 30 days in advance of any required stack test. The notification is to include a list of the procedures to be used that are acceptable to the department. Finally, free access to observe the stack test is to be provided to the department's representative.

6 NYCRR 202-1.3 (a)



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This regulation requires that any emission testing, sampling and analytical determination used to determine compliance must use methods acceptable to the department. Acceptable test methods may include but are not limited to the reference methods found in 40 CFR Part 60 appendix A and Part 61, appendix B. In addition, unless otherwise specified, all emission test reports must be submitted within 60 days after completion of testing.

6 NYCRR 211.1

6 NYCRR 225-1.2 (a) (2)

This regulation prohibits any person from selling, offering for sale, purchasing or using any fuel which contains sulfur in a quantity exceeding the limitations set forth in Table 1, Table 2, or Table 3 of this section.

6 NYCRR 225-1.7 (c)

This regulation requires that measurements be made daily of the rate of each fuel burned, the gross heat content and ash content of each fuel burned (determined at least once per week), and the average electrical output (daily) and hourly generation rate.

6 NYCRR 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.

6 NYCRR 227.2 (b) (1)

This regulation is from the 1972 version of Part 227 and still remains as part of New York's SIP. The rule establishes a particulate limit of 0.10 lbs/mmBtu based on a 2 hour average emission for any oil fired stationary combustion installation.

6 NYCRR 227-1.3

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

6 NYCRR 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.

6 NYCRR 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.

6 NYCRR 227-2.6



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This regulation establishes the compliance testing, monitoring, and reporting requirements for NOx RACT affected stationary combustion installations.

6 NYCRR 227-2.6 (a) (1)

This regulation establishes the monitoring requirements for NOx RACT affected very large boilers (boilers with a heat input of greater than 250 mmBtu/hr).

6 NYCRR 231-10.5

This section states what an applicant's permit must and will contain for conditions.

6 NYCRR 231-2.3 (b)

The provisions of Subpart 231-2 apply to new or modified major facilities. The contaminants of concern state-wide are nitrogen oxides and volatile organic compounds since New York State is located in the ozone transport region and because there are ozone non-attainment areas within the state. In the New York City metropolitan area, carbon monoxide is also a non-attainment contaminant. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.

The operation of proposed source projects or new major facilities may not commence until all emission reductions being used as offsets actually occur.

6 NYCRR 231-2.4 (a) (1)

The provisions of Subpart 231-2 apply to new or modified major facilities. The contaminants of concern state-wide are nitrogen oxides and volatile organic compounds since New York State is located in the ozone transport region and because there are ozone non-attainment areas within the state. In the New York City metropolitan area, carbon monoxide is also a non-attainment contaminant. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.

The permitting requirements for proposed source projects and new major facilities are set forth in section 231-2.4.

6 NYCRR 231-2.6

The provisions of Subpart 231-2 apply to new or modified major facilities. The contaminants of concern state-wide are nitrogen oxides and volatile organic compounds since New York State is located in the ozone transport region and because there are ozone non-attainment areas within the state. In the New York City metropolitan area, carbon monoxide is also a non-attainment contaminant. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.

The requirements and criteria for creating and certifying emission reduction credits (ERCs) are set forth in section 231-2.6.

6 NYCRR 231-3.9

This section sets the allowable amount of time a facility may take for shakedown.



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6 NYCRR 231-6.4

This section states what an applicant's permit must and will contain for conditions.

6 NYCRR 242-1.5

This regulation requires that the facility hold enough carbon dioxide allowances in their carbon dioxide budget at least equal to the amount of carbon dioxide emitted from the facility each year.

6 NYCRR 243-1.6 (a)

This citation requires the facility to acknowledge that they are subject to this CAIR regulation and provide owner and contact information. It also requires them to update this information as it changes or provide supplemental information at the Departments request.

6 NYCRR 243-1.6 (b)

This citation obligates the owners and operators of the facility to comply with the monitoring and reporting requirements of the CAIR regulations.

6 NYCRR 243-1.6 (c)

This citation explains the general provisions of the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program. This ozone season NOx cap and trade program runs from May 1 through September 30 each year, starting in 2009. Each source shall hold a tonnage equivalent in CAIR NOx Ozone Season allowances that is not less than the total tons of NOx emissions for the ozone season.

6 NYCRR 243-1.6 (d)

This citation for the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program explains some of the penalties that can be imposed on a CAIR NOx Ozone Season source that does not surrender enough CAIR NOx Ozone Season allowances to cover their NOx Ozone Season emissions.

6 NYCRR 243-1.6 (e)

This citation for the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program requires that all reports be submitted as required by this program, and that copies of all records and submissions made for this program be kept on site for at least five years.

6 NYCRR 243-2.1

This citation of the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program explains that an CAIR NOx Ozone Season designated representative must be selected to submit, sign and certify each submission on behalf of the source for the this program.

6 NYCRR 243-2.4

This citation describes the required elements of the "Certificate of Representation" for the CAIR program and the certifying language required with submissions to the Department.

6 NYCRR 243-8.1

This citation of the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program explains that CAIR NOx Ozone Season Trading Program sources must install, certify and operate monitoring systems the meet the monitoring, recordkeeping, and reporting requirements in Subpart 6 NYCRR 243-8 and in Subpart H of 40 CFR Part 75.

6 NYCRR 243-8.3



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This citation of the Clean Air Interstate Rule (CAIR) NO_x Ozone Season Trading Program explains what to do when an emission monitoring system fails quality assurance, quality control, or data validation requirements.

6 NYCRR 243-8.5 (d)

This citation of the Clean Air Interstate Rule (CAIR) NO_x Ozone Season Trading Program explains the what requirements the quarterly reports must meet.

6 NYCRR 243-8.5 (e)

This citation of the Clean Air Interstate Rule (CAIR) NO_x Ozone Season Trading Program explains the compliance certification requirements the source must follow for each quarterly report.

6 NYCRR Part 207

This regulation requires the owner or operator to submit an episode action plan to the Department in accordance with the requirements of 6NYCRR Part 207. The plan must contain detailed steps which will be taken by the facility to reduce air contaminant emissions during each stage of an air pollution episode. Once approved, the facility shall take whatever actions are prescribed by the episode action plan when an air pollution episode is in effect.

6 NYCRR Subpart 201-7

This regulation sets forth an emission cap that cannot be exceeded by the facility. In this permit that facility -widecap is as follows: 719 tpy of Particulates, 719 tpy of PM-10, 259 tpy of Carbon Monoxide, 560 tpy of NO_x, 74.8 tpy of VOC, 189 tpy of Sulfur Dioxide, 750 hours per year of oil firing, 0.04% Sulfur content in the distillate oil burned in the combustion turbines,. For Boiler 20, the emission cap is as follows: 49,000 lbs/yr of Particulates, 29,000 lbs/yr of PM-10, 79,000 lbs/yr of Sulfur Dioxide, 98 tpy of Carbon Monoxide, and 110 tpy of NO_x.

6 NYCRR Subpart 231-6

This Subpart applies to modifications to existing major facilities in non-attainment areas and attainment areas of the State within the OTR.

6 NYCRR Subpart 244-1

This subpart explains the general provisions of the Clean Air Interstate Rule (CAIR) Nitrogen Oxide (NO_x) Annual Trading Program. The control period for this annual NO_x cap and trade program runs from January 1 to December 31 each year, starting in 2009. Each source shall hold a tonnage equivalent in CAIR NO_x allowances that is not less than the total tons of NO_x emissions for the control period.

6 NYCRR Subpart 244-2

Each Clean Air Interstate Rule (CAIR) NO_x source shall have one CAIR designated representative and may have one alternate representative. Each submission for the CAIR NO_x Annual Trading Program shall be submitted, signed, and certified by the CAIR designated representative or the alternate representative.

6 NYCRR Subpart 244-8

The owners, operators, and Clean Air Interstate Rule (CAIR) designated representative of a CAIR NO_x unit shall comply with the monitoring, recordkeeping, and reporting requirements as provided in



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Subpart 6 NYCRR Part 244-8 and in 40 CFR Part 75, Subparts F and G. A certified NOx emission monitoring system must be used to measure NOx emissions. NOx emission reports must be certified and submitted quarterly.

6 NYCRR Subpart 245-1

This subpart explains the general provisions of the Clean Air Interstate Rule (CAIR) sulfur dioxide (SO2) Trading Program. The control period for this annual SO2 cap and trade program runs from January 1 to December 31, starting in the year 2010. Each source shall hold a tonnage equivalent in CAIR SO2 allowances that is not less than the total tons of SO2 emissions for the control period.

6 NYCRR Subpart 245-2

Each Clean Air Interstate Rule (CAIR) SO2 source shall have one CAIR designated representative and may have one alternate representative. Each submission for the CAIR SO2 Trading Program shall be submitted, signed, and certified by the CAIR designated representative or the alternate representative.

6 NYCRR Subpart 245-8

The owners, operators, and Clean Air Interstate Rule (CAIR) designated representative of a CAIR SO2 unit shall comply with the monitoring, recordkeeping, and reporting requirements as provided in Subpart 6 NYCRR Part 245-8 and in 40 CFR Part 75, Subparts F and G. A certified SO2 emission monitoring system must be used to measure SO2 emissions. SO2 emission reports must be certified and submitted quarterly.

Compliance Certification

Summary of monitoring activities at ASTORIA GENERATING STATION:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring

A-S0006	2-29	record keeping/maintenance procedures
FACILITY	2-13	record keeping/maintenance procedures
FACILITY	2-8	record keeping/maintenance procedures
A-S0006/-/004/AB001	2-73	record keeping/maintenance procedures
A-S0006/-/001/GT002	2-54	continuous emission monitoring (cem)
A-S0006/-/003/GT002	2-70	continuous emission monitoring (cem)
A-S0006	2-30	record keeping/maintenance procedures
A-S0006	2-31	record keeping/maintenance procedures
A-S0006	2-33	record keeping/maintenance procedures
A-S0006	2-34	record keeping/maintenance procedures
A-S0006	2-37	intermittent emission testing
A-S0006	2-40	record keeping/maintenance procedures
FACILITY	45	record keeping/maintenance procedures
FACILITY	46	record keeping/maintenance procedures
FACILITY	23	monitoring of process or control device parameters as surrogate
FACILITY	24	monitoring of process or control device parameters as surrogate
FACILITY	25	monitoring of process or control device parameters as surrogate
A-S0006/-/001/GT002	2-41	monitoring of process or control device parameters as surrogate
A-S0006/-/001/GT002	2-42	monitoring of process or control device parameters as surrogate
A-S0006/-/001/GT002	2-43	intermittent emission testing



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A-S0006/-/001/GT002	2-44	intermittent emission testing
A-S0006/-/001/GT002	2-45	continuous emission monitoring (cem)
A-S0006/-/001/GT002	2-46	continuous emission monitoring (cem)
A-S0006/-/001/GT002	2-47	continuous emission monitoring (cem)
A-S0006/-/001/GT002	2-48	continuous emission monitoring (cem)
A-S0006/-/001/GT002	2-49	continuous emission monitoring (cem)
A-S0006/-/001/GT002	2-50	continuous emission monitoring (cem)
A-S0006/-/001/GT002	2-51	continuous emission monitoring (cem)
A-S0006/-/001/GT002	2-52	continuous emission monitoring (cem)
A-S0006/-/002/GT002	2-55	intermittent emission testing
A-S0006/-/002/GT002	2-56	intermittent emission testing
A-S0006/-/002/GT002	2-57	continuous emission monitoring (cem)
A-S0006/-/002/GT002	2-58	continuous emission monitoring (cem)
A-S0006/-/002/GT002	2-59	continuous emission monitoring (cem)
A-S0006/-/002/GT002	2-60	continuous emission monitoring (cem)
A-S0006/-/003/GT002	2-62	monitoring of process or control device parameters as surrogate
A-S0006/-/003/GT002	2-63	intermittent emission testing
A-S0006/-/003/GT002	2-64	intermittent emission testing
A-S0006/-/003/GT002	2-65	continuous emission monitoring (cem)
A-S0006/-/003/GT002	2-66	continuous emission monitoring (cem)
A-S0006/-/003/GT002	2-67	continuous emission monitoring (cem)
A-S0006/-/003/GT002	2-68	continuous emission monitoring (cem)
A-S0006/-/004/AB001	2-71	work practice involving specific operations
A-S0006/-/004/AB001	2-72	intermittent emission testing
A-S0006/00061	2-74	record keeping/maintenance procedures
A-S0006/00061	2-75	continuous emission monitoring (cem)
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	28	continuous emission monitoring (cem)
FACILITY	29	monitoring of process or control device parameters as surrogate
A-S0001/-/NG3/00020	54	intermittent emission testing
A-S0001/-/NG3/00020	55	intermittent emission testing
A-S0001/-/NG3/00020	56	monitoring of process or control device parameters as surrogate
A-S0001/-/NG3/00020	57	monitoring of process or control device parameters as surrogate
A-S0001/-/NG3/00020	58	monitoring of process or control device parameters as surrogate
A-S0006	2-21	monitoring of process or control device parameters as surrogate
A-S0006	2-22	continuous emission monitoring (cem)
A-S0006	2-23	monitoring of process or control device parameters as surrogate
A-S0006	2-24	monitoring of process or control device parameters as surrogate
A-S0006	2-25	monitoring of process or control device parameters as surrogate
A-S0006/-/001/GT002	2-53	work practice involving specific operations
A-S0006/-/002/GT002	2-61	work practice involving specific operations
A-S0006/-/003/GT002	2-69	work practice involving specific operations
FACILITY	7	record keeping/maintenance procedures
FACILITY	40	work practice involving specific operations
FACILITY	41	record keeping/maintenance procedures
FACILITY	42	record keeping/maintenance procedures
A-S0002/-/RO1/00030	66	intermittent emission testing
A-S0003/-/RO2/00040	70	intermittent emission testing
A-S0004/-/RO3/00050	75	intermittent emission testing
A-S0006/00061/003/GT002	2-77	intermittent emission testing
FACILITY	43	record keeping/maintenance procedures
A-S0002/00031	67	continuous emission monitoring (cem)
A-S0002/00032	68	continuous emission monitoring (cem)
A-S0003/00041	71	continuous emission monitoring (cem)



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A-S0003/00042	72	continuous emission monitoring (cem)
A-S0004/00051	76	continuous emission monitoring (cem)
A-S0004/00052	77	continuous emission monitoring (cem)
A-S0001/00021	61	monitoring of process or control device parameters as surrogate
A-S0006/00061	2-76	monitoring of process or control device parameters as surrogate
A-S0006/00071	2-78	monitoring of process or control device parameters as surrogate
FACILITY	44	record keeping/maintenance procedures
A-S0005	78	record keeping/maintenance procedures
A-S0005	79	record keeping/maintenance procedures
A-S0001/-/NG3/00020	2-14	record keeping/maintenance procedures
A-S0003	2-15	continuous emission monitoring (cem)
A-S0003	2-16	monitoring of process or control device parameters as surrogate
A-S0003	2-17	monitoring of process or control device parameters as surrogate
A-S0004	2-18	continuous emission monitoring (cem)
A-S0004	2-19	monitoring of process or control device parameters as surrogate
A-S0004	2-20	monitoring of process or control device parameters as surrogate
A-S0001/-/NG3/00020	59	continuous emission monitoring (cem)
A-S0001/-/NG3/00020	60	continuous emission monitoring (cem)
A-S0001	52	continuous emission monitoring (cem)
A-S0001	53	continuous emission monitoring (cem)
A-S0002	65	continuous emission monitoring (cem)
FACILITY	2-82	record keeping/maintenance procedures
FACILITY	2-83	record keeping/maintenance procedures
FACILITY	1-15	record keeping/maintenance procedures
FACILITY	1-18	record keeping/maintenance procedures

Basis for Monitoring

NYCRR Part 201-7: Facility caps out of 231-6 requirements by keeping Luyster Creek Energy Project (LCEP) emissions of all criteria contaminants below the significant increase thresholds.

Siemens H Class turbine will have the following control technologies: dry low NOx combustors, water injection to reduce the formation of NOx within the gas turbine, a selective catalytic reduction (SCR) system to further reduce NOx emissions, and a CO oxidation catalyst to minimize CO and VOC emissions. Emissions of SO2 and PM will be minimized through the use of natural gas as a primary fuel and ULSD as a backup fuel.

The facility proposes to create future emission reduction credits (ERCs) which will be used as offsets to net the facility's emissions of all criteria contaminants below the significant increase thresholds. The ERCs used for netting will be generated by the shutdown of boiler 20(ES 00020) and the curtailment of operations of boilers 40 and 50(ES 00040 and ES 00050) through federally enforceable permit limits. The total proposed ERCs in tons per year (tpy) to be created are: 81.1 NOx, 44.17 PM, 44.17 PM-10, 44.17 PM-2.5, and 2.23 VOC. Along with these ERCs the new project under Emission Unit S0006 will cap to the following emission levels in tpy : 105.6 NOx, 54.07



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PM, 54.07 PM-10, 54.07 PM-2.5, 26.23 VOC.

Siemens H Class turbine is also subject to the NSPS requirements of 40 CFR 60 Subpart KKKK, 40 CFR 63 YYY Y and 6 NYCRR Part 227-2. 6 NYCRR Part 227-2 and 40 CFR 60 SubPart KKKK limits for NO_x are less stringent than applicant proposed NO_x limits which are cited under 201-6.

YYYY- This facility is an existing major source of HAPs and so applicable to this Rule.