

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 1-2820-00553/00025    Renewal Number: 1**



**02/10/2006**

**Facility Identification Data**

Name: EF BARRETT POWER STATION  
Address: 1 MCCARTHY RD  
ISLAND PARK, NY 11558

**Owner/Firm**

Name: KEYSpan CORPORATE SERVICES LLC  
Address: 445 BROAD HOLLOW RD  
MELVILLE, NY 11747, USA  
Owner Classification: Corporation/Partnership

**Permit Contacts**

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**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**

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Application for renewal of Air Title V Facility for an existing electric generating plant consisting of two (2) 185 MWe turbine/generator boiler sets operating on natural gas, #1, #2 or #6 fuel oils. The combustion turbines operate on either natural gas, #1, or #2 fuel oils. In addition, an industrial steam boiler is maintained on site for building heat. In addition to pipeline natural gas, #1, #2 and #6 fuel oil in the steam turbine boilers burn waste oil generated on and off site for energy recovery, and incinerate citrosolv, a boiler cleaning solution, following boiler chemical cleaning. There are numerous tanks used for storing distillate, lubrication and/or electrical cable oils at this facility. A complete list of tanks is included in the documentation section of this application.

**Attainment Status**

EF BARRETT POWER STATION is located in the town of HEMPSTEAD in the county of NASSAU. 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.)

<b>Criteria Pollutant</b>	<b>Attainment Status</b>
Particulate Matter (PM)	ATTAINMENT
Particulate Matter < 10µ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	SEVERE 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**

THIS FACILITY CONSISTS OF TWO (2) 185 MWE TURBINE/GENERATOR BOILER SETS OPERATING ON EITHER PIPELINE NATURAL GAS, #1, #2 OR #6 FUEL OILS. TWELVE (12) COMBUSTION TURBINE-GENERATORS (FOUR OF WHICH CONTAIN TWO ENGINES PER GENERATOR) ARE MAINTAINED ON SITE TO MEET SYSTEM LOAD DEMANDS. IN ADDITION, AN INDUSTRIAL STEAM BOILER IS USED FOR BUILDING HEAT.

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### Permit Structure and Description of Operations

The Title V permit for EF BARRETT POWER 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
- control            -        emission control devices
- process            -        any device or contrivance which may emit air contaminants that is not included in the above categories.

EF BARRETT POWER STATION is defined by the following emission unit(s):

Emission unit U00001 - This unit is a 185 mwe turbine/generator boiler set firing #1, #2 and #6 fuel oils and pipeline natural gas. In addition, this boiler may co-fire waste fuel for energy recovery and citrosolv for incineration. Exhaust is through emission point 00001.

Emission unit U00001 is associated with the following emission points (EP):  
00001

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

Process: P01 is located at GROUND FLOOR, Building BOILERBLD1 - This process is the combustion of #6 residual oil in a tangentially fired steam electric boiler. In order to improve boiler operation, a fuel additive may be mixed into the residual oil prior to combustion.

Process: P02 is located at GROUND FLOOR, Building BOILERBLD1 - This process is the combustion of #1 distillate oil in a tangentially fired steam electric boiler.

Process: P03 is located at GROUND FLOOR, Building BOILERBLD1 - This process is the combustion of #2 oil in a tangentially fired steam electric boiler.

Process: P04 is located at GROUND FLOOR, Building BOILERBLD1 - This process is the combustion of pipeline natural gas in a tangentially fired steam electric boiler.

Process: P05 is located at GROUND FLOOR, Building BOILERBLD1 - This process is the co-firing of waste fuel in a tangentially fired steam electric boiler. This fuel is fired in combination with a primary fuel, at a rate not to exceed 5%. Waste oil includes gas main drip water and gas transmission condensate.

Waste fuel is tested for compliance with 6NYCRR Part 225-2.3 and co-fired with primary boiler fuel at a

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maximum rate equivalent to 5% of the total heat input into the boiler. Lead, PCB's, and total halogens are tested on every delivery from off site. ( only KeySpan and LIPA waste fuel is accepted ). Monthly samples are collected and analyzed from each waste fuel tank on site. Analysis for sulfur and heat content have been waived by the NYSDEC since the co-firing rate restrictions insures that the "as burned" waste fuel in the boiler is always within the limitations of Part 225-2.3. Lead, PCB's and halogens limitations are complied with on an "as delivered" and/or "as generated" basis.

Process: P06 is located at GROUND FLOOR, Building BOILERBLD1 - This process is the incineration, by co-firing with a primary fuel, of a non-hazardous boiler chemical cleaning solution. Following a chemical cleaning of the water-side of the boilers tubes with an acidic solution, the spent material is evaporated when the boiler is operating at nominal full load. The spent chemical cleanup solution may be from any company owned boiler.

Emission unit U00002 - This unit is a 185 mwe turbine/generator boiler set firing #1, #2 and #6 fuel oils and pipeline natural gas. In addition, this boiler may co-fire waste oil for energy recovery and citrosolv for incineration. Exhaust is through emission point 00002.

Emission unit U00002 is associated with the following emission points (EP):  
00002

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

Process: P07 is located at GROUND FLOOR, Building BOILERBLD2 - This process is the combustion of #6 residual oil in a tangentially fired steam electric boiler. In order to improve boiler operation, a fuel additive may be mixed into the residual oil prior to combustion.

Process: P08 is located at GROUND FLOOR, Building BOILERBLD2 - This process is the combustion of #1 residual oil in a tangentially fired steam electric boiler. In order to improve boiler operation, a fuel additive may be mixed into the residual oil prior to combustion.

Process: P09 is located at GROUND FLOOR, Building BOILERBLD2 - This process is the combustion of #2 distillate oil in a tangentially fired steam electric boiler. When natural gas is unavailable, this fuel is used during the initial startup of the boiler

Process: P10 is located at GROUND FLOOR, Building BOILERBLD2 - This process is the combustion of pipeline natural gas in a tangentially fired steam electric boiler

Process: P11 is located at GROUND FLOOR, Building BOILERBLD2 - This process is the co-firing of waste fuel in a tangentially fired steam electric boiler. This fuel is fired in combination with a primary fuel, at a rate not to exceed 5%. Waste oil includes gas main drip water and gas transmission condensate.

Waste fuel is tested for compliance with 6NYCRR Part 225-2.3 and co-fired with primary boiler fuel at a maximum rate equivalent to 5% of the total heat input into the boiler. Lead, PCB's, and total halogens are tested on every delivery from off site. ( only KeySpan and LIPA waste fuel is accepted ). Monthly samples are collected and analyzed from each waste fuel tank on site. Analysis for sulfur and heat content have been waived by the NYSDEC since the co-firing rate restrictions insures that the "as burned" waste fuel in the boiler is always within the limitations of Part 225-2.3. Lead, PCB's and halogens limitations are complied with on an "as delivered" and/or "as generated" basis.

Process: P12 is located at GROUND FLOOR, Building BOILERBLD2 - This process is the incineration, by co-firing with a primary fuel, of a non-hazardous boiler chemical cleaning solution. Following a chemical cleaning of the water-side of the boilers tubes with an acidic solution, the spent material is evaporated when the boiler is operating at nominal full load. The spent chemical cleanup solution may be from any company owned boiler.

Emission unit U00003 - This unit is an industrial steam boiler used to supply auxiliary steam loads

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required by all onsite facilities.

Emission unit U00003 is associated with the following emission points (EP):  
00003

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

Process: P25 is located at GROUND FLOOR, Building HOUSEBOILE - This process involves the combustion of #1 distillate oil in an industrial steam boiler.

Process: P26 is located at GROUND FLOOR, Building HOUSEBOILE - This process involves the combustion of #2 distillate oil in an industrial steam boiler.

Process: P27 is located at GROUND FLOOR, Building HOUSEBOILE - This process involves the combustion of natural gas in an industrial steam boiler.

Emission unit U00004 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the long island electric distribution system. This unit is a "black start" combustion turbine designed to provide sufficient power to bring the entire power station back on line following a catastrophic system collapse. A diesel engine, emission point 000S4, emission unit U000S4 is utilized to start this combustion turbine.

Emission unit U00004 is associated with the following emission points (EP):  
00004

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

Process: P28 is located at GROUND FLOOR, Building CT#1 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P29 is located at GROUND FLOOR, Building CT#1 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P30 is located at GROUND FLOOR, Building CT#1 - This process is the combustion of pipeline natural gas in a combustion turbine.

Emission unit U00005 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the Long Island Electric distribution system.

Emission unit U00005 is associated with the following emission points (EP):  
00005

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

Process: P31 is located at GROUND FLOOR, Building CT#2 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P32 is located at GROUND FLOOR, Building CT#2 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P33 is located at GROUND FLOOR, Building CT#2 - This process is the combustion of pipeline natural gas in a combustion turbine.

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Emission unit U00006 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the Long Island Electric distribution system.

Emission unit U00006 is associated with the following emission points (EP):  
00006

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

Process: P34 is located at GROUND FLOOR, Building CT#3 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P35 is located at GROUND FLOOR, Building CT#3 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P36 is located at GROUND FLOOR, Building CT#3 - This process is the combustion of pipeline natural gas in a combustion turbine.

Emission unit U00007 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the Long Island Electric distribution system.

Emission unit U00007 is associated with the following emission points (EP):  
00007

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

Process: P37 is located at GROUND FLOOR, Building CT#4 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P38 is located at GROUND FLOOR, Building CT#4 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P39 is located at GROUND FLOOR, Building CT#4 - This process is the combustion of pipeline natural gas in a combustion turbine.

Emission unit U00008 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the long island electric distribution system. This unit is a "black start" combustion turbine designed to provide sufficient power to bring the entire power station back on line following a catastrophic system collapse. A diesel engine, emission point 000S8, emission unit 000S8 is utilized to start this combustion engine.

Emission unit U00008 is associated with the following emission points (EP):  
00008

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

Process: P40 is located at GROUND FLOOR, Building CT#5 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P41 is located at GROUND FLOOR, Building CT#5 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with

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the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P42 is located at GROUND FLOOR, Building CT#5 - This process is the combustion of pipeline natural gas in a combustion turbine.

Emission unit U00009 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the Long Island Electric distribution system.

Emission unit U00009 is associated with the following emission points (EP):

00009

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

Process: P43 is located at GROUND FLOOR, Building CT#6 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P44 is located at GROUND FLOOR, Building CT#6 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P45 is located at GROUND FLOOR, Building CT#6 - This process is the combustion of pipeline natural gas in a combustion turbine.

Emission unit U00010 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the Long Island Electric distribution system.

Emission unit U00010 is associated with the following emission points (EP):

00010

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

Process: P46 is located at GROUND FLOOR, Building CT#7 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P47 is located at GROUND FLOOR, Building CT#7 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P48 is located at GROUND FLOOR, Building CT#7 - This process is the combustion of pipeline natural gas in a combustion turbine.

Emission unit U00011 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the Long Island Electric distribution system.

Emission unit U00011 is associated with the following emission points (EP):

00011

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

Process: P49 is located at GROUND FLOOR, Building CT#8 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

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Process: P50 is located at GROUND FLOOR, Building CT#8 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P51 is located at GROUND FLOOR, Building CT#8 - This process is the combustion of pipeline natural gas in a combustion turbine.

Emission unit U00012 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the long island electric distribution system. This unit is paired with emission unit U00013 to operate a single generator. The emission point, emission unit, emission source and processes are completely independent, the generator is the only common component. Inlet water fogging may be utilized at maximum load to reduce NOx formation.

Emission unit U00012 is associated with the following emission points (EP):  
00012

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

Process: P52 is located at GROUND FLOOR, Building CT#9 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P53 is located at GROUND FLOOR, Building CT#9 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P54 is located at GROUND FLOOR, Building CT#9 - This is the combustion of pipeline natural gas in a combustion turbine.

Emission unit U00013 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the long island electric distribution system. This unit is paired with emission unit U00012 to operate a single generator. The emission point, emission unit, emission source and processes are completely independent, the generator is the only common component. Inlet water fogging may be utilized at maximum load to reduce NOx formation.

Emission unit U00013 is associated with the following emission points (EP):  
00013

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

Process: P55 is located at GROUND FLOOR, Building CT#9 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P56 is located at GROUND FLOOR, Building CT#9 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P57 is located at GROUND FLOOR, Building CT#9 - This process is the combustion of pipeline natural gas on a combustion turbine.

Emission unit U00014 - This unit is a combustion turbine used to supply peak generation capacity, as

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required to support the long island electric distribution system. This unit is paired with emission unit U00015 to operate a single generator. The emission point, emission unit, emission source and processes are completely independent, the generator is the only common component. Inlet water fogging may be utilized at maximum load to reduce NOx formation.

Emission unit U00014 is associated with the following emission points (EP):  
00014

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

Process: P58 is located at GROUND FLOOR, Building CT#10 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P59 is located at GROUND FLOOR, Building CT#10 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P60 is located at GROUND FLOOR, Building CT#10 - This process is the combustion of pipeline natural gas in a combustion turbine.

Emission unit U00015 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the long island electric distribution system. This unit is paired with emission unit U00014 to operate a single generator. The emission point, emission unit, emission source and processes are completely independent, the generator is the only common component. Inlet water fogging may be utilized at maximum load to reduce NOx formation.

Emission unit U00015 is associated with the following emission points (EP):  
00015

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

Process: P61 is located at GROUND FLOOR, Building CT#10 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P62 is located at GROUND FLOOR, Building CT#10 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P63 is located at GROUND FLOOR, Building CT#10 - This process is the combustion of pipeline natural gas in a combustion turbine.

Emission unit U00016 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the long island electric distribution system. This unit is paired with emission unit U00017 to operate a single generator. The emission point, emission unit, emission source and processes are completely independent, the generator is the only common component. Inlet water fogging may be utilized at maximum load to reduce NOx formation.

Emission unit U00016 is associated with the following emission points (EP):  
00016

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

Process: P64 is located at GROUND FLOOR, Building CT#11 - This process is the combustion of #1

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distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P65 is located at GROUND FLOOR, Building CT#11 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P66 is located at GROUND FLOOR, Building CT#11 - This process is the combustion of pipeline natural gas in a combustion turbine.

Emission unit U00017 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the long island electric distribution system. This unit is paired with emission unit U00016 to operate a single generator. The emission point, emission unit, emission source and processes are completely independent, the generator is the only common component. Inlet water fogging may be utilized at maximum load to reduce NOx formation.

Emission unit U00017 is associated with the following emission points (EP):

00017

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

Process: P67 is located at GROUND FLOOR, Building CT#11 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P68 is located at GROUND FLOOR, Building CT#11 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P69 is located at GROUND FLOOR, Building CT#11 - This process is the combustion of pipeline natural gas in a combustion turbine.

Emission unit U00018 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the long island electric distribution system. This unit is paired with emission unit U00019 to operate a single generator. The emission point, emission unit, emission source and processes are completely independent, the generator is the only common component. Inlet water fogging may be utilized at maximum load to reduce NOx formation.

Emission unit U00018 is associated with the following emission points (EP):

00018

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

Process: P70 is located at GROUND FLOOR, Building CT#12 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P71 is located at GROUND FLOOR, Building CT#12 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P72 is located at GROUND FLOOR, Building CT#12 - This is the combustion of pipeline

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natural gas in a combustion turbine.

Emission unit U00019 - This unit is a combustion turbine used to supply peak generation capacity, as required to support the long island electric distribution system. This unit is paired with emission unit U00019 to operate a single generator. The emission point, emission unit, emission source and processes are completely independent, the generator is the only common component. Inlet water fogging may be utilized at maximum load to reduce NOx formation.

Emission unit U00019 is associated with the following emission points (EP):  
00019

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

Process: P73 is located at GROUND FLOOR, Building CT#12 - This process is the combustion of #1 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P74 is located at GROUND FLOOR, Building CT#12 - This process is the combustion of #2 distillate oil in a combustion turbine. In order to improve combustion a fuel additive may be mixed with the distillate oil prior to combustion. In addition, when fuel oil is stored for extended periods, a biocide may be added to prevent fouling.

Process: P75 is located at GROUND FLOOR, Building CT#12 - This process is the combustion of pipeline natural gas in a combustion turbine.

Emission unit U000S4 - This unit is a 340 hp diesel engine used to start the black start combustion turbine, designated emission unit U00004. This unit only operates during startup of the combustion turbine, generally less than 15 minutes per event.

Emission unit U000S4 is associated with the following emission points (EP):  
000S4

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

Process: P91 is located at GROUND FLOOR, Building CT#1 - This process is the combustion of #1 distillate oil in a diesel engine. This engine is used to start the associated combustion turbine. During each startup the engine operates for less than 15 minutes

Process: P92 is located at GROUND FLOOR, Building CT#1 - This process is the combustion of #2 distillate oil in a diesel engine. This engine is used to start the associated combustion turbine. During each startup the engine operates for less than 15 minutes

Emission unit U000S8 - This unit is a 340 hp diesel engine used to start the "black start" combustion turbine, designated emission unit U00008. This unit only operates during startup of the combustion turbine, generally less than 15 minutes per event

Emission unit U000S8 is associated with the following emission points (EP):  
000S8

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

Process: P93 is located at GROUND FLOOR, Building CT#5 - This process is the combustion of #1 distillate oil in a diesel engine. This engine is used to start the associated combustion turbine. During each startup the engine operates for less than 15 minutes

Process: P94 is located at GROUND FLOOR, Building CT#5 - This process is the combustion of #1 distillate oil in a diesel engine. This engine is used to start the associated combustion turbine. During each startup the engine operates for less than 15 minutes

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**Title V/Major Source Status**

EF BARRETT POWER STATION is subject to Title V requirements. This determination is based on the following information:

Facility is major for Oxides of Nitrogen, making it subject to TV requirements.

**Program Applicability**

The following chart summarizes the applicability of EF BARRETT POWER STATION with regards to the principal air pollution regulatory programs:

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

**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

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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

Facility is out of compliance with specific requirements (see attached compliance schedule)  
Compliance Schedule:



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Location Facility/EU/EP/Process/ES	Short Description	Regulation
U-00001	Smoke Emission Limitations.	6NYCRR 227-1.3 (a)
U-00002	Smoke Emission Limitations.	6NYCRR 227-1.3 (a)

Compliance Discussion:

EF BARRETT POWER STATION is in violations of the following requirement(s): Facility is in compliance with TV 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
1-01-005-01	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - DISTILLATE OIL Grades 1 and 2 Oil
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
1-01-004-04	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - RESIDUAL OIL Grade 6 Oil: Tangential Firing
1-02-005-01	EXTERNAL COMBUSTION BOILERS - INDUSTRIAL INDUSTRIAL BOILER - DISTILLATE OIL Grades 1 and 2 Oil
1-02-006-02	EXTERNAL COMBUSTION BOILERS - INDUSTRIAL INDUSTRIAL BOILER - NATURAL GAS 10-100 MMBtu/Hr
2-01-009-01	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY IC ENGINE - KEROSENE/NAPHTHA (JET FUEL) Turbine



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- 2-01-001-02 INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION
ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL)
Reciprocating
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
2-02-009-02 INTERNAL COMBUSTION ENGINES - INDUSTRIAL
INDUSTRIAL INTERNAL COMBUSTION ENGINE - KEROSENE/NAPHTHA (JET FUEL)
Reciprocating

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 contaminants like 1,4-DIETHYLENE DIOXIDE (HAP), ARSENIC (HAP), CADMIUM (HAP), CARBON MONOXIDE, CHROMIUM (HAP), COPPER, HAP, IRON, LEAD (HAP), MERCURY (HAP), and NICKEL METAL AND INSOLUBLE.

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	COMPOUNDS (HAP)	
0NY210-00-0	OXIDES OF NITROGEN	>= 250 tpy
0NY075-00-0	PARTICULATES	>= 250 tpy
0NY075-00-5	PM-10	>= 250 tpy
007446-09-5	SULFUR DIOXIDE	>= 250 tpy
0NY998-00-0	VOC	>= 250 tpy
007440-66-6	ZINC	> 0 but < 2.5 tpy

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.

(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

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**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)**

**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)**

**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)**

**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)**

**6 NYCRR Part 201-6.5(a)(9)**

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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

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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 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

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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 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**

<b>Location Facility/EU/EP/Process/ES</b>	<b>Regulation</b>	<b>Short Description</b>	<b>Condition</b>
FACILITY	ECL 19-0301	Powers and Duties of the Department with respect to air pollution control	54
FACILITY	40CFR 68	Chemical accident prevention provisions	21
FACILITY	40CFR 72	Permits regulation	47

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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
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, 48, 49
FACILITY	6NYCRR 201-6.5(a) (4)	General conditions	15
FACILITY	6NYCRR 201-6.5(a) (7)	General conditions	
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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 204-1.6	Standard Requirements	24, 25
FACILITY	6NYCRR 204-2.1	Authorization and Responsibilities of the NOx Authorized Account Representative	26
FACILITY	6NYCRR 204-4.1	Compliance Certification Report	27, 28, 29
FACILITY	6NYCRR 204-7.1	Submission of NOx Allowance Transfers	30
FACILITY	6NYCRR 204-8.1	General Requirements	31, 32, 33
FACILITY	6NYCRR 204-8.2	Initial Certification and Recertification Procedures	34, 35
FACILITY	6NYCRR 204-8.3	Out of Control Periods	36
FACILITY	6NYCRR 204-8.4	Notifications	37
FACILITY	6NYCRR 204-8.7	Additional Requirements	38

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		to Provide Heat Input Data for Allocations Purposes	
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
FACILITY	6NYCRR 225-1.2(a)(2)	Sulfur in Fuel Limitations Post 12/31/87.	39, 40, 41
FACILITY	6NYCRR 225-2.3	Eligibility to burn waste fuel A.	42
FACILITY	6NYCRR 227.2(b)(1)	Particulate emissions.	46
FACILITY	6NYCRR 227-1.3(a)	Smoke Emission Limitations.	43, 44
U-00001	6NYCRR 227-1.3(a)	Smoke Emission Limitations.	50
U-00001/00001	6NYCRR 227-1.3(a)	Smoke Emission Limitations.	51
U-00002	6NYCRR 227-1.3(a)	Smoke Emission Limitations.	52
U-00002/00002	6NYCRR 227-1.3(a)	Smoke Emission Limitations.	53
FACILITY	6NYCRR 227-2	Reasonably available control technology for NOx	45
FACILITY	6NYCRR 237-1.4(a)	Generators equal to or greater than 25 MWe	57
FACILITY	6NYCRR 237-1.6(c)	Nitrogen oxides requirements	58
FACILITY	6NYCRR 237-1.6(e)	Recordkeeping and reporting requirements	59
FACILITY	6NYCRR 237-1.6(f)	Liability	60
FACILITY	6NYCRR 237-1.6(g)	Effect on other authorities	61
FACILITY	6NYCRR 237-2	NOx Authorized account representative for NOx budget sources	62
FACILITY	6NYCRR 237-4.1	Compliance certification report.	63
FACILITY	6NYCRR 237-7.1	Submission of NOx allowance transfers	64
FACILITY	6NYCRR 237-8	MONITORING AND REPORTING	65
FACILITY	6NYCRR 238-1.4	Applicability	66
FACILITY	6NYCRR 238-1.6(a)	Permit Requirements	67
FACILITY	6NYCRR 238-1.6(c)	Sulfur Dioxide requirements	68
FACILITY	6NYCRR 238-1.6(e)	Recordkeeping and Reporting Requirements	69
FACILITY	6NYCRR 238-1.6(f)	Liability	
FACILITY	70 6NYCRR 238-1.6(g)	Effect on Other Authorities	71
FACILITY	6NYCRR 238-2.1	Authorization/responsibil ities of the authorized account representative	72
FACILITY	6NYCRR 238-4.1	Compliance certification report	73
FACILITY	6NYCRR 238-7.1	Submission of SO2	74

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FACILITY

6NYCRR 238-8

allowance transfers  
Monitoring and Reporting 75

**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

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.

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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.

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;

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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 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.

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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 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, EF BARRETT POWER STATION has been determined to be subject to the following regulations:

40CFR 72

In order to reduce acid rain in the U.S. and Canada, Title IV of the Clean Air Act Amendments of 1990

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requires the establishment of a program to reduce emissions of SO<sub>2</sub> and NO<sub>x</sub> (sulfur dioxide and oxides of nitrogen). Fossil fuel burning electric utility companies are a major source of these contaminants in the US. These sources were 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 SO<sub>2</sub> 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 SO<sub>2</sub>. The utilities are required to limit SO<sub>2</sub> 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.

#### 6NYCRR 204-1.6

This condition requires the designated representative of the permittee to make submissions for the NO<sub>x</sub> Budget Program. The Program is designed to mitigate the interstate transport of ground level ozone and nitrogen oxides, a ground level ozone precursor.

#### 6NYCRR 204-2.1

This condition states the submission requirements for the NO<sub>x</sub> Budget Trading Program. The Program is designed to mitigate the interstate transport of ground level ozone and nitrogen oxides, a ground level ozone precursor.

#### 6NYCRR 204-4.1

This condition covers the compliance certification report requirements for the NO<sub>x</sub> Budget Program.

#### 6NYCRR 204-7.1

This condition lists the requirements for transfer of allowances in the NO<sub>x</sub> Budget Program.

#### 6NYCRR 204-8.1

This condition lists the general requirements for the NO<sub>x</sub> Budget trading program. They include, but are not limited to monitoring requirements, certification, record keeping and reporting.

#### 6NYCRR 204-8.2

This condition covers the procedures for initially certifying and recertifying the monitoring systems of the unit meet the requirements of the NO<sub>x</sub> Budget Program

#### 6NYCRR 204-8.3

This condition states the requirements for data substitution during times when the monitoring systems do not meet applicable quality assurance requirements.

#### 6NYCRR 204-8.4

This condition lists the addresses where monitoring plans and their modifications, compliance certifications, recertifications, quarterly QA/QC reports and petitions for alternative monitoring shall be sent.

#### 6NYCRR 204-8.7

This condition is a requirement for monitoring and reporting if a particular monitoring scenario is utilized.

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6NYCRR 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.

6NYCRR 225-2.3

This regulation prohibits the burning of Waste Fuel A in stationary combustion units. Waste fuel A is a waste oil that contains between 25 and 250 parts per million of lead and/or more than 50 parts per million of PCB or 1,000 parts per million of halogens.

6NYCRR 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.

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 227-2

This regulation limits the emission of oxides of nitrogen (NOx) from stationary combustion installations (boilers, combustion turbines and internal combustion engines).

6NYCRR 237-1.4 (a)

This condition specifies that any emission unit or facility with a unit; that at any time on or after January 1, 1999, serves a generator with a nameplate capacity equal to or greater than 25 MWe, and sells any amount of electricity, is a NOx budget unit and subject to the requirements of NYCRR 237

6NYCRR 237-1.6 (c)

This subdivision outlines the standard requirements of the Acid Deposition Reduction NOx Budget Trading Program for oxides of nitrogen.

6NYCRR 237-1.6 (e)

This requires the owners and operators of the NOx budget source and each NOx budget unit at the source to keep pertinent documents at the site for a period of 5 years; and lists which documents are pertinent.

6NYCRR 237-1.6 (f)

This describes the liability issues regarding the requirements of the ADR NOx Budget Trading Program .

6NYCRR 237-1.6 (g)

This item states that no provision of the ADR NOx Budget Trading Program, a NOx budget permit application, or a NOx budget permit, will exempt or exclude the owners and operators from compliance with any other provisions of applicable State and federal law and regulations.

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6NYCRR 237-2

This condition requires the permittee to select and authorize one person to manage, and represent the owners of any NOx budget unit; and specifies the responsibilities of this NOx authorized account representative

6NYCRR 237-4.1

This item specifies the requirements of the compliance certification report.

6NYCRR 237-7.1

This item specifies what information and actions are necessary in order to record the transfer of NOx allowances. t

6NYCRR 237-8

This item requires the owners and operators of a NOx budget unit to comply with the monitoring and reporting requirements of NYCRR 237-8 and Subpart H of 40 CFR part 75; and allows NOx budget units which are also NOx budget units under NYCRR Part 204 to be summarily referenced in order to demonstrate compliance with the requirements of this item.

6NYCRR 238-1.4

This citation identifies the facility as having one or more SO2 budget units as defined by Federal Law, and as such is subject to the requirements of 6 NYCRR 238

6NYCRR 238-1.6 (a)

This condition requires the applicant to submit a SO2 budget application for a permit and to operate in compliance with that permit.

6NYCRR 238-1.6 (c)

This Item requires the owners and operators of each SO2 budget source and each SO2 budget unit to hold SO2 allowances available for compliance deductions under NYCRR 238-6.5; and how such allowances will be managed.

6NYCRR 238-1.6 (e)

This item requires the owners and operators of the SO2 budget source to keep on site at the source pertinent documents for a period of 5 years from the date the document is created.

6NYCRR 238-1.6 (f)

This subdivision outlines the liability of an affected source.

6NYCRR 238-1.6 (g)

This subdivision outlines the liability of an affected source as subject to other requirements.

6NYCRR 238-2.1

This section outlines the authorization and responsibilities of the SO2 authorized account representative.



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6NYCRR 238-4.1

This section lists all of the requirements for the submission of the compliance certification report.

6NYCRR 238-7.1

This section outlines the requirements for the submission of SO2 allowance transfers.

6NYCRR 238-8

This condition requires the owner or operator of the facility to comply with the reporting and record keeping requirements of 40 CFR Part 75.

**Compliance Certification**

Summary of monitoring activities at EF BARRETT POWER STATION:

<b>Location Facility/EU/EP/Process/ES</b>	<b>Type of Monitoring</b>	<b>Cond No.</b>
FACILITY	record keeping/maintenance procedures	5
FACILITY	record keeping/maintenance procedures	6
FACILITY	record keeping/maintenance procedures	7
FACILITY	record keeping/maintenance procedures	29
FACILITY	record keeping/maintenance procedures	35
FACILITY	record keeping/maintenance procedures	37
FACILITY	record keeping/maintenance procedures	38
FACILITY	work practice involving specific operations	39
FACILITY	work practice involving specific operations	40
FACILITY	work practice involving specific operations	41
FACILITY	record keeping/maintenance procedures	42
FACILITY	intermittent emission testing	46
FACILITY	monitoring of process or control device parameters as surrogate	43
FACILITY	monitoring of process or control device parameters as surrogate	44
U-00001/00001	monitoring of process or control device parameters as surrogate	51
U-00002/00002	monitoring of process or control device parameters as surrogate	53
FACILITY	record keeping/maintenance procedures	45
FACILITY	record keeping/maintenance procedures	58
FACILITY	record keeping/maintenance procedures	63
FACILITY	record keeping/maintenance procedures	65
FACILITY	record keeping/maintenance procedures	68
FACILITY	record keeping/maintenance procedures	69
FACILITY	record keeping/maintenance procedures	73
FACILITY	record keeping/maintenance procedures	75

**Basis for Monitoring**

Facility operates Continuous Opacity, and Oxides of Nitrogen Monitors.