New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 2-6205-00246/00005
Renewal Number: 2
Modification Number: 1 01/24/2018

Facility Identification Data
Name: NYU CENTRAL PLANT
Address: 251 MERCER ST
NEW YORK, NY 10012

Owner/Firm
Name: NEW YORK UNIVERSITY
Address: 70 WASHINGTON SQ S
NEW YORK, NY 10012-1019, USA
Owner Classification: Corporation/Partnership

Permit Contacts
Division of Environmental Permits:
Name: ERIN L SHIRKEY
Address: NYSDEC - REGION 2
47-40 21ST ST
LONG ISLAND CITY, NY 11101-5401
Phone:7184824972

Division of Air Resources:
Name: DIANA MENASHA
Address: NYSDEC - REGION 2
47-40 21ST ST
LONG ISLAND CITY, NY 11101
Phone:7184827263

Air Permitting Contact:
Name: ZACHARY KORENSTEIN
Address: NEW YORK UNIVERSITY
10 ASTOR PL FL 6
NEW YORK, NY 10003
Phone:2129928276

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
This is a major modification to the Title V Renewal #2 for NYU Central Plant. This project consists of the removal of:

The seven (7) identical Caterpillar D399 stationary diesel internal combustion reciprocating engine generators (Emission Sources GEN01, GEN02, GEN03, GEN04, GEN05, GEN06 & GEN07), providing electricity ?with waste heat recovery boilers, from Emission Unit 2-0000. These seven engine-generators fired diesel oil (# 2 fuel oil) are lean burn internal combustion engines with compression ignition source. Each engine is rated at 1,000 horsepower for primary power production. These seven engines have participated in the Special Case Resources (SCR) program of the New York Independent System Operator (NYISO) or any other demand response program, as well as providing emergency back-up as needed. They have not operated since November 2013.

And the installation of:

Two (2) new reciprocating engines into the same existing Emission Unit 2-0000; one is a 2.6 MW GE-Jenbacher lean burn spark-ignited (Emission Source ENG08) natural gas-fired engine (Process JEN) with add-on selective catalytic reduction (Emission Control SCR08) for NOx and catalytic oxidation (Emission Control OXC08) for CO and VOC. The other engine is a certified 2.5 MW Caterpillar D3516C Tier 4 compression ignition (Emission Source ENG09) ultra low-sulfur distillate fuel oil (Process CAT) fired Tier 4 compression ignition engine serving as dispatch for demand response programs for the plant with similar "built in" catalyst-based emissions control (Emission Controls SCR09 and OXC09). The emissions from the two engines exhaust through a common stack identified as Emission Point 00002. The hours of operation will be capped at 500 per year for the Caterpillar engine (Emission Source ENG09).

The new "181 Mercer Street Expansion Project" involves installation of a new 2.5 MW natural gas-fired GE-Jenbacher JSM-616 engine generator (2649 KW or 4.55 MM Btu/hr), and a new 2.5 MW diesel-fired certified CAT 3516C, Tier 4 engine generator (2500 KW or 3627 HP) serving as dispatch for demand response programs and as black start power for the plant.

The Title V air permit applicability utilizes a "Significant Project Threshold" of emissions (tpy), and, a "Significant Net Emission Increase Threshold (tpy), based on individual air pollutants and the facility's Area Contaminant Classification within the state. NYU is an existing Title V major facility.

The predominant facility air permitting applicability for this new project is: Modifications to Existing Major Facilities in a Non-Attainment Areas and Attainment Areas of the State within the Ozone Transport Region, 6 NYCRR Subpart 231-6.

For Oxides of Nitrogen (NOx), which is classified as "attainment" in the New York City metropolitan area, the Significant Project Threshold is > 2.5 tpy, and the Significant Net Emission Increase Threshold is < 25 tpy.

Regulatory Applicability of New Source Review:

The pre-netting total project NOx with all the controls will be 10.67 tpy of NOx for the GE-Jenbacher engine (Emission Source ENG08) firing natural gas 8760 hr/yr, and 1.16 tpy for the Caterpillar D3516C engine (Emission Source ENG09) firing ultra-low sulfur distillate oil and capped at 500 hrs/yr, which exceeds the Significant Project Threshold (SPT) of 2.5 tpy, but is less than 25 tpy [the Significant Net Emission Increase Threshold (SNEIT)]. This is a modification to an existing major facility in a non-attainment area within the Ozone Transport Region according to 6 NYCRR 231-6. The facility is installing BACT-approved add-on pollution controls using selective catalytic reduction (SCR) for reducing NOx emissions, and oxidation catalysis for reducing CO & VOC emissions.

As a result of this new project, there is no change or increase to the facility's total NOx emissions, and there is a decrease in NOx for the modified Emission Unit 2-0000.

The Jenbacher natural gas fired engine (Emission Control ENG08) will employ add-on control technology utilizing selective catalytic reduction (SCR) with urea feed to minimize oxides of nitrogen (NOx) emissions, and an oxidation catalyst to minimize carbon monoxide emissions. The PTE emission factors used in the calculations for the Jenbacher are 0.30 g/bhp-hr for NOx, CO and VOC; and 0.040 g/bhp-hr for PM-10, and will meet the NSPS Subpart JJJJ compliance after the built-in controls from selective catalytic reduction (NOx) and oxidation catalyst (CO & VOC).

The diesel-fired CAT 3516, Tier 4 engine generator (Emission Source ENG09) utilizes proprietary built-in emissions controls (Emission Controls SCR09 & OXC09) and will not have its exhaust passed through the Jenbacher SCR system. the CAT generator set is optimized for use with the CAT clean emissions module (CEM), with the after-treatment system featuring a diesel oxidation catalyst combined with a selective catalytic reduction module and an air-assisted urea injection system. The catalyst -based control systems used for this product come from the factory as a serialized component 'attached/coupled' to the engine and cannot be installed separately from the machine per EPA regulations. The engine will have an EPA certification sticker, thus; no additional certifications are needed.

The emissions of the CAT (Emission Source ENG09) and the post-SCR Jenbacher (Emission Source GEN08) will exhaust to the existing stack (Emission Point 00002) with its existing continuous opacity monitor (COMS).

Under 6 NYCRR 201-7.1 (c) (1), NYU's anticipated actual emissions value instead of the PTEs established by assigning arbitrary emission factors. The arbitrary values assigned to establish PTE for the Jenbacher engine are 0.3 g/bhp-hr for NOx, CO and VOC; and 0.040 g/bhp-hr for PM-10. NYU have chosen an arbitrary value of 0.3 g/bhp-hr to establish PTE, which is NYU's anticipated actual emission rate.

Based on an arbitrary NOx emission factor for the GE-Jenbacher engine of 0.3 g/bhp-hr and operating 8760 hrs/yr, and the NOx emissions for the Caterpillar engine is 1.16 tpy (4.63 lb/hr x 500 hours).

The Project's NOx PTE emissions is the sum of the PTE for the stationary spark ignited Jenbacher engine which is 10.67 tpy of NOx after adopting the new arbitrary emission factors, and the NOx PTE emissions for the stationary compression ignition Caterpillar engine, which is 1.16 tpy (4.63 lb/hr x 500 hours). Therefore; the project's NOx PTE is: 10.67 tpy + 1.16 tpy = 11.83 tpy (23,660 lbs/yr).

The Net Emission Increase (NEI) has to be < Significant Emission Increase (SNEIT) of 25 tpy NOx for this project.
NEI = NOx emissions from GE-Jenbacher engine + NOx emissions from Caterpillar / D3516C engine =

NOx PTE for JEN + NOx PTE for CAT = 10.67+1.16 = 11.83 tpy of NOx

NEI = 10.67 tpy + 1.16 tpy = 11.83 tpy < 25 tpy, but >2.5 tpy

New Source Review is not applicable to this project because NYU is under the 25-ton Significant Net Emission Increase Threshold (SNEIT) with all the built in controls; the selective catalytic reduction (NOx) and the oxidation catalyst (CO & VOC).

CONCLUSION:
Based on the Subpart 231-2 Netting Analysis, since the Net Emission Increase (NEI) is < Significant Net Emission Increase Threshold (SNEIT), then this facility is NOT subject to Subpart 231-2.

NYU will maintain the new project emissions under the NOx 11.83 tons/year threshold cap by:

1. Preparing a BACT Plan to confirm the attributes and justifiability of the chosen technology; and
2. Installing BACT-approved add-on pollution controls to the Jenbacher engine (Emission Source ENG08) that include selective catalytic reduction (SCR) for NOx reduction (Emission Control SCR08), and an oxidation catalyst (Emission Control OXC08) for CO and VOC reductions. CO initially exceeds the Significant Project Threshold (SPT), but does not exceed the Significant Net Emission Increase Threshold (SNEIT). The GE-Jenbacher engine under NSPS Subpart JJJJ has emission standards for CO (2.0 g/bhp-hr) and VOC (0.7 g/bhp-hr), as well as NOx (1.0 g/bhp-hr).

According to 40 CFR 60.4211,Subpart IIII - for the Caterpillar Compression Ignition engine, it requires an initial performance test within one year after start-up. The Carterpillar engine has only an initial performance test within one year after starting up and subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

The Caterpillar manufacturer's nominal rated emission factors, total NOx is established as 4.63 lb/hr, and the NOx emissions for the Caterpillar engine is 4.63 lb/hr x 500 hours = 1.16 tpy (equivalent to 0.59 g/bhp-hr). The NSPS Subpart IIII general standards for engines of KW > 560 /HP > 750 are:

NSPS IIII	NOx	CO	PM	HC
g/bhp-hr	6.9	8.5	0.40	1.0
g/KW-hr	9.2	11.4	0.54	1.3

According to 40 CFR 60.4243, Subpart JJJJ - for the spark ignited Jenbacher engine, it requires testing every 8760 hours or every 3 years, whichever comes first. Under NSPS Subpart JJJJ, the stationary spark ignited Jenbacher engine, the owner or operator must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. *** The PTE calculations are based on 0.30 g/bhp-hr for NOx, CO and VOC and 0.40 g/bhp-hr for PM-10 after the built-in controls from selective catalytic reduction (NOx) and oxidation catalyst (CO & VOC), and the stack test will confirm these limits. For non-emergency spark ignited natural gas engines greater than or equal to 500 HP and manufactured July 2010 or after, the NSPS standards are:

NSPS JJJJ	NOx	CO	VOC
g/bhp-hr	1.0	2.0	0.7
ppmvd	82	270	60

For the stationary spark ignited Jenbacher engine, the PTE-establishing arbitrary level of 0.3 g/bhp-hr for all three parameters (NOx, CO and VOC) will meet the NSPS Subpart JJJJ compliance after the built-in controls from selective catalytic reduction (NOx) and oxidation catalyst (CO & VOC).

To provide space for the new equipment, the existing seven (7) diesel-fired, Caterpillar D399 engines in Emission Unit 2-0000), combustion Emission Sources ENG01 through ENG07, will be permanently removed on 2/4/2018, and the NOx RACT variance under which these seven engines operated will no longer be in effect.

Similarly, Process 003 will be removed on 2/4/2018. As such, the following current permit conditions will

be eliminated (expired) from the permit: #22.2, #24.1, #28, #30, #46, #47, #48, #51, #53, #61.7 #146, #147 and #148.

Attainment Status
NYU CENTRAL PLANT is located in the town of MANHATTAN in the county of NEW YORK.
The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

Criteria Pollutant	Attainment Status
Particulate Matter (PM)	ATTAINMENT
Particulate Matter< 10µ in diameter (PM10)	MODERATE NON-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:
NYU's Central Plant is a central cogeneration power plant at a major urban university in New York City.

New York University's (NYU) on campus, subterranean power plant currently consists of two, dual fueled (natural gas and ultra-low sulfur diesel) 5.5 MW Solar Taurus Model 60 turbines, each with a heat recovery steam generator (HRSG) and duct burner (natural gas only and never operating without its turbine), and three 65 MM Btu/hr dual-fuel, natural gas and ultra-low sulfur distillate #2 fuel oil fired boilers.

The new "181 Mercer Street Expansion Project" involves installation of a new 2.6 MW natural gas-fired GE-Jenbacher JSM-616 engine generator (2649 KW or 4.55 MM Btu/hr), and a new 2.5 MW diesel-fired certified CAT 3516C, Tier 4 engine generator (2500 KW or 3627 HP) serving as dispatch for demand response programs and as black start power for the plant.

The Title V air permit applicability utilizes a "Significant Project Threshold" of emissions (tpy), and, a "Significant Net Emission Increase Threshold (tpy), based on individual air pollutants and the facility's Area Contaminant Classification within the state. NYU is an existing Title V major facility.

The predominant facility air permitting applicability for this new project is: Modifications to Existing Major Facilities in a Non-Attainment Areas and Attainment Areas of the State within the Ozone Transport Region, 6 NYCRR Subpart 231-6.

For Oxides of Nitrogen (NOx), which is classified as "attainment" in the New York City metropolitan area, the Significant Project Threshold is > 2.5 tpy, and the Significant Net Emission Increase Threshold is < 25 tpy.

Based on an arbitrary NOx emission factor for the GE-Jenbacher engine of 0.3 g/bhp-hr for NOx, the firing of the controlled GE-Jenbacher JSM-616 engine generator on natural gas and its maximum operation of 365 days/yr and 24 hours /day (8760 hours per year) with add-on controls would emit 10.67 tons of NOx per year. The firing of the CAT 3516C engine generator on diesel and the capping of 500 hours/year calculates to 1.16 ton/year (4.63 lb/hr x 500 hours) for a total project NOx of 11.83 tons per year.

The Project's NOx PTE emissions is the sum of the PTE for the stationary spark ignited Jenbacher engine (which is 10.67 tpy of NOx after adopting the new arbitrary emission factors), and the NOx PTE emissions for the stationary compression ignition Caterpillar engine [which is 1.16 tpy (4.63 lb/hr x 500 hours)]. Therefore; the project's NOx PTE is: 10.67 tpy+ 1.16 tpy = 11.83 tpy (23,660 lbs/yr).

The Net Emission Increase (NEI) has to be < Significant Emission Increase (SNEIT) of 25 tpy NOx for this project.
NEI = NOx emissions from GE-Jenbacher engine + NOx emissions from Caterpillar / D3516C engine = NEI =10.67 tpy + 1.16 tpy = 11.83 tpy < 25 tpy, but >2.5 tpy

Maximum NOx emission for the new project with controls = GE-Jenbacher JSM-616 engine + CAT 3516C engine = 10.67 + 1.16 = 11.83 tpy, which is the total project annual potential to emit, which is > 2.5 tons and is < 25 tons.

New Source Review is not applicable to this project because NYU is under the 25-ton Significant Net Emission Increase Threshold (SNEIT) with all the built in controls; the selective catalytic reduction (NOx) and the oxidation catalyst (CO & VOC).

NYU will maintain the new project emissions under the NOx 11.83 tons/year threshold cap by:

1. Preparing a BACT Plan to confirm the attributes and justifiability of the chosen technology; and
2. Installing BACT-approved add-on pollution controls to the Jenbacher engine (Emission Control ENG08) that include selective catalytic reduction (SCR with urea feed) for NOx reduction Emission Control SCR08), and an oxidation catalyst (Emission Control OXC08) for CO reduction and VOC reduction. CO initially exceeds the Significant Project Threshold (SPT), but does not exceed the Significant Net Emission Increase Threshold (SNEIT). The GE-Jenbacher engine under NSPS Subpart JJJJ has emission standards for CO (2.0 g/bhp-hr) and VOC (0.7 g/bhp-hr), as well as NOx (1.0 g/bhp-hr).

The controlled GE-Jenbacher JSM-616 engine generator (2649 KW or 4.55 MM Btu/hr) - Emission Source ENG08 is four stroke lean burn spark ignited and will meet the NYSDEC presumptive standard for natural-fired engines (1.5 g/bhp-hr), the federal New Source Performance Standard (NSPS) for stationary spark ignition internal combustion engines (40 CFR 60 Subpart JJJJ) for NOx, which is 1.0 g/bhp-hr, the CO NSPS limit of 2.0 g/bhp-hr, and the VOC NSPS of 0.7 g/bhp-hr. Therefore, the GE-Jenbacher JSM-616 will meet the NSPS Subpart JJJJ NOx standard, CO standard and the VOC standard.

The GE-Jenbacher JSM-616 engine is equipped with SCR (Emission Control SCR08) for reducing the NOx emission and Oxidation Catalysis (Emission Control OXC08) for reducing the CO and the VOC emission. The GE-Jenbacher JSM-616 engine generator (2649 KW or 4.55 MM Btu/hr) emits 1.0 g/bhp-hr, which meets the NYSDEC presumptive standard for natural gas-fired engines of 1.5 g/bhp-hr, and the federal new source performance standard (NSPS) for stationary spark ignition internal combustion engines as per 40 CFR 60 Subpart JJJJ of 1.0 g/bhp-hr. Similarly, the Jenbacher will meet the NSPS Subpart JJJJ CO standard of 2.0 g/bhp-hr and the NSPS Subpart JJJJ VOC standard of 0.7 g/bhp-hr. Applicability to National Emission Standards for Hazardous Air Pollutants (NESHAPs) Subpart ZZZZ (40 CFR 63.6590; Stationary Reciprocating Internal Combustion Engines) is met by meeting the requirements of NSPS

Subpart JJJJ. No further requirements apply for such engines under Subpart ZZZZ.

In the PTE calculations, NYU has chosen a PTE of 0.30 g/bhp-hr for NOx, CO and VOC; and 0.04 g/bhp for PM-10 for the spark ignited GE-Jenbacher JSM-616 gas-fired engine generator, which meets the NYSDEC presumptive standard for natural gas-fired engines of 1.5 g/bhp-hr, and the federal new source performance standard (NSPS) for stationary spark ignition internal combustion engines as per 40 CFR 60 Subpart JJJJ of 1.0 g/bhp-hr.

Applicability to National Emission Standards for Hazardous Air Pollutants (NESHAPs) Subpart ZZZZ (40 CFR 63.6590; Stationary Reciprocating Internal Combustion Engines) is met by meeting the requirements of NSPS Subpart JJJJ.

The diesel-fired CAT 3516, Tier 4 engine generator (2500 KW or 3627 HP) - Emission Source ENG09 utilizes proprietary built-in emissions controls and will not have its exhaust passed through the Jenbacher SCR system. The CAT generator set is optimized for use with the CAT clean emissions module (CEM), with the after-treatment system featuring a diesel oxidation catalyst combined with a selective catalytic reduction module and an air-assisted urea injection system. The generator set also features integrated electronics for monitoring, protection and closed loop NOx control, an ADEM A4 panel. The catalyst-based control systems used for this product come from the factory as a serialized component 'married' to the engine and cannot be installed separately from the machine per EPA regulations. The engine will have an EPA certification sticker, thus no additional certifications are needed.

NSPS 40 CFR Part 60 Subpart IIII regulations for Stationary Compression Ignition Internal Combustion Engines, covers the CAT permitting applicability. Similarly, applicability to NESHAPS Subpart ZZZZ is met by meeting the requirements of Subpart IIII.

The emissions of the CAT and the Jenbacher will exhaust to the existing stack #2 through Emission Point 00002, with its continuous opacity monitor (COMS).

The following is the manufacturers' specifications for these two engines:

The stationary spark ignited natural gas-fired GE-Jenbacher JSM-616 engine generator is a four-stroke lean burn spark ignited engine with controls. It is rated at 2649 KW or 4.55 MM Btu/hr (Emission Source ENG08). The PTE-establishing arbitrary level of 0.3 g/bhp-hr for all three parameters (NOx, CO and VOC) and 0.04 g/bhp-hr for PM-10, will meet the NSPS Subpart JJJJ compliance after the built-in controls from selective catalytic reduction with urea feed (NOx) and oxidation catalysis (CO & VOC). For non-emergency spark ignited natural gas engines greater than or equal to 500 HP and manufactured July 2010 or after, the NSPS emission standards are:

NSPS JJJJ	NOx	CO	VOC
g/bhp-hr	1.0	2.0	0.7
ppmvd	82	270	60

The Caterpillar manufacturer's nominal rated emission factors, total NOx is established as 4.63 lb/hr, and the NOx emissions for the Caterpillar engine is 4.63 lb/hr x 500 hours = 1.16 tpy (equivalent to 0.59 g/bhp-hr). The NSPS Subpart IIII general standards for engines of KW > 560 /HP > 750 are:

NSPS IIII	NOx	CO	PM	HC

g/bhp-hr	6.9	8.5	0.40	1.0
g/KW-hr	9.2	11.4	0.54	1.3

40 CFR 60.4211, Subpart IIII - The Caterpillar engine is a CI - Compression Ignition, requires an initial performance test within one year after start-up. CI Caterpillar engine is required to an initial performance test within one year after starting up. It is a certified compression ignition engine. The owner or operator must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

40 CFR 63.4243, Subpart JJJJ - The Jenbacher engine is a SI - Spark Ignited, requires testing every 8760 hours or every 3 years, whichever comes first. Under NSPS Subpart JJJJ, the owner or operator must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. The Jenbacher is required to test every 8760 hours of operation or 3 years, whichever comes first.

To provide space for the new equipment, the existing seven diesel-fired, Caterpillar D399 engines in Emission Unit 2-0000, combustion Emission Sources ENG01 through ENG07, will be permanently removed on 2/4/2018, and the NOx RACT variance under which these engines operated will no longer be in effect.

Similarly, Process 003 will be removed on 2/4/2018. As such, the following current permit conditions associated with Process 003 or Emission Sources ENG01 through ENG07 will be eliminated: #22.2, #24.1, #28, #30, #46, #47, #48, #51, #53, #61.7, #146, #147 and #148.

Permit Structure and Description of Operations

The Title V permit for NYU CENTRAL PLANT
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.

NYU CENTRAL PLANT is defined by the following emission unit(s):

Emission unit 200000 - Emission Unit 2-00000, located in the Tisch Hall sub-basement of

40 West 4th Street, currently houses the seven diesel-fired Caterpillar D399 engines (Emission Sources ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07) that have not been in operation since November 2013. These engines will be permanently removed on 2/4/2018 and be replaced with two new reciprocating engines (Emission Sources ENG08 & ENG09) which will be installed on 2/1/2018 and into the same existing emission unit (Emission Unit 2-00000) and utilize the same existing stack and emission point (Emission Point 00002). One engine is defined as Emission Source ENG08, is the 2.6 MW GE-Jenbacher / JSM-616 natural gas fired (Process JEN) lean burn engine with add-on selective catalytic reduction for NOx (Emission Control SCR08) and catalytic oxidation (Emission Control OXC08) for CO and VOC. The other engine is Caterpillar / 3516C and is defined as Emission Source ENG09, is a 2.5 MW fuel oil-fired (Process CAT) Tier 4 compression ignition engine for black start and utility demand programs, similar to "built-in" catalyst-based emissions control (Emission Control OXC09).

The existing COMS at Emission Point 00002 for the seven engines in Emission Unit 2-00000 will remain at the facility and the two new engines (Emission Sources ENG08 & ENG09) will utilize the same existing stack and emission point (Emission Point 00002).

The current NOx limit for the seven diesel-fired Caterpillar D399 engines in this emission unit is 13.9 tons per year. The new NOx emissions for the combined ENG08 and ENG09 will not exceed the 5.0 tons per year cap.

Emission Controls (SCR08 & SCR09) are the selective catalytic reductions for the two new engines (Emission Sources ENG08 & ENG09); respectively, and will reduce the NOx emissions by 93 percent by weight.

Emission Controls (OXC08 & OXC09) are the oxidation catalysts for the two new engines (Emission Sources ENG08 & ENG09); respectively, and will reduce the CO emissions by 93 percent by weight.

Emission Controls (OXC08 & OXC09) are the oxidation catalysts for the two new engines (Emission Sources ENG08 & ENG09); respectively, and will reduce the VOC emissions by 82 percent by weight.

Emission unit 200000 is associated with the following emission points (EP):
00002
Process: 003 is located at sub-basement, Building 40 - Process 003 is the firing of diesel oil (# 2 fuel oil) in the seven identical Caterpillar D399 diesel engine generators (Emission Sources ENG01, ENG02,

ENG03, ENG04, ENG05, ENG06 & ENG07) associated with waste heat boilers at the plant in Emission Unit 2-00000. Each diesel engine generator is 850 KW (1,000 hp mechanical). The emissions from these seven diesel engine generators exhaust through one common stack, identified as Emission Point 00002.

The seven identical Caterpillar D399 diesel engine generators (Emission Sources ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07) with waste heat boilers have been participating in the Special Case Resources (SCR) of the New York Independent System Operator (NYISO) or any other demand response program, and will operate no more than 2,000 hours/7 engines/year.

Process: CAT is located at Sub-basement, Building 40 - Process CAT is the burning of ultra low-sulfur distillate fuel oil for firing the 2.5 MW Caterpillar D3516C Tier 4 compression ignition reciprocating engine (Emission Source ENG09) for black start and utility demand programs, similar to "built-in" catalyst-based emissions control (Emission Control OXC09) in Emission Unit 2-00000 and the emissions exhaust through a stack identified as Emission Point 00002. The hours of operation will be capped at 500 per year.

Process: JEN is located at Sub-basement, Building 40 - Process JEN is the burning of utility-provided natural gas for firing the 2.6 MW GE-Jenbacher lean burn spark-ignited reciprocating engine (Emission Source GEN08) with add-on selective catalytic reduction (Emission Control OXC08) for NOx and catalytic oxidation for CO and VOC (Emission Control OXC08) in Emission Unit 2-00000 and the emissions exhaust through a stack identified as Emission Point 00002.

Emission unit 100000 - The Central Power Plant at NYU provides electricity and high temperature hot water and steam for heating and cooling of university buildings year round. Emission Unit 1-00000 located in the sub-basement of 251 Mercer Street is part of the Central Plant and currently has three identical mid size high temperature hot water boilers of 65 MM Btu/hr each (Emission Sources 0BLRA, 0BLRB & 0BLRC) used for hot water. Each boiler is capable of burning natural gas (Process 001) and # 2 fuel oil - distillate fuel oil (Process 006). Emissions from the three boilers are exhausted through a single emission point, a nine foot diameter stack on the roof of 251 Mercer Street, identified as Emission Point 00001. A licensed operating engineer is on duty at all times.

Also emitting through this emission point at the plant are two 5.5 MW gas turbines (Emission Sources TURB1 & TURB2) burning natural gas (Process 004) and # 2 ultra low sulfur distillate fuel oil (Process 005), and two 70 MM Btu/hr duct burners (Emission Controls DUCT1 & DUCT2) fueled by natural gas (Process 004) for cogeneration with the two turbines. The facility's electrical output is approximately 11 MW from the two turbines (2 @ 5.5 MW = 11 MW = 11 MW x 8,760 hours = 96,360 MWe-hrs). The two

combustion turbines are identical, each is approximately 60.5 MM Btu/hr and each is equipped with a heat recovery steam generator (HRSG). Emissions from the two turbines co-exhaust with the boilers through the same single emission point identified as Emission Point 00001.

The two 5.5 MW gas turbines (Emission Sources TURB1 & TURB2), and their two corresponding 70 MM Btu/hr duct burners (Emission Controls DUCT1 & DUCT2; respectively) for cogeneration with the two turbines began operating December 2010 (though they were allowed to operate beginning June 30, 2010).

As per 6 NYCRR 227-1.4, COMS is required on combustion sources exceeding 250 MMBtu/hr heat input, excluding gas turbines. Heat input at Emission Point 00001 from the mid-size boilers (Emission Sources 0BLRA, 0BLRB & 0BLRC) @ 65 MMBtu/hr each total 195 MMBtu/hr (< 250 MMBtu/hr), therefore COMS is not required, but the existing continuous opacity monitoring system (COMS) unit will voluntarily remain on the stack of Emission Point 00001.

Since total heat input for the combustion sources (excluding gas turbines) is < 250 MM Btu/hr threshold, COMS is not required by opacity regulation 6 NYCRR 227-1.3 (a).

Emission unit 100000 is associated with the following emission points (EP):
00001

Process: 001 is located at sub-basement, Building 251 - Process 001 is the combustion of natural gas in three existing boilers (Emission Sources 0BLRA, 0BLRB & 0BLRC) in Emission Unit 1-0000. Boilers 0BLRA, 0BLRB and 0BLRC are 65 MM Btu/hr each. These three boilers combust natural gas (Process 001) and # 2 fuel oil (Process 006).

Emissions from the three boilers exhaust through a single emission point, a nine foot diameter stack on the roof of 251 Mercer Street, identified as Emission Point 00001. The same emission point exhausts emissions from the two turbines (Emission Sources TURB1 & TURB2) and their corresponding duct burners (Emission Controls DUCT1 & DUCT2; respectively).

Process: 004 is located at sub-basement, Building 251 - Process 004 consists of the combustion of natural gas in the two 5.5 MW turbines (Emission Sources TURB1 & TURB2) with or without their corresponding two duct burners (Emission Controls DUCT1 & DUCT2; respectively) in Emission Unit 1-00000. The duct burners combust only natural gas. When the two turbines are not operating due to emergency or

maintenance, the duct burners do not operate and supplemental hot water is provided by the boilers. The duct burners operate only when the turbines are operating. The duct burners (Emission Controls DUCT1 & DUCT2) do not operate independent of the turbines (Emission Sources TURB1 & TURB2).

The two combustion turbines (Emission Sources TURB1 & TURB2) are identical, and each is approximately 60.5 MM Btu/hr.

Process: 005 is located at sub-basement, Building 251 - Process 005 consists of the combustion of # 2 fuel oil (distillate oil) in the two 5.5 MW turbines (Emission Sources TURB1 & TURB2) with or without their corresponding two duct burners (Emission Controls DUCT1 & DUCT2; respectively) in Emission Unit 1-00000. The duct burners combust only natural gas. When the two turbines are not operating due to emergency or maintenance, the duct burners do not operate and supplemental hot water is provided by the boilers.

The two combustion turbines (Emission Sources TURB1 & TURB2) are identical, and each is approximately 60.5 MM Btu/hr. The duct burners (Emission Controls DUCT1 & DUCT2) operate only when the turbines are operating; the duct burners do not operate independent of the turbines (Emission Sources TURB1 & TURB2).

Emissions from the two turbines/duct burners will be exhausted through a single emission point, identified as Emission Point 00001 (the same emission point as the three boilers).

Process: 006 is located at Sub-basement, Building 251 - Process 006 is the firing of # 2 distillate fuel oil in the three mid-size boilers (Emission Sources 0BLRA, 0BLRB & 0BLRC) in Emission Unit 1-0000 after the conversion from # 6 residual fuel oil to # 2 distillate fuel oil (Process 006) beginning 7/1/2014. Process 002 (#6 residual fuel oil) will no longer be used at the facility (ended on 6/30/2014).

The boilers are dual fuel and will continue to burn natural gas (Process 001) as the predominant fuel and Process 006 (#2 ultra low sulfur distillate fuel oil) as back-up fuel.

Changes to the boilers include new oil guns, new fuel oil trains, new steam automization trains and compressed air atomization trains. The existing burners will remain in place.

Additional efficiency and safety upgrades include an oil purifier centrifuge for the oil tanks, extended fire protection in the oil pump room and full burning capacity for optimal steam and air atomization.

Emissions from the three boilers exhaust through a single emission point, a nine foot diameter stack on the roof of 251 Mercer Street, identified as Emission Point 00001. The same emission point will be used to exhaust emissions from the two new turbines (Emission Sources TURB1 & TURB2) and their corresponding duct burners (Emission Controls DUCT1 & DUCT2; respectively).

Title V/Major Source Status
NYU CENTRAL PLANT is subject to Title V requirements. This determination is based on the following information:
The Central Plant at New York University is a major facility that is subject to Title V requirements because the potential emissions of oxides of nitrogen and carbon monoxide tons/year for carbon monoxide).

Program Applicability
The following chart summarizes the applicability of NYU CENTRAL PLANT with regards to the principal air pollution
regulatory programs:

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

NOTES:
PSD Prevention of Significant Deterioration (40 CFR 52, 6 NYCRR 231-7, 231-8) - 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 231-5, 231-6) - 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, 6 NYCRR 200.10) - 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, 6 NYCRR 200.10) - 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, 6 NYCRR 200.10) - 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, 6 NYCRR 201-6) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subpart A thru G, 6 NYCRR 200.10) - 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 212-3, 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, 6 NYCRR 200.10) - 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 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
8221	COLLEGES AND UNIVERSITIES, NEC

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
1-02-006-02	EXTERNAL COMBUSTION BOILERS - INDUSTRIAL INDUSTRIAL BOILER - NATURAL GAS 10-100 MMBtu/Hr
1-03-005-02	EXTERNAL COMBUSTION BOILERS - COMMERCIAL/INDUSTRIAL COMMERCIAL/INSTITUTIONAL BOILER - DISTILLATE OIL 10-100MMBTU/HR **

2-01-001-01	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL) Turbine
2-01-001-02	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL) Reciprocating
2-01-002-01	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - NATURAL GAS Turbine
2-03-001-01	INTERNAL COMBUSTION ENGINES - COMMERCIAL/INSTITUTIONAL COMMERCIAL/INSTITUTIONAL IC ENGINE - DISTILLATE OIL (DIESEL) Reciprocating
2-03-002-01	INTERNAL COMBUSTION ENGINES - COMMERCIAL/INSTITUTIONAL COMMERCIAL/INSTITUTIONAL IC ENGINE - NATURAL GAS Reciprocating

Facility Emissions Summary

In the following table, the CAS No. or Chemical Abstract Service 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 for each contaminant that is displayed represents the facility-wide PTE in tons per year (tpy) or pounds per year (lbs/yr). In some instances the PTE represents a federally enforceable emissions cap or limitation for that contaminant. 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	PTE lbs/yr	PTE tons/yr	Actual lbs/yr	Actual tons/yr
0NY750-00-0	CARBON DIOXIDE EQUIVALENTS	293616000		164628000	
000630-08-0	CARBON MONOXIDE	258000		122255	
0NY210-00-0	OXIDES OF NITROGEN	317000		90529	
0NY075-00-0	PARTICULATES	25440		25440	
0NY075-02-5	PM 2.5	16740		5626	
0NY075-00-5	PM-10	16740		5626	
007446-09-5	SULFUR	66580		763	

	DIOXIDE		
0NY100-00-0	TOTAL HAP	3268	1450
0NY998-00-0	VOC	18600	4648

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: **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 B: **Timely Application for the Renewal of Title V Permits -6 NYCRR Part 201-6.2(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 C: **Certification by a Responsible Official - 6 NYCRR Part 201-6.2(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 D: **Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.4(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 E: **Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.4(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 F: **Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4(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 G: **Property Rights - 6 NYCRR 201-6.4(a)(6)**

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

Item H: Severability - 6 NYCRR Part 201-6.4(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 I: Permit Shield - 6 NYCRR Part 201-6.4(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 J: Reopening for Cause - 6 NYCRR Part 201-6.4(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 2 01-6.7 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 K: 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 L: 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: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined by subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the Department 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 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 and maintained;
(3) During the period of the emergency the facility owner 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 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 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_02

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

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

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

Regulatory Analysis

Location Facility/EU/EP/Process/ES	Regulation	Condition	Short Description
FACILITY	ECL 19-0301	149	Powers and Duties of the Department with respect to air pollution control
1-00000/00001/004/DUCT1	40CFR 60-A.4	66	General provisions - Address
1-00000/00001/004/DUCT2	40CFR 60-A.4	77	General provisions - Address
1-00000/00001/004/TURB1	40CFR 60-A.4	88	General provisions - Address
1-00000/00001/004/TURB2	40CFR 60-A.4	100	General provisions - Address
1-00000/00001/005/TURB1	40CFR 60-A.4	118	General provisions - Address

1-00000/00001/005/TURB2	40CFR 60-A.4	131	General provisions - Address
1-00000/00001/005/TURB1	40CFR 60-A.7(a)	119	Notification and Recordkeeping
1-00000/00001/005/TURB2	40CFR 60-A.7(a)	132	Notification and Recordkeeping
1-00000/00001/004/DUCT1	40CFR 60-A.7(b)	67	Notification and Recordkeeping
1-00000/00001/004/DUCT2	40CFR 60-A.7(b)	78	Notification and Recordkeeping
1-00000/00001/004/TURB1	40CFR 60-A.7(b)	89	Notification and Recordkeeping
1-00000/00001/004/TURB2	40CFR 60-A.7(b)	101	Notification and Recordkeeping
1-00000/00001/005/TURB1	40CFR 60-A.7(b)	120	Notification and Recordkeeping
1-00000/00001/005/TURB2	40CFR 60-A.7(b)	133	Notification and Recordkeeping
1-00000/00001/004/DUCT1	40CFR 60-A.7(f)	68	Notification and Recordkeeping
1-00000/00001/004/DUCT2	40CFR 60-A.7(f)	79	Notification and Recordkeeping
1-00000/00001/004/TURB1	40CFR 60-A.7(f)	90	Notification and Recordkeeping
1-00000/00001/004/TURB2	40CFR 60-A.7(f)	102	Notification and Recordkeeping
1-00000/00001/005/TURB1	40CFR 60-A.7(f)	121	Notification and Recordkeeping
1-00000/00001/005/TURB2	40CFR 60-A.7(f)	134	Notification and Recordkeeping
1-00000/00001/004/DUCT1	40CFR 60-A.8(a)	69	Performance Tests
1-00000/00001/004/DUCT2	40CFR 60-A.8(a)	80	Performance Tests
1-00000/00001/004/TURB1	40CFR 60-A.8(a)	91	Performance Tests
1-00000/00001/004/TURB2	40CFR 60-A.8(a)	103	Performance Tests
1-00000/00001/005/TURB1	40CFR 60-A.8(a)	122	Performance Tests
1-00000/00001/005/TURB2	40CFR 60-A.8(a)	135	Performance Tests
1-00000/00001/004/DUCT1	40CFR 60-A.8(b)	70	Performance Tests
1-00000/00001/004/DUCT2	40CFR 60-A.8(b)	81	Performance Tests
1-00000/00001/004/TURB1	40CFR 60-A.8(b)	92	Performance Tests
1-00000/00001/004/TURB2	40CFR 60-A.8(b)	104	Performance Tests
1-00000/00001/005/TURB1	40CFR 60-A.8(b)	123	Performance Tests
1-00000/00001/005/TURB2	40CFR 60-A.8(b)	136	Performance Tests
1-00000/00001/004/DUCT1	40CFR 60-A.8(d)	71	Performance Tests
1-00000/00001/004/DUCT2	40CFR 60-A.8(d)	82	Performance Tests
1-00000/00001/004/TURB1	40CFR 60-A.8(d)	93	Performance Tests
1-00000/00001/004/TURB2	40CFR 60-A.8(d)	105	Performance Tests
1-00000/00001/005/TURB1	40CFR 60-A.8(d)	124	Performance Tests

1-00000/00001/005/TURB2	40CFR 60-A.8(d)	137	Performance Tests
1-00000/00001/004/DUCT1	40CFR 60-A.8(e)	72	Performance Tests
1-00000/00001/004/DUCT2	40CFR 60-A.8(e)	83	Performance Tests
1-00000/00001/004/TURB1	40CFR 60-A.8(e)	94	Performance Tests
1-00000/00001/004/TURB2	40CFR 60-A.8(e)	106	Performance Tests
1-00000/00001/005/TURB1	40CFR 60-A.8(e)	125	Performance Tests
1-00000/00001/005/TURB2	40CFR 60-A.8(e)	138	Performance Tests
1-00000/00001/004/DUCT1	40CFR 60-A.8(f)	73	Performance Tests
1-00000/00001/004/DUCT2	40CFR 60-A.8(f)	84	Performance Tests
1-00000/00001/004/TURB1	40CFR 60-A.8(f)	95	Performance Tests
1-00000/00001/004/TURB2	40CFR 60-A.8(f)	107	Performance Tests
1-00000/00001/005/TURB1	40CFR 60-A.8(f)	126	Performance Tests
1-00000/00001/005/TURB2	40CFR 60-A.8(f)	139	Performance Tests
1-00000/00001/004/DUCT1	40CFR 60-A.9	74	General provisions - Availability of information
1-00000/00001/004/DUCT2	40CFR 60-A.9	85	General provisions - Availability of information
1-00000/00001/004/TURB1	40CFR 60-A.9	96	General provisions - Availability of information
1-00000/00001/004/TURB2	40CFR 60-A.9	108	General provisions - Availability of information
1-00000/00001/005/TURB1	40CFR 60-A.9	127	General provisions - Availability of information
1-00000/00001/005/TURB2	40CFR 60-A.9	140	General provisions - Availability of information
1-00000/00001/005	40CFR 60-Dc.45c(a)	112	Compliance and Performance Test Methods and Procedures for Particulate Matter.
FACILITY	40CFR 60-IIII.4211(a)	1 -17	Stationary Compression Ignition Engines - Compliance Requirements
2-00000/00002/CAT/ENG09	40CFR 60-IIII.4211(a)	1 -26	Stationary Compression Ignition Engines - Compliance Requirements
2-00000/00002/JEN/ENG08	40CFR 60-IIII.4211(a)	1 -29	Stationary Compression Ignition Engines - Compliance Requirements
FACILITY	40CFR 60-IIII.4211(g)	1 -18, 1 -19, 1 -20, 1 -21	Changes to emissions related settings
2-	40CFR 60-IIII.4211(g)	1 -27, 1 -28	Changes to emissions

00000/00002/CAT/ENG09			related settings
FACILITY	40CFR 60-JJJJ.4243(b)(2	1 -22, 1 -23, 1 - 24, 1 -25	SI ICE - Maintenance Plan and testing
FACILITY	40CFR 60-KKKK.4305	55	Stationary Combustion Turbine NSPS - applicability
1-00000/00001/004/DUCT1	40CFR 60-KKKK.4325	75	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/004/DUCT2	40CFR 60-KKKK.4325	86	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/004/TURB1	40CFR 60-KKKK.4325	97	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/004/TURB2	40CFR 60-KKKK.4325	109	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/005/DUCT1	40CFR 60-KKKK.4325	114	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/005/DUCT2	40CFR 60-KKKK.4325	116	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/005/TURB1	40CFR 60-KKKK.4325	128	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/005/TURB2	40CFR 60-KKKK.4325	141	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/005/TURB1	40CFR 60-KKKK.4330	129	Stationary Combustion Turbine NSPS - SO2 emission limits
1-00000/00001/005/TURB2	40CFR 60-KKKK.4330	142	Stationary Combustion Turbine NSPS - SO2 emission limits
FACILITY	40CFR 60-KKKK.4340	56, 57	Stationary Combustion Turbine NSPS - demonstrating compliance with NOx standard without using using water or steam injection
1-00000/00001/004/TURB1	40CFR 60-KKKK.4340(a)	98	Stationary Combustion Turbine NSPS - Continuous compliance with NOx limit
1-00000/00001/004/TURB2	40CFR 60-KKKK.4340(a)	110	Stationary Combustion Turbine NSPS - Continuous compliance with NOx limit
FACILITY	40CFR 60-KKKK.4365(a)	58, 59	Stationary Combustion Turbine NSPS - Exemption from monitoring total sulfur content of

			fuel
FACILITY	40CFR 68	20	Chemical accident prevention provisions
FACILITY	40CFR 82-F	21	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	11, 1 -2	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	150	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	12	Recycling and Salvage
FACILITY	6NYCRR 201-1.8	13	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2(a)	14	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3(a)	15	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	22, 60, 61	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4(a)(4)	16	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4(a)(7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4(a)(8)	17, 1 -1	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4(c)	3, 4	Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.4(c)(2)	5	Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201-6.4(c)(3)(ii	6	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4(d)(4)	23	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4(e)	7	Compliance Certification
FACILITY	6NYCRR 201-6.4(f)(6)	18	Off Permit Changes
FACILITY	6NYCRR 201-6.4(g)	1 -3	Permit Shield
FACILITY	6NYCRR 201-7	25	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 201-7.1(c)(1)	1 -6	Application Content - Description of the Cap
FACILITY	6NYCRR 202-1.1	19	Required emissions tests.
FACILITY	6NYCRR 202-2.1	8	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	9	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	32	General Prohibitions - air pollution

			prohibited
FACILITY	6NYCRR 215.2	10	Open Fires - Prohibitions
FACILITY	6NYCRR 225.7(a)	37	Reports, Sampling and Analysis
FACILITY	6NYCRR 225-1.2	1 -10	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.2(f)	33	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.2(g)	34	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.2(h)	35	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.6	36	Reports, Sampling, and Analysis
FACILITY	6NYCRR 227.2(b)(1)	52, 54, 1 -15	Particulate emissions.
1-00000/00001	6NYCRR 227-1.2(a)(1)	62	Particulate Emissions from Liquid Fuels.
FACILITY	6NYCRR 227-1.3	38, 39, 1 -11	Smoke Emission Limitations.
1-00000/00001/006	6NYCRR 227-1.3	143	Smoke Emission Limitations.
FACILITY	6NYCRR 227-1.3(a)	1 -12	Smoke Emission Limitations.
1-00000/00001	6NYCRR 227-1.3(a)	63	Smoke Emission Limitations.
1-00000/00001/005	6NYCRR 227-1.3(a)	111	Smoke Emission Limitations.
1-00000/00001/006	6NYCRR 227-1.3(a)	144	Smoke Emission Limitations.
1-00000/00001	6NYCRR 227-1.4(a)	151	Stack Monitoring. (see narrative)
FACILITY	6NYCRR 227-1.4(b)	40	Stack Monitoring
1-00000/00001	6NYCRR 227-1.4(b)	64	Stack Monitoring
2-00000/00002	6NYCRR 227-1.4(b)	145	Stack Monitoring
FACILITY	6NYCRR 227-1.6(a)	41	Corrective Action.
FACILITY	6NYCRR 227-1.6(b)	42	Corrective Action: Facility Shutdown.
FACILITY	6NYCRR 227-1.6(c)	43	Corrective Action: Facility Shutdown Prohibitions.
FACILITY	6NYCRR 227-1.6(d)	44	Corrective Action: Facility Shutdown Prohibitions.
FACILITY	6NYCRR 227-2.4(c)(1)(ii	45	2010 NOx RACT presumptive limit.
1-00000/00001/004/DUCT1	6NYCRR 227-2.4(e)(3)	65	NOx requirements for other combustion turbines.
1-00000/00001/004/DUCT2	6NYCRR 227-2.4(e)(3)	76	NOx requirements for other combustion turbines.
1-00000/00001/004/TURB1	6NYCRR 227-2.4(e)(3)	87	NOx requirements for other combustion turbines.
1-00000/00001/004/TURB2	6NYCRR 227-2.4(e)(3)	99	NOx requirements for other combustion turbines.
1-00000/00001/005/DUCT1	6NYCRR 227-2.4(e)(3)	113	NOx requirements for other combustion turbines.
1-00000/00001/005/DUCT2	6NYCRR 227-2.4(e)(3)	115	NOx requirements for other combustion

				turbines.
1-00000/00001/005/TURB1	6NYCRR 227-2.4(e)(3)	117		NOx requirements for other combustion turbines.
1-00000/00001/005/TURB2	6NYCRR 227-2.4(e)(3)	130		NOx requirements for other combustion turbines.
FACILITY	6NYCRR 227-2.4(f)(1)	1	-13	Emission limit for natural gas fired engines.
FACILITY	6NYCRR 227-2.4(f)(3)	1	-14	Emission limit for distillate oil fired engines.
FACILITY	6NYCRR 227-2.5(a)	49		Fuel switching option.
FACILITY	6NYCRR 227-2.5(c)	50		Alternative RACT option.
FACILITY	6NYCRR 231-6	1	-16	Mods to Existing Major Facilities in Nonattainment and Attainment Areas of the State in the OTR

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.

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 201-6.4 (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 201-6.4 (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 201-6.4 (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 201-6.4 (c)
This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

6 NYCRR 201-6.4 (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 201-6.4 (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 201-6.4 (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 201-6.4 (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 201-6.4 (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 201-6.4 (g)
Permit Exclusion Provisions - specifies those actions, such as administrative orders, suits, claims for natural resource damages, etc that are not affected by the federally enforceable portion of the permit, unless they are specifically addressed by it.

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 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 there 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, NYU CENTRAL PLANT has been determined to be subject to the following regulations:

40 CFR 60.4
This condition lists the USEPA Region 2 address for the submittal of all communications to the "Administrator". In addition, all such communications must be copied to NYSDEC Bureau of Quality Assurance (BQA).

40 CFR 60.4211 (a)
This regulation states that the owner or operator and must comply with the emission standards specified in 40 CFR 60 Subpart IIII and must operate and maintain the stationary compression ignition internal combustion engine and control device according to the manufacturer's written instructions.

40 CFR 60.4211 (g)
This regulation specifies that any changes made to emissions related settings, not in accordance with manufacturer's requirements, must be tested to ensure that the unit meets the emissions limits.

40 CFR 60.4243 (b) (2) (ii)

This regulation requires the owner or operator of a stationary SI internal combustion engine greater than 500 HP to keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

40 CFR 60.4305
This regulation is an NSPS regulation for Stationary Combustion Turbines and it explains the applicability of this subpart to stationary combustion turbines as:

(a) Owners or operators of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MM Btu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, the turbine is subject to this subpart. Only heat input to the combustion turbine should be included when determining whether or

not this subpart is applicable to the turbine. Any additional heat input to associated heat recovery steam generators (HRSG) or duct burners should not be included when determining your peak heat input. However, this subpart does apply to emisions from any associated HRSG and duct burners.

(b) Stationary combustion turbines regulated under this subpart are exempt from the requirements of subpart GG of this part. Heat recovery steam generators and duct burners regulated under this subpart are exempted from the requirements of subparts Da, Db, and Dc of this part.

40 CFR 60.4325

This regulation is an NSPS regulation for Stationary Combustion Turbines and it specifies the NOx emission limits specified in Table 1 to this subpart. If the turnine's total heat input is greater than or equal to 50 percent natural gas, then the owner or operator must meet the corresponding limit foa a natural gas-fired turbine when the turbine is burning that fuel. Similarly, when the turbine's total heat input is greater than 50 percent distillate oil and fuels other than natural gas, then the owner or operator must meet the corresponding limit for distillate oil and fuels other than natural gas for the duration of the time that the turbine burns that particular fuel.

40 CFR 60.4330

This regulation specifies that the emission limit for sulfur dioxide from a stationary combustion turbine is 0.060 lb SO2/MMBtu heat input.

40 CFR 60.4340

This regulation requires the facility to perform an annual compliance test on internal combustion engines that do not use water or steam injection to control the emissions of oxides of nitrogen (NOx). Altenatively, the facility may use a continuous emissions monitor to determine the emissions of NOx.

40 CFR 60.4340 (a)

This condition specifies NOx annual testing requirement for turbines.

40 CFR 60.4365 (a)

This section provides an exemption from monitoring total sulfur content of the fuel used by a facility.

40 CFR 60.45c (a)

This regulation requires that the opacity of the emissions be monitored during the stack test. The opacity may not exceed 20%.

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 (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 60.8 (d)
This regulation contains the requirements for advance notification of Performance (stack) testing.

40 CFR 60.8 (e)
This regulation requires the facility to provide appropriate sampling ports, safe platforms and utilities as necessary for Performance (stack) testing.

40 CFR 60.8 (f)
This regulation requires that Performance (stack) tests consist of three runs unless otherwise specified. The rule also designates the allowable averaging methods for the analysis of the results.

40 CFR 60.9
This rule citation allows the public access to any information submitted to the EPA Administrator (or state contact), in conjunction with a project subject to this section of the regulation.

6 NYCRR 201-7.1 (c) (1)
This regulation sets forth an emission cap that cannot be exceeded by the facility. In this permit that cap is 0.30 g/bhp-hr for CO, NOx and VOC for the 2.5 MW GE-Jenbacher / JSM-616 spark-ignited engine (Emission Source ENG08) natural gas fired because of the control equipments (Selective Catalytic Reduction for NOx and Oxidation Catalyst for CO and VOC). This cap is chosen by NYU and is used in the PTE emission calculations, and is NYU's anticipated actual value and will be demostrated by stack testing.

6 NYCRR 211.1
This regulation requires that no person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property.

6 NYCRR 225.7 (a)
The commissioner may require an owner of an air contamination source to retain for up to three years, and to submit to him, fuel analyses, information on the quantity of fuel received, burned or sold, and results of stack sampling, stack monitoring and other procedures to ensure compliance with the provisions of the Part. **NOTE: This citation has been replaced by requirements cited under 225-1.8(a) and is no longer a part of current State regulations, however, it remains as part of New York State's approved State Implementation Plan (SIP).**

6 NYCRR 225-1.2
This section of the regulation establishes sulfur-in-fuel limitations for coal, residual oil, distillate oil, and waste oil.

6 NYCRR 225-1.2 (f)
Sulfur-in-fuel limitations for the purchase of #2 heating oil on or after July 1, 2012.

6 NYCRR 225-1.2 (g)
Sulfur-in-fuel limitations for the purchase of distillate oil on or after July 1, 2014.

6 NYCRR 225-1.2 (h)

Sulfur-in-fuel limitation for the firing of distillate oil on or after July 1, 2016.

6 NYCRR 225-1.6
This section establishes the requirements for reporting, sampling, and analyzing fuel by subject facilities.

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 227-1.2 (a) (1)
This regulation establishes a particulate emission limit in terms of lbs per mmBtu of heat input for stationary combustion units of greater than 250 mmBtu/hr heat input capacity which fire coal, oil, or coal derived fuels.

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 227-1.4 (a)
Subdivisions (a) and (f) of this section (227-1.4) have not been approved by EPA and have not been included in the NYS SIP.

6 NYCRR 227-1.4 (b)
This regulation requires the specific contents of excess emissions reports for opacity from facilities that employ continuous opacity monitors (COMs).

6 NYCRR 227-1.6 (a)
This regulation requires that any facility found in violation of the provisions of Part 227 must not operate the affected stationary combustion installation that is in violation unless it is equipped with approved emission control equipment, it is rehabilitated or upgraded in an approved manner; or the fuel is changed

to an acceptable type

6 NYCRR 227-1.6 (b)
This regulation states that the Department may seal the affected stationary combustion installation that does not comply with the provisions in subdivision 6 NYCRR 227-1.6(a) within the time provided.

6 NYCRR 227-1.6 (c)
This regulation state that no person may operate any affected stationary combustion installation sealed by the commissioner in accordance with this Part 227.

6 NYCRR 227-1.6 (d)
This regulation states that no person except Department personnel may remove, tamper with, or destroy any seal affixed to any affected stationary combustion installation.

6 NYCRR 227-2.4 (c) (1) (ii)
Future NOx RACT presumptive limit effective 7/1/14.

6 NYCRR 227-2.4 (e) (3)
NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

6 NYCRR 227-2.4 (f) (1)
Presumptive NOx RACT emission limit for natural gas fired stationary internal combustion engines.

6 NYCRR 227-2.4 (f) (3)
Presumptive NOx RACT emission limit for distillate oil fired stationary internal combustion engines.

6 NYCRR 227-2.5 (a)

Fuel switching NOx RACT compliance option.

6 NYCRR 227-2.5 (c)

This provision allows the owner or operator to demonstrate that the applicable presumptive RACT emission limit in section 227-2.4 of this Subpart is not economically or technically feasible. Based on this determination the Department is allowed to set a higher emission source specific emission limit.

6 NYCRR Subpart 201-7

This regulation sets forth an emission cap that cannot be exceeded by the facility. In this permit that cap is 5.0 tons per year of combined NOx emissions for the two new reciprocating engines, the 2.5 MW GE-Jenbacher / JSM-616 (Emission Source ENG08) natural gas fired, and the 2.5 MW Caterpillar / 3516C ULSD distillate fuel oil fired (Emission Source ENG09).

The hours of operation for the Caterpillar / 3516C engine (Emission Source ENG09) is capped at 500 per year.

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.

Compliance Certification
Summary of monitoring activities at NYU CENTRAL PLANT:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring
1-00000/00001/005	112	intermittent emission testing
FACILITY	1-17	record keeping/maintenance procedures
2-00000/00002/CAT/ENG09	1-26	record keeping/maintenance procedures
2-00000/00002/JEN/ENG08	1-29	record keeping/maintenance procedures
FACILITY	1-18	intermittent emission testing
FACILITY	1-19	intermittent emission testing
FACILITY	1-20	intermittent emission testing
FACILITY	1-21	intermittent emission testing

2-00000/00002/CAT/ENG09	1-27	intermittent emission testing
2-00000/00002/CAT/ENG09	1-28	intermittent emission testing
FACILITY	1-22	record keeping/maintenance procedures
FACILITY	1-23	intermittent emission testing
FACILITY	1-24	intermittent emission testing
FACILITY	1-25	intermittent emission testing
FACILITY	55	record keeping/maintenance procedures
1-00000/00001/004/DUCT1	75	intermittent emission testing
1-00000/00001/004/DUCT2	86	intermittent emission testing
1-00000/00001/004/TURB1	97	intermittent emission testing
1-00000/00001/004/TURB2	109	intermittent emission testing
1-00000/00001/005/DUCT1	114	intermittent emission testing
1-00000/00001/005/DUCT2	116	intermittent emission testing
1-00000/00001/005/TURB1	128	intermittent emission testing
1-00000/00001/005/TURB2	141	intermittent emission testing
1-00000/00001/005/TURB1	129	monitoring of process or control device parameters as surrogate
1-00000/00001/005/TURB2	142	monitoring of process or control device parameters as surrogate
FACILITY	56	intermittent emission testing
FACILITY	57	intermittent emission testing
1-00000/00001/004/TURB1	98	record keeping/maintenance procedures
1-00000/00001/004/TURB2	110	record keeping/maintenance procedures
FACILITY	58	work practice involving specific operations
FACILITY	59	work practice involving specific operations
FACILITY	1-2	record keeping/maintenance procedures
FACILITY	4	work practice involving specific operations
FACILITY	6	record keeping/maintenance procedures
FACILITY	7	record keeping/maintenance procedures
FACILITY	1-4	work practice involving specific operations
FACILITY	1-5	monitoring of process or control device parameters as surrogate
FACILITY	26	work practice involving specific operations
FACILITY	27	monitoring of process or control device parameters as surrogate
FACILITY	29	monitoring of process or control device parameters as surrogate
FACILITY	31	monitoring of process or control device parameters as surrogate
FACILITY	1-7	intermittent emission testing
FACILITY	1-8	intermittent emission testing
FACILITY	1-9	intermittent emission testing
FACILITY	8	record keeping/maintenance procedures
FACILITY	37	record keeping/maintenance procedures
FACILITY	1-10	work practice involving specific operations
FACILITY	33	work practice involving specific operations
FACILITY	34	work practice involving specific operations
FACILITY	35	work practice involving specific operations
FACILITY	36	record keeping/maintenance procedures
FACILITY	1-15	intermittent emission testing
FACILITY	52	intermittent emission testing
FACILITY	54	intermittent emission testing
1-00000/00001	62	intermittent emission testing
FACILITY	1-11	record keeping/maintenance procedures
FACILITY	38	monitoring of process or control device parameters as surrogate
FACILITY	39	record keeping/maintenance procedures
1-00000/00001/006	143	record keeping/maintenance procedures
FACILITY	1-12	monitoring of process or control device parameters as surrogate
1-00000/00001	63	monitoring of process or control device parameters as surrogate
1-00000/00001/005	111	monitoring of process or control device parameters as surrogate

1-00000/00001/006	144	monitoring of process or control device parameters as surrogate
1-00000/00001	151	monitoring of process or control device parameters as surrogate
FACILITY	40	record keeping/maintenance procedures
1-00000/00001	64	record keeping/maintenance procedures
2-00000/00002	145	record keeping/maintenance procedures
FACILITY	41	record keeping/maintenance procedures
FACILITY	45	intermittent emission testing
1-00000/00001/004/DUCT1	65	intermittent emission testing
1-00000/00001/004/DUCT2	76	intermittent emission testing
1-00000/00001/004/TURB1	87	intermittent emission testing
1-00000/00001/004/TURB2	99	intermittent emission testing
1-00000/00001/005/DUCT1	113	intermittent emission testing
1-00000/00001/005/DUCT2	115	intermittent emission testing
1-00000/00001/005/TURB1	117	intermittent emission testing
1-00000/00001/005/TURB2	130	intermittent emission testing
FACILITY	1-13	intermittent emission testing
FACILITY	1-14	intermittent emission testing
FACILITY	49	intermittent emission testing
FACILITY	50	record keeping/maintenance procedures
FACILITY	1-16	monitoring of process or control device parameters as surrogate

---

Basis for Monitoring

The NYU Central Plant is subject to the requirements of Title V. The facility is required, under the provisions of 6 NYCRR Subpart 201-6, to submit semiannual compliance reports and an annual Compliance Certification. This facility is required to comply with the following monitoring conditions:

Condition #4 for 6 NYCRR 201-6.4(c): This is a facility-wide condition for Work Practice Involving Specific Operations for Oxides of Nitrogen. The facility's NOx emissions will not exceed 158.5 tpy.

Condition #6 for 6 NYCRR 201-6.4(c) (3) (ii): This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures. This condition 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.

Condition #7 for 6 NYCRR 201-6.4(e): This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures. This condition specifies the overall permit requirements for compliance certification, including emission limitations, standards or work practices.

Condition #8 for 6 NYCRR 202-2.1: This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures. This condition sets forth the applicability criteria for submitting an annual statement of emissions. The criteria is based on annual emission threshold quantities and ozone attainment designation. This condition applies to

all Title V facilities and these facilities must submit an annual emission statement by April 15th of each year.

Condition # 1-2 for 6 NYCRR 200.7: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Processes: CAT & JEN and Emission Sources/Controls: ENG09, OXC09, SCR09, ENG08, OXC08 and SCR08 for Record Keeping/Maintenance Procedures for Oxides of Nitrogen.

This condition is for Maintenance of Equipment:

This condition applies to the two new stationary reciprocating internal combustion engines (Emission Sources ENG08 & ENG09) which will be installed on 2/1/2018 and into the same existing emission unit (Emission Unit 2-00000) and utilize the same existing stack and emission point (Emission Point 00002). One engine is defined as Emission Source ENG08, the 2.5 MW (equivalent to 2649 KW or to 4.55 MMBtu/hr) GE-Jenbacher / JSM-616 lean burn engine natural gas fired spark-ignited (Process JEN) and is equipped with selective catalytic reduction (SCR08) for NOx and catalytic oxidation for CO and VOC (Emission Control OXC08). The other engine defined as Emission Source ENG09, is a 2.5 MW Caterpillar / 3516C (equivalent to 2500 KW or to 3627 HP) ultra-low sulfur fuel oil-fired (Process CAT) Tier 4 compression ignition engine for black start and utility demand programs with "built-in" catalyst-based emissions controls (Emission Controls OXC09 and SCR09).

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such device effectively.

Condition # 1-4 for 6 NYCRR Subpart 201-7, Capping out of 6 NYCRR 231-2: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: CAT and Emission Sources/Controls: ENG09, OXC09/SCR09 for Work Practice Involving Specific Operations as Surrogate for Oxides of Nitrogen.

The hours of operation for the 2.5 MW Caterpillar / 3516C (Emission Source ENG09) ULSD fuel oil-fired (Process CAT) Tier 4 compression ignition engine for black start and utility demand programs, with "built-in" catalyst-based emissions controls (Emission Controls SCR09 and OXC09) is defined as Emission Source ENG09, and is capped at 500 hours per year.

Condition # 1-5 for 6 NYCRR Subpart 201-7, Capping out of 6 NYCRR 231-2: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Processes: CAT & JEN and Emission Sources/Controls: ENG09, OXC09, SCR09, ENG08, OXC08 and SCR08 for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen.

This condition applies to the two new reciprocating internal combustion engines (Emission Sources ENG08 & ENG09) which will be installed on 2/1/2018 and into the same existing emission unit (Emission Unit 2-00000) and utilize the same existing stack and emission point (Emission Point 00002). One engine is defined as Emission Source ENG08, the 2.5 MW GE-Jenbacher / JSM-616 natural gas fired (Process JEN) lean burn engine with add-on selective catalytic reduction for NOx (Emission Control SCR08) and catalytic oxidation (Emission Control OXC08) for CO and VOC. The other engine is a Caterpillar / 3516C and is defined as Emission Source ENG09, is 2.5 MW fuel oil-fired (Process CAT) Tier 4 compression ignition engine for black start and utility demand programs with "built-in" catalyst-based emissions control (Emission Controls OXC09 and SCR09).

The Project's NOx PTE emissions is the sum of the PTE for the stationary spark ignited Jenbacher engine which is 10.67 tpy (based on 8,760 hr/yr) of NOx after adopting the new arbitrary emission factors, and the NOx PTE emissions for the stationary compression ignition Caterpillar engine (choosing the manufacturer's 0.59 g/bhp-hr NOx emission limit), which is 1.16 tpy (4.63 lb/hr x 500 hours). Therefore; the project's NOx PTE is 10.67 tpy+ 1.16 tpy = 11.83 tpy (23,660 lbs/yr).

Condition #26 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 231-2: This is a facility-wide condition. This condition is for Work Practice Involving Specific Operations for Oxides of Nitrogen. The facility’s NOx emissions will not exceed 158.5 tpy. Computerized records, will be kept on file that calculate emissions based on equipment manufacturer’s emissions factors, stack test results, and EPA emission factors.

Condition #27 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 231-2: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Processes: 004 & 005 and Emission Sources/Controls: DUCT1, DUCT2, TURB1 & TURB2 for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen.

The NOx PTE for the two combined combustion turbine/ HRSG duct burners pairs (Emission Sources/Controls: DUCT1, DUCT2, TURB1 & TURB2) will not exceed 104.23 tpy.

Condition #29 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 231-2: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Processes: 004 & 005 and Emission Sources: TURB1 & TURB2 for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen.

The NOx PTE for the two combustion turbine (Emission Sources TURB1 & TURB2) when operating without their duct burners will not exceed 56.93 tpy.

Condition #31 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 231-2: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Processes: 001 & 006 and Emission Sources: 0BLRA, 0BLRB & 0BLRC for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen.

All three mid-size boilers, Boilers 0BLRA, 0BLRB and 0BLRC will have a 40.4 tpy NOx emission cap equivalent to the PTE emissions of two of the identical boilers.

Condition #1-7 for 6 NYCRR 201-7.1 (c) (1), Capping Out of 6 NYCRR 231-2: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: JEN and Emission Sources/Controls: ENG08, OXC08/SCR08 for Intermittent Emission Testing for VOC.

This condition applies to the 2.5 MW (equivalent to 2649 KW or to 4.55 MMBtu/hr) GE-Jenbacher / JSM-616 lean burn engine Emission Source ENG08, natural gas fired spark-ignited (Process JEN) equipped with selective catalytic reduction for NOx (Emission Control SCR08) and catalytic oxidation for CO and VOC (Emission Control OXC08).

The NSPS Volatile Organic Compounds (VOC) limit for this engine is 0.7 g/bhp-hr or 60 ppmvd. NYU has chosen an arbitrary value of 0.3 g/bhp-hr to establish the PTE, though the anticipated actual value is 0.078 g/bhp-hr.

For establishing the PTE calculations, NYU has chosen an emission factor of 0.30 grams per brake horsepower-hour (g/bhp-hr) for VOC to be used in the emission calculations for the GE-Jenbacher / JSM-616 engine generator.

The owner or operator of a stationary SI internal combustion engine greater than 500 HP must conduct an initial performance test and must conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

Condition #1-8 for 6 NYCRR 201-7.1 (c) (1), Capping Out of 6 NYCRR 231-2: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: JEN and Emission Sources/Controls: ENG08, OXC08/SCR08 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 2.5 MW (equivalent to 2649 KW or to 4.55 MMBtu/hr) GE-Jenbacher / JSM-616 lean burn engine Emission Source ENG08, natural gas fired spark-ignited (Process JEN) equipped with selective catalytic reduction for NOx (Emission Control SCR08) and catalytic oxidation for CO and VOC (Emission Control OXC08).

The NSPS Oxides of Nitrogen (NOx) limit for this engine is 1.0 g/bhp-hr or 82 ppmvd. NYU has chosen an arbitrary value of 0.3 g/bhp-hr to establish the PTE, though the post-control anticipated actual value is expected to be 0.078 g/bhp-hr.

For establishing the PTE calculations, NYU has chosen an emission factor of 0.30 grams per brake horsepower-hour (g/bhp-hr) for NOx is used in the emission calculations for the GE-Jenbacher / JSM-616 engine generator.

The owner or operator of a stationary SI internal combustion engine greater than 500 HP must conduct an initial performance test and must conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

Condition #1-9 for 6 NYCRR 201-7.1 (c) (1), Capping Out of 6 NYCRR 231-2: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: JEN and Emission Sources/Controls: ENG08, OXC08/SCR08 for Intermittent Emission Testing for Carbon Monoxide.

This condition applies to the 2.5 MW (equivalent to 2649 KW or to 4.55 MMBtu/hr) GE-Jenbacher / JSM-616 lean burn engine Emission Source ENG08, natural gas fired spark-ignited (Process JEN) equipped with selective catalytic reduction for NOx (Emission Control SCR08) and catalytic oxidation for CO and VOC (Emission Control OXC08).

The NSPS Carbon Monoxide (CO) limit for this engine is 2.0 g/bhp-hr or 270 ppmvd. NYU has chosen an arbitrary vale of 0.3 g/bhp-hr to establish the PTE, though the anticipated actual value is 0.156 g/bhp-hr.

For establishing the PTE calculations, NYU has chosen an emission factor of 0.30 grams per brake horsepower-hour (g/bhp-hr) for CO to be used in the emission calculations for the GE-Jenbacher / JSM-616 engine generator.

The owner or operator of a stationary SI (Spark Ignited) internal combustion engine greater than 500 HP must conduct an initial performance test and must conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

Condition #1-10 for 6 NYCRR 225-1.2: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: CAT and Emission Sources/Controls: ENG09, OXC09/SCR09 for Work Practice Involving Specific Operations for Sulfur Dioxide.

Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510 (b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

In accordance with 40CFR80.510 (b), except as otherwise specifically provided in 40CFR 80, Subpart I, all non-road diesel fuel is subject to the following per-gallon standards:

(1) Sulfur content.

(i) 15 ppm maximum for NR diesel fuel.

(2) Cetane index or aromatic content, as follows:

(i) A minimum cetane index of 40; or

(ii) A maximum aromatic content of 35 volume percent.

The Sulfur Limit in Diesel oil is 15 parts per million by weight.

Condition #33 for 6 NYCRR 225-1.2(f): This is a facility-wide condition. This condition is for Work Practice Involving Specific Operations for Sulfur Dioxide for the sulfur content limit of 0.0015 percent by weight. The distillate fuel oil (#2 heating oil) purchase is limited to 0.0015 percent sulfur by weight on or after July 1, 2012. Compliance with this limit will be based on vendor certifications.

Condition #34 for 6 NYCRR 225-1.2(g): This is a facility-wide condition. This condition is for Work Practice Involving Specific Operations for Sulfur Dioxide for the sulfur content limit of 0.0015 percent by weight. The distillate fuel oil (#2 heating oil) purchase is limited to 0.0015 percent sulfur by weight on or after July 1, 2014. Compliance with this limit will be based on vendor certifications.

Condition #35 for 6 NYCRR 225.1(h): This is a facility-wide condition. This condition is for Work Practice Involving Specific Operations for Sulfur Dioxide for the sulfur content limit of 0.0015 percent by weight. The distillate fuel oil (#2 heating oil) firing is limited to 0.0015 percent sulfur by weight on or after July 1, 2016. Compliance with this limit will be based on vendor certifications.

Condition #36 for 6 NYCRR 225-1.6: This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures for Sulfur Dioxide. The owner or operator of a facility which purchases and fires coal or oil shall submit reports to the commissioner containing a fuel analysis, 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. All records shall be available for a minimum of three years.

Condition #37 for 6 NYCRR 225.7 (a): This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures. The commissioner may require an owner of an air contamination source to retain for up to three years, and to submit to him, fuel analyses, information on the quantity of fuel received, burned or sold, and results of stack sampling, stack monitoring and other procedures to ensure compliance with the provisions of the Part.

The permittee shall retain fuel oil supplier certifications for each shipment of oil received. Such certifications shall contain, as a minimum, supplier name, date of shipment, quantity shipped, heating value of the oil, oil sulfur content, and the method used to determine the sulfur content. Such certifications shall be available for inspection by, or submitted to, the NYSDEC as per the stated reporting requirement.

Condition #1-11 for 6 NYCRR 227-1.3: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: CAT and Emission Sources/Controls: ENG09, OXC09/SCR09 for Record Keeping/Maintenance Procedures for Particulates.

This condition requires a limitation and compliance monitoring for opacity from a stationary combustion installation**:** The opacity will be limited to 20% except for one six minute period per hour, not to exceed 27%, based upon the six minute average.

The facility is required to observe the stacks for each combustion source operating on oil once per day for visible emissions.

Condition #38 for 6 NYCRR 227-1.3 for Particulates: This condition is an emission unit level, emission point level, process level and emission source level condition that

applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Sources: TURB1 & TURB2 for Monitoring of Process or Control Device Parameters as Surrogate for Particulates. This is a condition that applies to the two combustion turbines (Emission Sources TURB1 & TURB2).

This condition requires a limitation and compliance monitoring for opacity from a stationary combustion installation**:** The opacity will be limited to 20% except for one six minute period per hour, not to exceed 27%, based upon the six minute average.

Condition #39 for 6 NYCRR 227-1.3: This is a facility-wide condition for Record Keeping/Maintenance Procedures. The facility is required to observe the stacks for each combustion source operating on oil once per day for visible emissions.

This condition requires a limitation and compliance monitoring for opacity from a stationary combustion installation**:** The opacity will be limited to 20% except for one six minute period per hour, not to exceed 27%, based upon the six minute average.

Condition #1-12 for 6 NYCRR 227-1.3(a): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: CAT and Emission Sources/Controls: ENG09, OXC09/SCR09 for Monitoring of Process or Control Device Parameters as Surrogate for Particulates for Opacity.

This condition 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.

The opacity is limited to 20% at Emission Point 00002 when the 2.5 MW Caterpillar / 3516C engine (Emission Source ENG09) is firing #2 fuel oil.

The facility is required to observe the stacks for each combustion source operating on oil once per day for visible emissions.

Condition #40 for 6 NYCRR 227-1.4 (b): This is a facility-wide condition for Record Keeping/Maintenance Procedures. This condition requires a limitation and compliance monitoring for opacity from a stationary combustion installation**:** The opacity will be limited to 20% except for one six minute period per hour, not to exceed 27%, based upon the six minute average.

This condition requires the specific contents of excess emissions reports for opacity from facilities that employ continuous opacity monitors (COMs).

NYU will maintain a voluntary COMS since a COMS is not required for the facility's emission sources. Either by voluntary COMS or visible emissions observations, NYU will include the excess emission report. The regulation does not require COMS for these emission sources, but NYU has voluntarily installed COMS.

Condition #41 for 6 NYCRR 227-1.6 (a): This is a facility-wide condition for Record Keeping/Maintenance Procedures.

This condition requires that any facility found in violation of the provisions of Part 227 must not operate the affected stationary combustion installation that is in violation unless it is equipped with approved emission control equipment, it is rehabilitated or upgraded in an approved manner; or the fuel is changed to an acceptable type.

Condition # 45 for 6 NYCRR 227-2.4(c)(1)(ii): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Processes: 001 & 006 and Emission Sources: 0BLRA, 0BLRB & 0BLRC for Intermittent Emission Testing for Oxides of Nitrogen.

This condition is for NOx RACT presumptive limit effective 7/1/14 for mid-size boilers. A mid-size boiler is a boiler with a maximum heat input capacity greater than 25 million Btu per hour and equal to or less than 100 million Btu per hour.

Due to the Fuel Switching Compliance Option [(6 NYCRR 227-2.5 (a)], the three mid-size boilers that recently have been firing # 6 fuel oil/gas will require to meet the 0.20 lbs/MM Btu upon switching to # 2 fuel oil/gas and not the 0.08 lbs/MM Btu which is for the # 2 fuel oil. See related Condition # 48 for 6 NYCRR 227-2.5 (a).

Condition # 1-13 for 6 NYCRR 227-2.4 (f) (1): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: JEN and Emission Sources/Controls: ENG08, OXC08/SCR08 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 2.5 MW GE-Jenbacher / JSM-616 lean burn spark ignited engine Emission Source ENG08 (equivalent to 2649 KW or to 4.55 MMBtu/hr) natural gas fired spark-ignited (Process JEN) equipped with selective catalytic reduction (Emission Control SCR08) for NOx and oxidation catalysis (Emission Control OXC08) for CO and VOC.

Stack testing will be required in order to demonstrate compliance with the 1.5 grams per brake horsepower-hour (g/bhp-hr) NOx emission limit. The owner or operator must submit a stack test protocol to the Department for approval prior to testing. The owner or

operator shall submit stack test results, to the Department for approval, within 60 days of stack test completion.

Condition # 1-14 for 6 NYCRR 227-2.4 (f) (3): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: CAT and Emission Sources/Controls: ENG09, OXC09/SCR09 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 2.5 MW Caterpillar / 3516C (equivalent to 2500 KW or to 3627 HP) fuel oil-fired (Process CAT) Tier 4 compression ignition engine defined as Emission Source ENG09, for black start and utility demand programs with "built-in" catalyst-based emissions control (Emission Control OXC09) and selective catalytic reduction (Emission Control SCR09).

This condition is for the presumptive NOx RACT emission limit for distillate oil fired stationary internal combustion engines. This condition is to ensure that the engines run at optimum conditions and stays in compliance with the NOx RACT emission limit by performing periodic maintenance in accordance with the manufacturer's specifications.

Stack testing will be required in order to demonstrate compliance with the 2.3 grams per brake horsepower-hour (g/bhp-hr) NOx RACT emission limit in the severe ozone non-attainment area. The owner or operator must submit a stack test protocol to the Department for approval prior to testing. The owner or operator shall submit stack test results, to the Department for approval, within 60 days of stack test completion.

Condition #49 for 6 NYCRR 227-2.5(a): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Processes: 001 & 006 and Emission Sources: 0BLRA, 0BLRB & 0BLRC for Intermittent Emission Testing for Oxides of Nitrogen.

This condition is for NOx RACT presumptive limit effective 7/1/14 for mid-size boilers. A mid-size boiler is a boiler with a maximum heat input capacity greater than 25 million Btu per hour and equal to or less than 100 million Btu per hour.

Due to the Fuel Switching Compliance Option [(6 NYCRR 227-2.5 (a)], the three mid-size boilers that recently have been firing # 6 fuel oil/gas will require to meet the 0.20 lbs/MM Btu upon switching to # 2 fuel oil/gas and not the 0.08 lbs/MM Btu which is for the # 2 fuel oil. See related Condition # 45 for 6 NYCRR 227-2.4 (c)(1)(ii).

Condition #50 for 6 NYCRR 227-2.5(c): This is a facility-wide condition for Record Keeping/Maintenance Procedures for Oxides of Nitrogen.

This condition allows the owner or operator to demonstrate that the applicable presumptive RACT emission limit in section 227-2.4 of this Subpart is not economically or technically feasible. Based on this determination the Department is allowed to set a higher emission source specific emission limit.

Condition # 1-15 for 6 NYCRR 227.2 (b) (1): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: CAT and Emission Sources/Controls: ENG09, OXC09/SCR09 for Intermittent Emission Testing for Particulates.

This condition applies to the 2.5 MW Caterpillar / 3516C (equivalent to 2500 KW or to 3627 HP) fuel oil-fired (Process CAT) Tier 4 compression ignition engine defined as Emission Source ENG09, for black start and utility demand programs with "built-in" catalyst-based emissions control (Emission Control OXC09) and selective catalytic reduction (Emission Control SCR09).

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

Condition # 52 for 6 NYCRR 227.2 (b) (1): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 006 and Emission Sources: 0BLRA, 0BLRB & 0BLRC for Intermittent Emission Testing for Particulates.

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

Condition # 54 for 6 NYCRR 227.2 (b) (1): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Sources: TURB1,TURB2, DUCT1 & DUCT2 for Intermittent Emission Testing for Particulates. This is a condition that applies to the two combustion turbines (Emission Sources TURB1 & TURB2) with their associated duct burners (Emission Controls DUCT1 & DUCT2). This condition is Intermittent Emission Testing.

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

Condition # 1-16 for 6 NYCRR 231-6: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Processes: CAT & JEN and Emission Sources/Controls: ENG09, OXC09/SCR09, and ENG08, OXC08/SCR08 for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen.

Based on an arbitrary NOx emission factor for the GE-Jenbacher engine of 0.3 g/bhp-hr and operating 8760 hrs/yr, and the NOx emissions for the Caterpillar engine (choosing NOx emission limit of 0.59 g/bhp-hr), which is 1.16 tpy (4.63 lb/hr x 500 hours):

NOx PTE for JEN + NOx PTE for CAT = 10.67 + 1.16 = 11.83 tpy of NOx

The Project's NOx PTE emissions is the sum of the PTE for the stationary spark ignited Jenbacher engine which is 10.67 tpy of NOx after adopting the new arbitrary emission factors, and the NOx PTE emissions for the stationary compression ignition Caterpillar engine with a NOx emission factor of 0.59 g/bhp-hr, which is 1.16 tpy (4.63 lb/hr x 500 hours). Therefore, the project's NOx PTE is 10.67 tpy+ 1.16 tpy = 11.83 tpy (23,660 lbs/yr).

Condition # 1-17 for 40 CFR 60.4211 (a), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: CAT and Emission Sources/Controls: ENG09, OXC09/SCR09 for Record Keeping/Maintenance Procedures.

This condition applies to the 2.5 MW Caterpillar / 3516C (equivalent to 2500 KW or to 3627 HP) fuel oil-fired (Process CAT) Tier 4 compression ignition engine defined as Emission Source ENG09, for black start and utility demand programs with "built-in" catalyst-based emissions control (Emission Control OXC09) and selective catalytic reduction (Emission Control SCR09).

This condition states that the owner or operator and must comply with the emission standards specified in 40 CFR 60 Subpart IIII and must operate and maintain the stationary compression ignition internal combustion engine and control device according to the manufacturer's written instructions.

Condition # 1-18 for 40 CFR 60.4211 (g), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: CAT and Emission Sources/Controls: ENG09, OXC09/SCR09 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 2.5 MW Caterpillar / 3516C (equivalent to 2500 KW or to 3627 HP) fuel oil-fired (Process CAT) Tier 4 compression ignition engine defined as Emission Source ENG09, for black start and utility demand programs with "built-in" catalyst-based emissions control (Emission Control OXC09) and selective catalytic reduction (Emission Control SCR09).

The manufacturer's Oxides of Nitrogen (NOx) anticipated emission factor for this engine is 0.59 grams per brake horsepower-hour (g/bhp-hr) or 0.802g/KW-hr.

This condition specifies that any changes made to emissions related settings, not in accordance with manufacturer's requirements, must be tested to ensure that the unit meets the emissions limits.

Condition # 1-19 for 40 CFR 60.4211 (g), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: CAT and Emission Sources/Controls: **ENG09, OXC09/SCR09** for **Intermittent Emission Testing** for Carbon Monoxide**.**

This condition applies to the 2.5 MW Caterpillar / 3516C (equivalent to 2500 KW or to 3627 HP) fuel oil-fired (Process CAT) Tier 4 compression ignition engine defined as Emission Source ENG09, for black start and utility demand programs with "built-in" catalyst-based emissions control (Emission Control OXC09) and selective catalytic reduction (Emission Control SCR09).

The manufacturer's Carbon Monoxide (CO) limit for this engine is 0.03 grams per brake horsepower-hour (g/bhp-hr).

This condition specifies that any changes made to emissions related settings, not in accordance with manufacturer's requirements, must be tested to ensure that the unit meets the emissions limits.

Condition # 1-20 for 40 CFR 60.4211 (g), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: CAT and Emission Sources/Controls: **ENG09, OXC09/SCR09** for **Intermittent Emission Testing** for Particulates**.**

This condition applies to the 2.5 MW Caterpillar / 3516C (equivalent to 2500 KW or to 3627 HP) fuel oil-fired (Process CAT) Tier 4 compression ignition engine defined as Emission Source ENG09, for black start and utility demand programs with "built-in"

catalyst-based emissions control (Emission Control OXC09) and selective catalytic reduction (Emission Control SCR09).

The Particulates (PM) limit for this engine is 0.03 grams per brake horsepower-hour (g/bhp-hr).

This condition specifies that any changes made to emissions related settings, not in accordance with manufacturer's requirements, must be tested to ensure that the unit meets the emissions limits.

Condition # 1-21 for 40 CFR 60.4211 (g), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: CAT and Emission Sources/Controls: **ENG09, OXC09/SCR09** for **Intermittent Emission Testing** for VOC**.**

This condition applies to the 2.5 MW Caterpillar / 3516C (equivalent to 2500 KW or to 3627 HP) fuel oil-fired (Process CAT) Tier 4 compression ignition engine defined as Emission Source ENG09, for black start and utility demand programs with "built-in" catalyst-based emissions control (Emission Control OXC09) and selective catalytic reduction (Emission Control SCR09).

The manufacturer provides an emission factor for Volatile Organic Compounds (VOC) for this engine of 0.01 grams per brake horsepower-hour (g/bhp-hr) or 0.136 g/KW-hr.

This condition specifies that any changes made to emissions related settings, not in accordance with manufacturer's requirements, must be tested to ensure that the unit meets the emissions limits.

Condition # 1-22 for 40 CFR 60.4243 (b)(2)(ii), NSPS Subpart JJJJ: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: JEN and Emission Sources/Controls: ENG08, OXC08/SCR08 for Record Keeping/Maintenance Procedures for Oxides of Nitrogen.

This condition applies to the 2.5 MW (equivalent to 2649 KW or to 4.55 MMBtu/hr) GE-Jenbacher / JSM-616 lean burn engine Emission Source ENG08, natural gas fired spark-ignited (Process JEN) equipped with selective catalytic reduction for NOx (Emission Control SCR08) and catalytic oxidation for CO and VOC (Emission Control OXC08).

This condition requires the owner or operator of a stationary SI internal combustion engine greater than 500 HP to keep a maintenance plan and records of conducted

maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Condition # 1-23 for 40 CFR 60.4243 (b)(2)(ii), NSPS Subpart JJJJ: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: JEN and Emission Sources/Controls: ENG08, OXC08/SCR08 for Intermittent Emission Testing for Carbon Monoxide.

This condition applies to the 2.5 MW (equivalent to 2649 KW or to 4.55 MMBtu/hr) GE-Jenbacher / JSM-616 lean burn engine Emission Source ENG08, natural gas fired spark-ignited (Process JEN) equipped with selective catalytic reduction for NOx (Emission Control SCR08) and catalytic oxidation for CO and VOC (Emission Control OXC08).

The NSPS Carbon Monoxide (CO) limit for this engine is 2.0 g/bhp-hr or 270 ppmvd. The manufacturer's anticipated emission factor is 0.156 g/bhp-hr, and NYU has chosen an arbitrary value of 0.3 grams per brake horsepower-hour (g/bhp-hr) to establish the PTE. This will be confirmed by stack testing.

This condition requires the owner or operator of a stationary SI internal combustion engine greater than 500 HP to keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Condition # 1-24 for 40 CFR 60.4243 (b)(2)(ii), NSPS Subpart JJJJ: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: JEN and Emission Sources/Controls: ENG08, OXC08/SCR08 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 2.5 MW (equivalent to 2649 KW or to 4.55 MMBtu/hr) GE-Jenbacher / JSM-616 lean burn engine Emission Source ENG08, natural gas fired spark-ignited (Process JEN) equipped with selective catalytic reduction for NOx (Emission Control SCR08) and catalytic oxidation for CO and VOC (Emission Control OXC08).

The NSPS Oxides of Nitrogen (NOx) limit for this engine is 1.0 g/bhp-hr or 82 ppmvd. NYU has chosen an arbitrary value of 0.3 grams per brake horsepower-hour (g/bhp-hr) to establish the PTE, though the anticipated actual value is 0.078 g/bhp-hr. This will be confirmed by stack testing.

This condition requires the owner or operator of a stationary SI internal combustion engine greater than 500 HP to keep a maintenance plan and records of conducted

maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Condition # 1-25 for 40 CFR 60.4243 (b)(2)(ii), NSPS Subpart JJJJ: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: JEN and Emission Sources/Controls: ENG08, OXC08/SCR08 for Intermittent Emission Testing for VOC.

This condition applies to the 2.5 MW (equivalent to 2649 KW or to 4.55 MMBtu/hr) GE-Jenbacher / JSM-616 lean burn engine Emission Source ENG08, natural gas fired spark-ignited (Process JEN) equipped with selective catalytic reduction for NOx (Emission Control SCR08) and catalytic oxidation for CO and VOC (Emission Control OXC08).

The NSPS Volatile Organic Compounds (VOC) limit for this engine is 0.7 g/bhp-hr or 60 ppmvd. NYU has chosen an arbitrary value of 0.3 grams per brake horsepower-hour (g/bhp-hr) to establish the PTE, though the anticipated actual value is 0.078 g/bhp-hr. This will be confirmed by a stack testing.

This condition requires the owner or operator of a stationary SI internal combustion engine greater than 500 HP to keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Condition #55 for 40 CFR 60.4305, NSPS Subpart KKKK: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Processes: 004 & 005 and Emission Sources: TURB1 &TURB2 for Record Keeping/Maintenance Procedures for Oxides of Oxygen.

The two combustion turbines (Emission Sources TURB1 & TURB2) are subject to 40 CFR 60.KKKK - Standards of Performance for Stationary Combustion Turbines for the operation of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MM Btu) per hour, which commenced construction, modification, or reconstruction after February 18, 2005. The two combustion turbines are identical, and each one is approximately 60.5 MM Btu/hr and they will burn either natural gas (Process 004) or # 2 fuel oil (Process 005). This replaces the requirements of 40 CFR 60.GG which have expired. NOx emissions under 40 CFR 60.KKKK are limited to less than or equal to 25 ppm (when firing natural gas), and are limited to 74 ppm (when firing oil) subject to initial and periodic performance testing to confirm compliance.

Condition #56 for 40 CFR 60.4340, NSPS Subpart KKKK: This condition is an emission unit level, emission point level, process level and emission source level

condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Sources: TURB1 &TURB2 for Intermittent Stack Testing for Oxides of Nitrogen.

The two combustion turbines (Emission Sources TURB1 & TURB2) are subject to 40 CFR 60.KKKK - Standards of Performance for Stationary Combustion Turbines for the operation of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MM Btu) per hour, which commenced construction, modification, or reconstruction after February 18, 2005. The two combustion turbines are identical, and each one is approximately 60.5 MM Btu/hr and they will burn either natural gas (Process 004) or # 2 fuel oil (Process 005). This replaces the requirements of 40 CFR 60.GG which have expired. NOx emissions under 40 CFR 60.KKKK are limited to less than or equal to 25 ppm (when firing natural gas), and are limited to 74 ppm (when firing oil) subject to initial and periodic performance testing to confirm compliance.

The NOx emission limit for each of the two combustion turbines will be 74 ppm at 15% O2 firing fuels other than natural gas, where stack testing is required for compliance.

Condition #57 for 40 CFR 60.4340, NSPS Subpart KKKK: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Sources: TURB1 &TURB2 for Intermittent Stack Testing for Oxides of Nitrogen.

The two combustion turbines (Emission Sources TURB1 & TURB2) are subject to 40 CFR 60.KKKK - Standards of Performance for Stationary Combustion Turbines for the operation of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MM Btu) per hour, which commenced construction, modification, or reconstruction after February 18, 2005. The two combustion turbines are identical, and each one is approximately 60.5 MM Btu/hr and they will burn either natural gas (Process 004) or # 2 fuel oil (Process 005). This replaces the requirements of 40 CFR 60.GG which have expired. NOx emissions under 40 CFR 60.KKKK are limited to less than or equal to 25 ppm (when firing natural gas), and are limited to 74 ppm (when firing oil) subject to initial and periodic performance testing to confirm compliance.

The NOx emission limit for each of the two turbines will be 25 ppm at 15% O2 firing natural gas, where stack testing is required for compliance.

Condition #58 for 40 CFR 60.4365(a), NSPS Subpart KKKK: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Sources: TURB1 &TURB2 for Work Practice Involving Specific Operations for Sulfur Dioxide.

Sulfur content in #2 fuel oil combusting in the two new combustion turbines is limited to 0.05% sulfur by weight. This is equivalent to 500 ppm by weight, and 0.06 lbs per million BTU of heat input.

Sulfur content in the natural gas combusting in the two new turbines is limited to 0.05% sulfur by weight. This is equivalent to 20 grains per 100 scf, and 0.06 lbs per million BTU of heat input.

This section provides an exemption from monitoring total sulfur content of the fuel used by a facility.

Condition #59 for 40 CFR 60.4365(a), NSPS Subpart KKKK: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Sources: TURB1 &TURB2 for Sulfur Dioxide for Work Practice Involving Specific Operations.

Sulfur content in the natural gas combusting in the two new turbines is limited to 0.05% sulfur by weight. This is equivalent to 20 grains per 100 scf, and 0.06 lbs per million BTU of heat input.

Condition #62 for 6 NYCRR 227-1.2(a)(1): This condition is an emission unit level and an emission point level condition that applies to EU: 1-00000 & EP: 00001 for Intermittent Emission Testing for Particulates.

The particulate emission limit for a stationary combustion installation ducted through a common stack, firing liquid fuels, and having a heat capacity exceeding 250 MM Btu/hr is limited to 0.10 pounds per million Btus. This condition applies to Emission Unit 1-00000, Emission Point 00001,Process 005 for the two new combustion turbines, and Process 002 for the reconfigured three mid-size boilers, where stack testing is required for compliance.

This regulation establishes a particulate emission limit in terms of lbs per mmBtu of heat input for stationary combustion units of greater than 250 mmBtu/hr heat input capacity which fire coal, oil, or coal derived fuels.

Condition #63 for 6 NYCRR 227-1.3(a): This condition is an emission unit level and an emission point level condition that applies to EU: 1-00000 & EP: 00001 for Monitoring of Process or Control Device Parameters as Surrogate for Particulates.

This condition 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.

The opacity is limited to 20% at Emission Point 00001 when any of the boilers or combustion turbines is firing #2 fuel oil.

Condition # 64 for 6 NYCRR 227-1.4 (b): This condition is an emission unit level and an emission point level condition that applies to EU: 1-00000 & EP: 00001 for Record Keeping/Maintenance Procedures.

This condition requires the specific contents of excess emissions reports for opacity from facilities that employ continuous opacity monitors (COMs).

As per 6 NYCRR 227-1.4, COMS is required on combustion sources exceeding 250 MMBtu/hr heat input, excluding gas turbines. Heat input at Emission Point 00001 from the small boilers (Emission Sources 0BLRA, 0BLRB & 0BLRC) @ 65 MMBtu/hr each total 195 MMBtu/hr (< 250 MMBtu/hr), therefore COMS is not required, but the existing continuous opacity monitoring system (COMS) unit will voluntarily remain on the stack of Emission Point 00001.

NYU will maintain a voluntary COMS on Emission Point 00001 since a COMS is not required due to the exclusion of turbines. Either by voluntary COMS or visible emissions observations, NYU will include the excess emission report. The regulation does not require COMS for these emission sources, but NYU has voluntarily installed COMS.

Since total heat input for the combustion sources (excluding gas turbines) is < 250 MM Btu/hr threshold and COMS is not required by opacity regulation 6 NYCRR 227-1.3 (a).

Condition # 65 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Control: DUCT1 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 for Emission Control DUCT1, where the combustion turbine fires natural gas and the duct burner also fires natural gas. The duct burner fires only natural gas.

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NOx RACT limit is 25 parts per million by volume (dry, corrected to 15% O2) for the combined cycle combustion turbine (Emission Source TURB1) firing natural gas (Process 004) with its associated/corresponding duct burner (Emission Control DUCT1) in Emission Unit 1-00000.

Condition # 75 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Source/Control: DUCT1 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 for Emission Control DUCT1, where the combustion turbine fires natural gas and the duct burner also fires natural gas. The duct burner fires only natural gas.

The facility will demonstrate compliance with the NOx standard of 25.0 parts per million by volume (dry, corrected to 15% O2) for the turbine burning natural gas with its associated/corresponding HRSG duct burner (Emission Control DUCT1) burning natural gas, where stack testing is required for compliance.

Condition # 76 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Control: DUCT2 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 2 (Emission Source TURB2) firing natural gas (Process 004) with its associated/corresponding duct burner (Emission Controls DUCT2) where the combustion turbine fires natural gas and the duct burner also fires natural gas. The duct burner fires only natural gas.

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NOx RACT limit is 25 parts per million by volume (dry, corrected to 15% O2) for the combined cycle combustion turbine (Emission Source TURB2) firing natural gas (Process 004) with its corresponding duct burner (Emission Control DUCT2) in Emission Unit 1-00000.

Condition # 86 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Source/Control: DUCT2 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 2 (Emission Control DUCT2) firing natural gas (Process 004) with

its corresponding duct burner (Emission Control DUCT2) where the combustion turbine fires natural gas and the duct burner also fires natural gas. The duct burner fires only natural gas.

The facility will demonstrate compliance with the NOx standard of 25.0 parts per million by volume (dry, corrected to 15% O2) for the combustion turbine burning natural gas and with its associated/corresponding HRSG duct burner (Emission Control DUCT2) also burning natural gas, where stack testing is required for compliance.

Condition # 87 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Source: TURB1 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combustion turbine # 1 for Emission Source TURB1, where the combustion turbine fires natural gas without the duct burner.

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NOx RACT limit is 25 parts per million by volume (dry, corrected to 15% O2) for the combustion turbine (Emission Source TURB1) firing natural gas (Process 004) without its associated/corresponding duct burner in Emission Unit 1-00000.

Condition # 97 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Source/Control: TURB1 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combustion turbine # 1 for Emission Source TURB1, where the combustion turbine fires natural gas without the duct burner.

The facility will demonstrate compliance with the NOx standard of 25.0 parts per million by volume (dry, corrected to 15% O2) for the combustion turbine (Emission Source TURB1) burning natural gas without its associated/corresponding HRSG duct burner, where stack testing is required for compliance.

Condition # 98 for 40 CFR 60.4340(a), NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission

Source/Control: TURB1 for Record Keeping/Maintenance Procedures for Oxides of Nitrogen.

To demonstrate continuous compliance, this condition specifies NOx annual testing requirement for combustion turbines if the facility is not using water or steam injection to control NOx emissions.

Condition # 99 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Source: TURB2 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 2 (Emission Source TURB2) firing natural gas (Process 004) without its associated/corresponding duct burner, where the combustion turbine fires natural gas.

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NOx RACT limit is 25 parts per million by volume (dry, corrected to 15% O2) for the combustion turbine (Emission Source TURB2) firing natural gas (Process 004) without its associated/corresponding duct burner in Emission Unit 1-00000.

Condition # 109 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Source/Control: TURB2 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combustion turbine # 2 (Emission Sources TURB2) firing natural gas (Process 004) without its associated/corresponding duct burner, where the combustion turbine fires natural gas.

The facility will demonstrate compliance with the NOx standard of 25.0 parts per million by volume (dry, corrected to 15% O2) for the combustion turbine (Emission Source TURB2) without its associated/corresponding HRSG duct burner (Emission Control DUCT2), burning natural gas without its associated HRSG duct burner, where stack testing is required for compliance

Condition # 110 for 40 CFR 60.4340(a), NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission

Source/Control: TURB2 for Record Keeping/Maintenance Procedures for Oxides of Nitrogen.

To demonstrate continuous compliance, this condition specifies NOx annual testing requirement for combustion turbines if the facility is not using water or steam injection to control NOx emissions.

Condition # 111 for 6 NYCRR 227-1.3 (a): This condition is an emission unit level, an emission point level and process level condition that applies to EU: 1-00000, EP: 00001 and Process: 005 for Monitoring of Process or Control Device Parameters as Surrogate for Particulates.

This condition 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 when firing # 2 fuel oil (Process 005).

The opacity is limited to 20% at Emission Point 00001 when any of the combustion turbines is firing #2 fuel oil (Process 005).

Condition # 112 for 40 CFR 60.45c (a), NSPS Subpart Dc: This condition is an emission unit level, an emission point level and process level condition that applies to EU: 1-00000, EP: 00001 and Process: 005 for Intermittent Emission Testing for Particulates.

Initial performance test for Particulates is required under 40 CFR 60.8 when firing #2 fuel oil.

Condition # 113 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Control: DUCT1 for Intermittent Emission Testing Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 for Emission Control DUCT1, where the combustion turbine fires #2 fuel oil and the duct burner fires natural gas. The duct burner fires only natural gas.

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NOx RACT limit is 65 parts per million by volume (dry, corrected to 15% O2) for the combined cycle combustion (Emission Source TURB1) firing #2 fuel oil

(Process 005) with its associated/corresponding duct burner (Emission Control DUCT1) in Emission Unit 1-00000.

Condition # 114 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: DUCT1 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 for Emission Control DUCT1, where the combustion turbine fires #2 fuel oil and the duct burner fires natural gas. The duct burner fires only natural gas.

The facility will demonstrate compliance with the NOx standard of 74.0 parts per million by volume (dry, corrected to 15% O2) for the combustion turbine (Emission Source TURB1) with its associated/corresponding HRSG duct burner (Emission Control DUCT1), where the combustion turbine fires #2 fuel oil (Process 005) and its associated/corresponding HRSG duct burner fires natural gas, where stack testing is required for compliance. The duct burner fires only natural gas.

Condition # 115 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: DUCT2 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 for Emission Control DUCT1, where the combustion turbine fires #2 fuel oil and the duct burner fires natural gas. The duct burner fires only natural gas.

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NOx RACT limit is 65 parts per million by volume (dry, corrected to 15% O2) for the combined cycle combustion (Emission Source TURB2) firing #2 fuel oil (Process 005) with its associated/corresponding duct burner (Emission Control DUCT2) in Emission Unit 1-00000.

Condition # 116 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: DUCT2 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 2 for Emission Control DUCT2, where the combustion turbine fires #2 fuel oil and the duct burner fires natural gas. The duct burner fires only natural gas.

The facility will demonstrate compliance with the NOx standard of 74.0 parts per million by volume (dry, corrected to 15% O2) for the combustion turbine (Emission Source TURB2) with its associated/corresponding HRSG duct burner (Emission Control DUCT2), where the combustion turbine fires #2 fuel oil (Process 005) and its associated/corresponding HRSG duct burner fires natural gas, where stack testing is required for compliance. The duct burner fires only natural gas.

Condition # 117 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: TURB1 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 (Emission Source TURB1) firing # 2 fuel oil (Process 005) without its associated/corresponding duct burner, where the combustion turbine fires # 2 fuel oil.

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NOx RACT limit is 65 parts per million by volume (dry, corrected to 15% O2) for the combustion turbine (Emission Source TURB1) firing # 2 fuel oil (Process 005) without its associated/corresponding duct burner in Emission Unit 1-00000.

Condition # 128 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: TURB1 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combustion turbine # 1 for Emission Source TURB1, where the combustion turbine fires # 2 fuel oil without its associated/corresponding HRSG duct burner.

The facility will demonstrate compliance with the NOx standard of 74.0 parts per million by volume (dry, corrected to 15% O2) for the combustion turbine (Emission Source TURB1) burning # 2 fuel oil without its associated/corresponding HRSG duct burner, where stack testing is required for compliance.

Condition # 129 for 40 CFR 60.4330, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: TURB1 for Monitoring of Process or Control Device Parameters as Surrogate for Sulfur Dioxide for the sulfur content in the fuel oil.

For each fuel delivery, the sulfur content of the #2 fuel oil to be burned in the combustion turbine (Emission Source TURB1) has a limit of 500 ppm (0.05% by weight). This is equivalent to 0.060 pounds per million Btus.

Condition # 130 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: TURB2 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 2 (Emission Source TURB2) firing # 2 fuel oil (Process 005) without its associated/corresponding duct burner, where the combustion turbine fires # 2 fuel oil.

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NOx RACT limit is 65 parts per million by volume (dry, corrected to 15% O2) for the combustion turbine (Emission Sources TURB2) firing # 2 fuel oil (Process 005) without its associated/corresponding duct burner in Emission Unit 1-00000.

Condition # 141 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: TURB2 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combustion turbine # 2 for Emission Source TURB2, where the combustion turbine fires # 2 fuel oil without its associated/corresponding HRSG duct burner.

The facility will demonstrate compliance with the NOx standard of 74.0 parts per million by volume (dry, corrected to 15% O2) for the combustion turbine (Emission Source TURB2) burning # 2 fuel oil without its associated/corresponding HRSG duct burner, where stack testing is required for compliance.

Condition # 142 for 40 CFR 60.4330, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: TURB2 for Monitoring of Process or Control Device Parameters as Surrogate for Sulfur Dioxide for the sulfur content in the fuel oil.

For each fuel delivery, the sulfur content of the #2 fuel oil to be burned in the combustion turbine (Emission Source TURB2) has a limit of 500 ppm (0.05% by weight). This is equivalent to 0.060 pounds per million Btus.

Condition # 143 for 6 NYCRR 227-1.3: This condition is an emission unit level, emission point level and process level condition that applies to EU: 1-00000, EP: 00001 and Process: 006 for Record Keeping/Maintenance Procedures for Particulates. The facility is required to observe the stacks for each combustion source (Emission Sources 0BLRA, 0BLRB & 0BLRC) when operating on oil once per day for visible emissions.

This condition applies to the three mid-size boilers (Emission Sources 0BLRA, 0BLRB & 0BLRC) when operating on # 2 fuel oil (Process 006).

This condition requires a limitation and compliance monitoring for opacity from a stationary combustion installation**:** The opacity will be limited to 20% except for one six minute period per hour, not to exceed 27%, based upon the six minute average.

Condition # 144 for 6 NYCRR 227-1.3 (a): This condition is an emission unit level, an emission point level and a process level condition that applies to EU: 1-00000, EP: 00001and Process: 006 for Monitoring of Process or Control Device Parameters as Surrogate for Particulates.

This condition applies to the three mid-size boilers (Emission Sources 0BLRA, 0BLRB & 0BLRC) when operating on # 2 fuel oil (Process 006).

This condition 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 when firing # 2 fuel oil (Process 006).

The opacity is limited to 20% at Emission Point 00001 when any of the combustion turbines is firing #2 fuel oil (Process 006).

Condition # 145 for 6 NYCRR 227-1.4 (b): This condition is an emission unit level and an emission point level condition that applies to EU: 2-00000 and EP: 00002 for Particulates for Record Keeping/Maintenance Procedures.

This condition requires the specific contents of excess emissions reports for opacity from facilities that employ continuous opacity monitors (COMs).

The existing COMS at Emission Point 00002 for the seven engines in Emission Unit 2-00000 will remain at the facility. This COMS is voluntary since the emission unit does not meet the 250 MMBtu/hr heat input threshold of the regulation governing COMS. NYU will voluntarily use COMS at Emission Point 00002, and all issues that would ordinarily be applicable such as maintenance, reporting and recordkeeping will be voluntarily performed.

The existing COMS at Emission Point 00002 for the seven engines in Emission Unit 2-00000 will remain at the facility. This COMS is voluntary since the emission unit does not meet the 250 MMBtu/hr heat input threshold of the regulation governing COMS. NYU will maintain a voluntary COMS on Emission Point 00002 since COMS is not required for these emission sources (seven engines). Either by voluntary COMS or visible emissions observations, NYU will include the excess emission report. The regulation does not require COMS for these emission sources, but NYU has voluntarily installed COMS.

Condition # 1-26 for 40 CFR 60.4211 (a), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: CAT and Emission Sources/Controls: **ENG09, OXC09/SCR09** for **Record Keeping/Maintenance Procedures.**

This condition states that the owner or operator and must comply with the emission standards specified in 40 CFR 60 Subpart IIII and must operate and maintain the stationary compression ignition internal combustion engine and control device according to the manufacturer's written instructions.

Condition # 1-27 for 40 CFR 60.4211 (g), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: CAT and Emission Sources/Controls: ENG09, OXC09/SCR09 for Intermittent Emission Testing for Carbon Monoxide.

This condition applies to the 2.5 MW Caterpillar / 3516C (equivalent to 2500 KW or to 3627 HP) fuel oil-fired (Process CAT) Tier 4 compression ignition engine defined as Emission Source ENG09, for black start and utility demand programs with "built-in" catalyst-based emissions control (Emission Control OXC09) and selective catalytic reduction (Emission Control SCR09).

The manufacturer's Carbon Monoxide (CO) limit for this engine is 0.03 grams per brake horsepower-hour (g/bhp-hr).

This condition specifies that any changes made to emissions related settings, not in accordance with manufacturer's requirements, must be tested to ensure that the unit meets the emissions limits.

Condition # 1-28 for 40 CFR 60.4211 (g), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: CAT and Emission Sources/Controls: ENG09, OXC09/SCR09 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 2.5 MW Caterpillar / 3516C (equivalent to 2500 KW or to 3627 HP) fuel oil-fired (Process CAT) Tier 4 compression ignition engine defined as Emission Source ENG09, for black start and utility demand programs with "built-in" catalyst-based emissions control (Emission Control OXC09) and selective catalytic reduction (Emission Control SCR09).

The manufacturer's Oxides of Nitrogen (NOx) limit for this engine is 0.59 grams per brake horsepower-hour (g/bhp-hr).

This condition specifies that any changes made to emissions related settings, not in accordance with manufacturer's requirements, must be tested to ensure that the unit meets the emissions limits.

Condition # 1-29 for 40 CFR 60.4211 (g), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: JEN and Emission Sources/Controls: ENG08, OXC08/SCR08 for Record Keeping/Maintenance Procedures.

This condition applies to the 2.5 MW (equivalent to 2649 KW or to 4.55 MMBtu/hr) GE-Jenbacher / JSM-616 lean burn engine Emission Source ENG08, natural gas fired spark-ignited (Process JEN) equipped with selective catalytic reduction for NOx (Emission Control SCR08) and catalytic oxidation for CO and VOC (Emission Control OXC08).

This regulation specifies that any changes made to emissions related settings, not in accordance with manufacturer's requirements, must be tested to ensure that the unit meets the emissions limits.

Condition # 151 for 6 NYCRR 227-1.4 (a): This condition is an emission unit level and an emission point level condition that applies to EU: 1-00000 and EP: 00001 for Monitoring of Process or Control device Parameters as Surrogate for Particulates.

This condition applies to the three mid-size boilers (Emission Sources 0BLRA, 0BLRB & 0BLRC) when operating on # 2 fuel oil (Process 006).

This condition requires a limitation and compliance monitoring for opacity from a stationary combustion installation**:** The opacity will be limited to 20% except for one six minute period per hour, not to exceed 27%, based upon the six minute average.

As per 6 NYCRR 227-1.4, COMS is required on combustion sources exceeding 250 MMBtu/hr heat input, excluding gas turbines. Heat input at Emission Point 00001 from the small boilers (Emission Sources 0BLRA, 0BLRB & 0BLRC) @ 65 MMBtu/hr each total 195 MMBtu/hr (< 250 MMBtu/hr), therefore COMS is not required, but the existing continuous opacity monitoring system (COMS) unit will voluntarily remain on the stack of Emission Point 00001.

This condition requires the specific contents of excess emissions reports for opacity from facilities that employ continuous opacity monitors (COMs).