Facility DEC ID: 2620500246

PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 2-6205-00246/00005
Effective Date: Expiration Date:

Permit Issued To:NEW YORK UNIVERSITY
70 WASHINGTON SQ S
NEW YORK, NY 10012-1019

Contact: DAVID ALONSO
NEW YORK UNIVERSITY
10 ASTOR PL FL 7
NEW YORK, NY 10003
(212) 998-1077

Facility: NYU CENTRAL PLANT
251 MERCER ST
NEW YORK, NY 10012

Contact: Brian Burke
New York University
10 Astor Pl 7th Fl
New York, NY 10003
(212) 998-1416

Description:

PERMIT DESCRIPTION
NYU Central Plant
DEC ID # 2-6205-00246/00005 (Ren 3)

NYU's Central Plant is a central cogeneration power plant is an on campus, subterranean, central cogeneration power plant at a major urban university in New York City. The NYU Central Power Plant produces hot water, steam and electricity using three (3) identical boilers identified as Emission Sources 0BLRA, 0BLRB and 0BLRC in Emission Unit 1-00000; each boiler is rated at 65 MM BTU/hr. The three boilers are dual-fired, natural gas and ultra-low sulfur distillate #2 fuel oil boilers.

NYU is an existing Title V major facility in a non-attainment area, and attainment area of the state within the ozone transport region, pending the particular contaminant in question. The plant consists of:

Emission Unit 1-0000: 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 each boilers which are dual-fired, natural gas and ultra-low sulfur distillate #2 fuel oil boilers.

Combustion Turbine Trains:

The facility's electrical output is approximately 11 MW from two combustion turbines (@ 5.5 MW each = 11 MW, or 11MW x 8,760 hours = 96,360 MWe-hrs). The two combustion turbines (Emission Sources TURB1 & TURB2) operate on natural gas (Process 004) and # 2 distillate fuel oil (Process 005). Maximum possible emissions for the turbines are based on combusting # 2 fuel oil for 8,760 hours per year. Potential to emit (PTE) for the combined two turbines is based on the heat content equivalent of combusting 9 months of natural gas and 3 months of # 2 fuel oil, not precluding any mixture of gas and oil or hours that does not exceed emissions caps or applicable regulations. The combined turbines have a NOx PTE of 56.93 tpy. The two combustion turbines are identical and each is approximately 60.5 MM Btu/hr.

The two duct burners combust only natural gas (Process 004) and their maximum possible emissions are equivalent to the PTE based on 8,760 hours per year. The duct burners are 70 MM Btu/hr each and 20 MM Btu/hr of that heat input is provided by the two combustion turbines; thus duct burner fuel is not required for this fraction of heat input. The duct burners never operate by themselves without their concomitant combustion turbine. The maximum possible NOx emissions for the combined HRSG/duct burners operating [only] on natural gas is 47.30 tpy. The duct burners do not have a specific regulated 'cap', but the two combined combustion turbine/HRSG-duct burner pairs have a capped NOx PTE of 104.23 tpy.

Boilers:

NYU dual-fuel boilers normally operate using natural gas (Process 001) with historical back-up # 6 residual fuel oil (Process 002). Potential to emit (PTE) for the boilers is based on the heat content equivalent of 9 months of natural gas and 3 months of # 2 fuel oil, with a self-imposed (federally enforceable) cap of emissions equivalent to 2 boilers, 40.4 tons of NOx per annual maximum rolled monthly. The cap is based strictly on emissions and not any specific individual use of gas or fuel oil, or hours of operation. Thus, emission contribution from distillate fuel oil will be significantly less than that from residual fuel oil. The three boilers may be used singularly or in any combination at different times. The cap applies to the overall combination of both fuels (natural gas and fuel oil) and is not prorated for any single fuel.

The three boilers were upgraded from firing # 6 residual fuel oil (Process 002) to firing # 2 ultra-low-sulfur distillate fuel oil (Process 006). This work was completed in 2015. All boilers will continue to burn natural gas as the primary fuel (Process 001) and maintain their current ratings.

Upgrades included incorporating new oil guns, new fuel oil trains, and new steam atomization trains and compressed air atomization trains for full burning capacity for optimal steam and air atomization. Additional efficiency and safety upgrades include an oil purifier centrifuge for the oil tanks, and extended fire protection in the oil pump room.

The facility already uses oil with sulfur content not exceeding the 0.0015 % (15 ppm) limit for its turbines and is in [default] facility compliance with 6 NYCRR 225-1.2 (h), which will be incorporated into the permit renewal. The boilers will fire the same distillate fuel oil, under new Process 006.

Continuous Opacity Monitoring Systems (COMS):

The turbines, duct burners and boilers emit through a shared stack (Emission Point 00001), which has an existing COMS unit to voluntarily monitor opacity, since the total heat input for the combustion sources (excluding gas turbines per regulation) is < 250 MM Btu/hr threshold and COMS is voluntarily being kept and will continue to be used for the opacity compliance of Emission Point 00001 as per regulation 6 NYCRR 227-1.3 (a). The COMS is voluntarily being kept and will continue to be used for the opacity compliance of Emission Point 00001. All issues that would ordinarily be applicable such as maintenance, reporting and recordkeeping for the engines and boilers COMS are also voluntarily performed.

New State-of-the-Art Engines:

Emission Unit 2-0000: Currently, two engines are being constructed and installed (in the space vacated by the removal of the seven old diesel-fired, Caterpillar D399 compression ignition engines combustion Emission Sources ENG01 through ENG07) and anticipated to go on-line during the first year of the renewed 5-year permit term:

1. The first engine identified as Emission Source ENG08 is a 2.6 MW (4.55 MM Btu/hr or 2649 KW) four stroke lean burn spark ignited natural gas-fired GE-Jenbacher JSM-616 engine generator (PTE 10.67 tons of NOx per year). Approved control technology pollution controls include add-on selective catalytic reduction with urea feed for NOx reduction, and an oxidation catalyst for CO and VOC reduction. The engine will meet the NYSDEC presumptive

standard for natural gas-fired engines, the federal New Source Performance Standards (NSPS) for stationary spark ignition internal combustion engines (40 CFR 60 Subpart JJJJ) for NOx, CO and VOC. The PTE-establishing a 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 NSPS Subpart JJJJ compliance of 1.0 g/bhp-hr, which meets the NYSDEC presumptive standard for natural gas-fired engines of 1.5 g/bhp-hr. Applicability to NESHAPs Subpart ZZZZ (40 CFR 63.6590) is met by meeting the requirements of Subpart JJJJ.

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

2. The second engine identified as Emission Source ENG09 is a 2.5 MW diesel-fired certified Caterpillar 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. Capping at 500 hours/year calculates to 1.16 tons of NOx/year (4.63 lb/hr x 500 hours/year). The 4.63 lb/hr NOx emission factor is equivalent to 0.59 g/bhp-hr. This engine utilizes proprietary built-in emissions controls and its exhaust will not pass through the Jenbacher SCR system: features diesel oxidation catalyst combined with a selective catalytic reduction module and an air-assisted urea injection system. The catalyst-based control systems 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. Applicability to NESHAPs Subpart ZZZZ is met by meeting the requirements of Subpart IIII.

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 Caterpillar engine NSPS Subpart IIII general standards for engines of KW >560 / HP > 750 will be met as listed below:

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

Based on a NOx emission factor for the GE-Jenbacher engine of 0.3 g/bhp-hr for NOx (which will be confirmed by the approved control technology plan and add-on pollution controls), 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 (23,660 lbs/yr).

The emissions of the CAT and the Jenbacher engines will exhaust to the existing stack #2 through Emission point 00002, with its continuous opacity monitor system (COMS). The existing COMS on Emission Point 00002 for monitoring the CAT process and the JEN process opacity from the 2 engines in Emission Unit 2-0000 also remains voluntary at the facility and will continue to be used for the opacity compliance of Emission Point 00001.

Both engines require an initial performance test within one year after start-up to demonstrate compliance with the applicable emissions standard, and subsequent testing every 8760 hours or every three years, whichever comes first, to demonstrate on-going compliance according to 40 CFR 60.4211, Subpart IIII for the CI - Compression Ignition Caterpillar engine and according to 40 CFR 63.4243, Subpart JJJJ for the SI -Spark Ignited Jenbacher engine.

There are no emission increases or changes to any capped emission limitations from the existing permit. There are no criteria or regulated pollutant emission increases.

The permit includes all caps of NOx in tons per year, the capping certification is annual for the following:

Facility	158.5
Turbines and duct burners, oil & gas	104.23
Turbines only, oil & gas	56.93
Boilers, oil & gas	40.4
Jenbacher gas engine	10.67
Caterpillar oil engine operation	1.16 and 500 hours per year
Combined Jenbacher and Caterpillar engine	11.83

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The facility conducts stack testing on the following emission sources:

Turbines and duct burners - annually.
Boilers - once every 5 years.
Jenbacher engine - initial and subsequent every 8760 hours or 3 years, whichever comes first.
Caterpillar engine - initial and subsequent every 8760 hours or 3 years, whichever comes first.

The facility operates other sources which are considered exempt from permitting in accordance with 6 NYCRR 201-3.2 (c), including three storage tanks (<10,000 gallons capacity), containing distillate fuel oil.

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator: STEPHEN A WATTS
47-40 21ST ST
LONG ISLAND CITY, NY 11101-5401

Authorized Signature: _____ Date: ___ / ___ / _____

Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

PAGE LOCATION OF CONDITIONS

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DEC GENERAL CONDITIONS
****** General Provisions ******
For the purpose of your Title V permit, the following section contains state-only enforceable terms and conditions.
GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department
Applicable State Requirement: ECL 19-0305

Item 1.1:
The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

Item 1.2:
The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

Item 1.3:
A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Condition 2: Relationship of this Permit to Other Department Orders and Determinations
Applicable State Requirement: ECL 3-0301 (2) (m)

Item 2.1:
Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Condition 3: Applications for permit renewals, modifications and transfers
Applicable State Requirement: 6 NYCRR 621.11

Item 3.1:
The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item3.2:
The permittee must submit a renewal application at least 180 days before the expiration of permits for Title V and State Facility Permits.

Item 3.3
Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

Condition 4: Permit modifications, suspensions or revocations by the Department
Applicable State Requirement: 6 NYCRR 621.13

Item 4.1:
The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

a) materially false or inaccurate statements in the permit application or supporting papers;
b) failure by the permittee to comply with any terms or conditions of the permit;
c) exceeding the scope of the project as described in the permit application;
d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

****** Facility Level ******

Condition 5: Submission of application for permit modification or renewal - REGION 2 HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:
Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator
Region 2 Headquarters
Division of Environmental Permits
1 Hunters Point Plaza, 4740 21st Street
Long Island City, NY 11101-5407
(718) 482-4997

Permit ID: 2-6205-00246/00005 **Facility DEC ID: 2620500246**

Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

Permit Issued To:NEW YORK UNIVERSITY
70 WASHINGTON SQ S
NEW YORK, NY 10012-1019

Facility: NYU CENTRAL PLANT
251 MERCER ST
NEW YORK, NY 10012

Authorized Activity By Standard Industrial Classification Code:
8221 - COLLEGES AND UNIVERSITIES, NEC

Permit Effective Date: Permit Expiration Date:

PAGE LOCATION OF CONDITIONS

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FEDERALLY ENFORCEABLE CONDITIONS
Facility Level

44 40CFR 60.4211(g), NSPS Subpart IIII: Compliance Certification
45 40CFR 60.4211(g), NSPS Subpart IIII: Compliance Certification
46 40CFR 60.4211(g), NSPS Subpart IIII: Compliance Certification
47 40CFR 60, NSPS Subpart JJJJ: Applicability
48 40CFR 60.4243(b)(2)(ii), NSPS Subpart JJJJ: Compliance Certification
49 40CFR 60.4243(b)(2)(ii), NSPS Subpart JJJJ: Compliance Certification
50 40CFR 60.4243(b)(2)(ii), NSPS Subpart JJJJ: Compliance Certification
51 40CFR 60.4243(b)(2)(ii), NSPS Subpart JJJJ: Compliance Certification
52 40CFR 60.4243(b)(2)(ii), NSPS Subpart JJJJ: Compliance Certification
53 40CFR 60.4305, NSPS Subpart KKKK: Compliance Certification
54 40CFR 60.4340, NSPS Subpart KKKK: Compliance Certification
55 40CFR 60.4340, NSPS Subpart KKKK: Compliance Certification
56 40CFR 60.4365(a), NSPS Subpart KKKK: Compliance Certification
57 40CFR 63, Subpart JJJJJJ: Applicability
58 40CFR 80.510(b), Subpart I: Compliance Certification

Emission Unit Level

59 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
60 6 NYCRR Subpart 201-6: Process Definition By Emission Unit

EU=1-00000,EP=00001

61 6 NYCRR 227-1.3 (a): Compliance Certification
62 6 NYCRR 227-1.4 (b): Compliance Certification
63 6 NYCRR 227-1.3: Compliance Certification

EU=1-00000,EP=00001,Proc=004,ES=DUCT1

64 6 NYCRR 227-2.4 (e) (2): Compliance Certification
65 40CFR 60.4, NSPS Subpart A: EPA Region 2 address.
66 40CFR 60.4325, NSPS Subpart KKKK: Compliance Certification

EU=1-00000,EP=00001,Proc=004,ES=DUCT2

67 6 NYCRR 227-2.4 (e) (2): Compliance Certification
68 40CFR 60.4325, NSPS Subpart KKKK: Compliance Certification

EU=1-00000,EP=00001,Proc=004,ES=TURB1

69 6 NYCRR 227-2.4 (e) (2): Compliance Certification
70 40CFR 60.7(b), NSPS Subpart A: Recordkeeping requirements.
71 40CFR 60.7(f), NSPS Subpart A: Facility files for subject sources.
72 40CFR 60.8(b), NSPS Subpart A: Performance Test Methods - Waiver EU Level
73 40CFR 60.8(d), NSPS Subpart A: Prior notice.
74 40CFR 60.8(e), NSPS Subpart A: Performance testing facilities.
75 40CFR 60.8(f), NSPS Subpart A: Number of required tests.
76 40CFR 60.9, NSPS Subpart A: Availability of information.
77 40CFR 60.4325, NSPS Subpart KKKK: Compliance Certification
78 40CFR 60.4340(a), NSPS Subpart KKKK: Compliance Certification

EU=1-00000,EP=00001,Proc=004,ES=TURB2

79 6 NYCRR 227-2.4 (e) (2): Compliance Certification
80 40CFR 60.4325, NSPS Subpart KKKK: Compliance Certification
81 40CFR 60.4340(a), NSPS Subpart KKKK: Compliance Certification
82 6 NYCRR 227-1.3: Compliance Certification

EU=1-00000,EP=00001,Proc=005,ES=TURB1

101 83 6 NYCRR 227-2.4 (e) (2): Compliance Certification
102 84 40CFR 60.4325, NSPS Subpart KKKK: Compliance Certification

EU=1-00000,EP=00001,Proc=005,ES=TURB2

104 85 6 NYCRR 227-2.4 (e) (2): Compliance Certification
106 86 40CFR 60.7(a), NSPS Subpart A: Date of Construction Notification - if a COM is used.
107 87 40CFR 60.4325, NSPS Subpart KKKK: Compliance Certification
110 88 6 NYCRR 227-1.3 (a): Compliance Certification

EU=2-00000,EP=00002

110 89 6 NYCRR 227-1.4 (b): Compliance Certification
111 90 6 NYCRR 227-1.3: Compliance Certification

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

114 91 ECL 19-0301: Contaminant List
114 92 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
115 93 6 NYCRR 201-6.5 (a): CLCPA Applicability
115 94 6 NYCRR 211.1: Air pollution prohibited

Emission Unit Level

EU=1-00000,EP=00001

116 95 6 NYCRR 227-1.4 (a): Compliance Demonstration

FEDERALLY ENFORCEABLE CONDITIONS
****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
The items listed below are not subject to the annual compliance certification requirements under Title V. Permittees may also have other obligations under regulations of general applicability.

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 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 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 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 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 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 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 201-6.4 (i)**

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

i. When additional applicable requirements under the act become applicable to a title V facility with a remaining permit term of 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 the 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 section 201- 6.6 of this Subpart.

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.

MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS SUBJECT TO ANNUAL CERTIFICATIONS AT ALL TIMES

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements at all times.

Condition 1: **Acceptable Ambient Air Quality**
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 200.6

Item 1.1:
Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

Condition 2: **Fees**
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (7)

Item 2.1:
The owner and/or operator of a stationary source shall pay fees to the Department consistent with the fee schedule authorized by ECL 72-0303.

Condition 3: **Recordkeeping and Reporting of Compliance Monitoring**
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-6.4 (c)

Item 3.1:
The following information must be included in any required compliance monitoring records and reports:

(i) The date, place, and time of sampling or measurements;

(ii) The date(s) analyses were performed;

(iii)The company or entity that performed the analyses;

(iv) The analytical techniques or methods used including quality assurance and quality control procedures if required;

(v) The results of such analyses including quality assurance data where required; and

(vi) The operating conditions as existing at the time of sampling or measurement.

Any deviation from permit requirements must be clearly identified in all records and reports. Reports must be certified by a responsible official, consistent with Section 201-6.2 of Part 201.

Condition 4: Records of Monitoring, Sampling, and Measurement
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-6.4 (c) (2)

Item 4.1:
Compliance monitoring and recordkeeping shall be conducted according to the terms and conditions contained in this permit and shall follow all quality assurance requirements found in applicable regulations. Records of all monitoring data and support information must be retained for a period of at least 5 years from the date of the monitoring, sampling, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

Condition 5: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-6.4 (c) (3) (ii)

Item 5.1:
The Compliance Certification activity will be performed for the Facility.

Item 5.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

To meet the requirements of this facility permit with respect to reporting, the permittee must:

Submit reports of any required monitoring at a minimum frequency of every 6 months, based on a calendar year reporting schedule. These reports shall be submitted to the Department within 30 days after the end of a reporting period. All instances of deviations from permit requirements must be clearly identified in such reports. All required

reports must be certified by the responsible official for this facility.

Notify the Department and report permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations shall be submitted to the permitting authority based on the following schedule:

(1) For emissions of a hazardous air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.

(2) For emissions of any regulated air pollutant, excluding those listed in paragraph (1) of this section, that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.

(3) For all other deviations from permit requirements, the report shall be contained in the 6 month monitoring report required above.

(4) This permit may contain a more stringent reporting requirement than required by paragraphs (1), (2) or (3) above. If more stringent reporting requirements have been placed in this permit or exist in applicable requirements that apply to this facility, the more stringent reporting requirement shall apply.

If above paragraphs (1) or (2) are met, the source must notify the permitting authority by telephone during normal business hours at the Regional Office of jurisdiction for this permit, attention Regional Air Pollution Control Engineer (RAPCE) according to the timetable listed in paragraphs (1) and (2) of this section. For deviations and incidences that must be reported outside of normal business hours, on weekends, or holidays, the DEC Spill Hotline phone number at 1-800-457-7362 shall be used. A written notice, certified by a responsible official consistent with 6 NYCRR Part 201-6.2(d)(12), must be submitted within 10 working days of an occurrence for deviations reported under (1) and (2). All deviations reported under paragraphs (1) and (2) of this section must also be identified in the 6 month monitoring report required above.

The provisions of 6 NYCRR 201-1.4 shall apply if the permittee seeks to have a violation excused unless otherwise limited by regulation. In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation

must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets. Notwithstanding any recordkeeping and reporting requirements in 6 NYCRR 201-1.4, reports of any deviations shall not be on a less frequent basis than the reporting periods described in paragraphs (1) and (4) above.

In the case of any condition contained in this permit with a reporting requirement of "Upon request by regulatory agency" the permittee shall include in the semiannual report, a statement for each such condition that the monitoring or recordkeeping was performed as required or requested and a listing of all instances of deviations from these requirements.

In the case of any emission testing performed during the previous six month reporting period, either due to a request by the Department, EPA, or a regulatory requirement, the permittee shall include in the semiannual report a summary of the testing results and shall indicate whether or not the Department or EPA has approved the results.

All semiannual reports may be submitted electronically or physically. Electronic reports shall be submitted using the Department's Air Compliance and Emissions Electronic-Reporting system (ACE). If the facility owner or operator elects to send physical copies instead, two copies shall be sent to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office) and one copy shall be sent to the Administrator (or his or her representative). Mailing addresses for the above referenced persons are contained in the monitoring condition for 6 NYCRR Part 201-6.4(e), contained elsewhere in this permit.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 6: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-6.4 (e)

Item 6.1:
The Compliance Certification activity will be performed for the Facility.

Item 6.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Requirements for compliance certifications with terms and conditions contained in this facility permit include the following:

i. Compliance certifications shall contain:
- the identification of each term or condition of the permit that is

the basis of the certification;
- the compliance status;
- whether compliance was continuous or intermittent;
- the method(s) used for determining the compliance status of the facility, currently and over the reporting period consistent with the monitoring and related record keeping and reporting requirements of this permit;
- such other facts as the Department may require to determine the compliance status of the facility as specified in any special permit terms or conditions; and
- such additional requirements as may be specified elsewhere in this permit related to compliance certification.

ii. The responsible official must include in the annual certification report all terms and conditions contained in this permit which are identified as being subject to certification, including emission limitations, standards, or work practices. That is, the provisions labeled herein as "Compliance Certification" are not the only provisions of this permit for which an annual certification is required.

iii. Compliance certifications shall be submitted annually. Certification reports are due 30 days after the anniversary date of four consecutive calendar quarters. The first report is due 30 days after the calendar quarter that occurs just prior to the permit anniversary date, unless another quarter has been acceptable by the Department.

iv. All annual compliance certifications may be submitted electronically or physically. Electronic reports shall be submitted using the Department's Air Compliance and Emissions Electronic-Reporting system (ACE). If the facility owner or operator elects to send physical copies instead, two copies shall be sent to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office) and one copy shall be sent to the Administrator (or his or her representative). The mailing addresses for the above referenced persons are:

Chief – Air Compliance Branch
USEPA Region 2 DECA/ACB
290 Broadway, 21st Floor
New York, NY 10007

The address for the RAPCE is as follows:

Regional Air Pollution Control Engineer
Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101-5407

The address for the BQA is as follows:

NYSDEC
Bureau of Quality Assurance
625 Broadway
Albany, NY 12233-3258

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2021.
Subsequent reports are due on the same day each year

Condition 7: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-6.4 (e)

Item 7.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 7.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
The hours of operation for the 2.5 MW Caterpillar / 3516C (Emission Source ENG09) ultra-low sulfur distillate fuel oil fired (Process CAT) Tier 4 compression ignition engine serving as dispatch for black start power and utility demand response programs for the plant, with "built-in" catalyst-based emissions controls (Emission Controls SCR09) for NOx and (Emission Control OXC09) for CO and VOC. The hours of operation are capped at 500 hours per year for the Caterpillar engine.

NYU has chosen the OEM's NOx emission factor of 0.59 g/bhp-hr (4.63 lb/hr) for this Caterpillar engine firing distillate oil and capped at 500 hrs/yr, which results in a maximum NOx emissions of 1.16 tons per year (4.63 lb/hr x 500 hours).

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Manufacturer Name/Model Number: Caterpillar / 3516C
Parameter Monitored: HOURS OF OPERATION
Upper Permit Limit: 500 hours per year
Reference Test Method: Keep Records of Operating Hours
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: ANNUAL TOTAL ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 8: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-6.4 (e)

Item 8.1:
The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 8.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:

To prove that the 6/30/2010 repowering project with the two new turbines (Emission Sources TURB1 & TURB2) and the two duct burners (DUCT1 & DUCT2) results in a significant net emission decrease (not increase), and hence the turbines are not subject or required to meet the required emission limits for LAER for NOx, CO or VOC, the facility proposed to net out the facility's NOx emission to 158.5 tons per year.

Netting analysis show significant facility emission reductions. The repowering project is having the following NOx annual emission reductions from 465 to 158.5 tons per year.

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.

The breakdown of the facility's netting out of NOx in tons per year is as follows:

Facility 158.5

Turbines and duct burners, oil & gas	104.23
Turbines only, oil & gas	56.93
Boilers, oil & gas	
40.4	
Jenbacher gas engine	10.67
Caterpillar oil engine	
1.16	
Caterpillar hours per year operation	500
Combined Jenbacher & Caterpillar	11.83
Exempt combustion sources	2.04

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 158.5 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 9: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 202-2.1

Item 9.1:
The Compliance Certification activity will be performed for the Facility.

Item 9.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year. Statements are to be mailed to: New York State Department of Environmental Conservation, Division of Air Resources, Bureau of Air Quality Planning, 625 Broadway, Albany NY 12233-3251

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due by April 15th for previous calendar year

Condition 10: Recordkeeping requirements
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 202-2.5

Item 10.1:

(a) The following records shall be maintained for at least five years:

(1) a copy of each emission statement submitted to the department; and

(2) records indicating how the information submitted in the emission statement was determined, including any calculations, data, measurements, and estimates used.

(b) These records shall be made available at the facility to the representatives of the department upon request during normal business hours.

Condition 11: Open Fires - Prohibitions
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 215.2

Item 11.1:
Except as allowed by Title 6 NYCRR Section 215.3, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

Item 11.2
Per Section 215.3, burning in an open fire, provided it is not contrary to other law or regulation, will be allowed as follows:
(a) On-site burning in any town with a total population less than 20,000 of downed limbs and branches (including branches with attached leaves or needles) less than six inches in diameter and eight feet in length between May 15th and the following March 15th. For the purposes of this subdivision, the total population of a town shall include the population of any village or portion thereof located within the town. However, this subdivision shall not be construed to allow burning within any village.
(b) Barbecue grills, maple sugar arches and similar outdoor cooking devices when actually used for cooking or processing food.
(c) Small fires used for cooking and camp fires provided that only charcoal or untreated wood is used as fuel and the fire is not left unattended until extinguished.
(d) On-site burning of agricultural wastes as part of a valid agricultural operation on contiguous agricultural lands larger than five acres actively devoted to agricultural or horticultural use, provided such waste is actually grown or generated on those lands and such waste is capable of being fully burned within a 24-hour period.
(e) The use of liquid petroleum fueled smudge pots to prevent frost damage to crops.
(f) Ceremonial or celebratory bonfires where not otherwise prohibited by law, provided that only untreated wood or other agricultural products are used as fuel and the fire is not left unattended until extinguished.
(g) Small fires that are used to dispose of a flag or religious item, and small fires or other smoke producing process where not otherwise prohibited by law that are used in connection with a religious ceremony.
(h) Burning on an emergency basis of explosive or other dangerous or contraband materials by police or other public safety organization.
(i) Prescribed burns performed according to Part 194 of this Title.
(j) Fire training, including firefighting, fire rescue, and fire/arson investigation training, performed under applicable rules and guidelines of the New York State Department of State's Office of Fire Prevention and Control. For fire training performed on acquired structures, the structures must be emptied and stripped of any material that is toxic, hazardous or likely to emit toxic smoke (such as asbestos, asphalt shingles and vinyl siding or other vinyl products) prior to burning and must be at least 300 feet from other occupied structures. No more than one structure

per lot or within a 300 foot radius (whichever is bigger) may be burned in a training exercise.
(k) Individual open fires as approved by the Director of the Division of Air Resources as may be required in response to an outbreak of a plant or animal disease upon request by the commissioner of the Department of Agriculture and Markets, or for the destruction of invasive plant and insect species.
(l) Individual open fires that are otherwise authorized under the environmental conservation law, or by rule or regulation of the Department.

MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS SUBJECT TO ANNUAL CERTIFICATIONS ONLY IF APPLICABLE

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements only if effectuated during the reporting period. [NOTE: The corresponding annual compliance certification for those conditions not effectuated during the reporting period shall be specified as "not applicable".]

Condition 12: Recycling and Salvage
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-1.7

Item 12.1:
Where practical, the owner or operator of an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of the ECL.

Condition 13: Prohibition of Reintroduction of Collected Contaminants to the air
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-1.8

Item 13.1:
No person shall unnecessarily remove, handle or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

Condition 14: Exempt Sources - Proof of Eligibility
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-3.2 (a)

Item 14.1:
The owner or operator of an emission source or activity that is listed as being exempt may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all records necessary for demonstrating compliance with this Subpart on-site for a period of five years, and make them available to representatives of the department upon request.

Condition 15: Trivial Sources - Proof of Eligibility

Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-3.3 (a)

Item 15.1:
The owner or operator of an emission source or activity that is listed as being trivial in this Section may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request.

Condition 16: Requirement to Provide Information
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (4)

Item 16.1:
The owner and/or operator shall furnish to the department, within a reasonable time, any information that the department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the department copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality, if the administrator initiated the request for information or otherwise has need of it.

Condition 17: Right to Inspect
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (8)

Item 17.1:
The department or an authorized representative shall be allowed upon presentation of credentials and other documents as may be required by law to:

(i) enter upon the permittee's premises where a facility subject to the permitting requirements of this Subpart is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

(ii) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(iii) inspect at reasonable times any emission sources, equipment (including monitoring and air pollution control equipment), practices, and operations regulated or required under the permit; and

(iv) sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

Condition 18: Off Permit Changes
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-6.4 (f) (6)

Item 18.1:
No permit revision will be required for operating changes that contravene an express permit term, provided that such changes would not violate applicable requirements as defined under this Part or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting, or compliance certification permit terms and conditions. Such changes may be made without requiring a permit revision, if the changes are not modifications under any provision of title I of the act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions) provided that the facility provides the administrator and the department with written notification as required below in advance of the proposed changes within a minimum of seven days. The facility owner or operator, and the department shall attach each such notice to their copy of the relevant permit.

(i) For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(ii) The permit shield described in section 6 NYCRR 201-6.4 shall not apply to any change made pursuant to this paragraph.

Condition 19: Required Emissions Tests
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 202-1.1

Item 19.1:
For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time.

Condition 20: Accidental release provisions.
Effective for entire length of Permit

Applicable Federal Requirement:40 CFR Part 68

Item 20.1:
If a chemical is listed in Tables 1,2,3 or 4 of 40 CFR §68.130 is present in a process in quantities greater than the threshold quantity listed in Tables 1,2,3 or 4, the following requirements will apply:

a) The owner or operator shall comply with the provisions of 40 CFR Part 68 and;

b) The owner or operator shall submit at the time of permit issuance (if not previously submitted) one of the following, if such quantities are present:

1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided

in 40 CFR §68.10(a) or,

2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan. Information should be submitted to:

Risk Management Plan Reporting Center
C/O CSC
8400 Corporate Dr
Carrollton, Md. 20785

Condition 21: Recycling and Emissions Reduction
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 82, Subpart F

Item 21.1:
The permittee shall comply with all applicable provisions of 40 CFR Part 82.

The following conditions are subject to annual compliance certification requirements for Title V permits only.

Condition 22: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 200.7

Item 22.1:
The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 22.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Maintenance of Equipment:

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.

This condition applies to all emission sources and controls in Emission Unit 1-00000 at the facility, including the three identical

mid size high temperature hot water boilers of 65 MM Btu/hr each (Emission Sources 0BLRA, 0BLRB & 0BLRC) used for hot water. 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).

This condition also applies to the two new stationary reciprocating internal combustion engines (Emission Sources ENG08 & ENG09) in Emission Unit 2-00000 at the facility which are being installed and on line during 2020 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 2.6 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).

To ensure that the units run at optimum conditions and stay in compliance with NOx RACT emission limits, periodic maintenance will be performed in accordance with manufacturer's specifications. These specific procedures are outlined in the manufacturer's specification manual for the unit. Other components of the periodic maintenance program for the unit include those actions necessitated by the results of monitoring the following data: diagnostic data obtained after a set number of operating hours, engine gas analysis, and fuel consumption versus power output of the unit.

This monitoring description will be revised after the facility submits new procedures from the OEMs to the Department.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 23: Emission Unit Definition
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 23.1:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 1-00000
Emission Unit Description:
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 the existing continuous opacity monitoring system (COMS) unit will voluntarily remain on the stack of Emission Point 00001 will continue to be used for the opacity compliance of Emission Point 00001 as per regulation 6 NYCRR 227-1.3 (a).

Building(s): 251

Item 23.2:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 2-00000
Emission Unit Description:
Emission Unit 2-00000, located in the Tisch Hall sub-basement of 40 West 4th Street, will contain the two new reciprocating internal combustion engines (Emission Sources ENG08 & ENG09) which are being

installed and on line during 2020, in the space previously occupied by the seven diesel-fired Caterpillar D399 engines that were permanently removed and had NOx limit of 13.9 tons per year. These two new engines will utilize the same existing stack (Emission Point 00002). The existing Continuous Opacity Monitoring System (COMS) at Emission point 00002 will remain in use by these two new engines.
One engine is defined as Emission Source ENG08, stationary spark ignited 2.6 MW GE-Jenbacher / JSM-616 natural gas fired (Process JEN) lean burn engine with approved emission control technology add-on selective catalytic reduction (SCR) for NOx (Emission Control SCR08) and catalytic oxidation (Emission Control OXC08) for CO and VOC.

The other engine is defined as Emission Source ENG09, Caterpillar / 3516C, a 2.5 MW (3627 HP) fuel oil-fired (Process CAT) Tier 4 compression ignition engine for black start and utility demand programs with "built-in" approved emission control technology catalyst-based emissions controls also using SCR for NOx, and oxidation catalysis for CO and VOC (Emission Controls SCR09 and OXC09; respectively).

NOx emissions for the combined ENG08 and ENG09 are netted out at 11.83 tons per year: 10.67 tpy of NOx for the GE-Jenbacher engine (Emission Source ENG08) firing natural gas (Process JEN) at 8760 hrs/yr (based on a NOx emission factor for the JEN of 0.3 g/bhp-hr), and 1.16 tpy (4.63 lb/hr x 500 hours) for the Caterpillar / D3516C engine (Emission Source ENG09) firing distillate oil and capped at 500 hrs/yr. The Net Emission Increase (NEI):

NEI = NOx emissions from GE-Jenbacher engine + NOx emissions from Caterpillar / D3516C engine =

NEI = NOx PTE for JEN + NOx PTE for CAT =
10.67 + 1.16 = 11.83 tpy or 23,660 lbs/yr of NOx

This facility is an existing major facility in a non-attainment area within the Ozone Transport Region according to 6 NYCRR 231-6.

Building(s): 40

Condition 24: Progress Reports Due Semiannually
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-6.4 (d) (4)

Item 24.1:
Progress reports consistent with an applicable schedule of compliance are to be submitted at least semiannually, or at a more frequent period if specified in the applicable requirement or by the department. Such progress reports shall contain the following:

(i) dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

(ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

Condition 25: Non Applicable requirements
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-6.4 (g)

Item 25.1:
This section contains a summary of those requirements that have been specifically identified as being not applicable to this facility and/or emission units, emission points, processes and/or emission sources within this facility. The summary also includes a justification for classifying any such requirements as non-applicable.

40 CFR 60.4330
Reason: The condition for 40 CFR 60 KKKK 4330 is an NSPS regulation for Stationary Combustion Turbines (Emission SourcesTURB 1 & TURB2) operating on #2 distillate fuel oil (Process 005) and it specifies the sulfur dioxide emission limit of 0.060 lb SO2/MMBtu heat input. This is equivalent to 500 ppm or 0.05 % sulfur by weight.

Since the New York State Regulation 6 NYCRR 225-1.2 (h) with a sulfur content limit of 15 ppm (0.0015 % by weight) in the #2 fuel oil supersedes the Federal Regulation 40 CFR 60.4330, NSPS Subpart KKKK - Stationary Combustion Turbine NSPS - SO2 emission limits, which is equivalent to 500 ppm or 0.05% by weight sulfur content limit.

Therefore; Regulation 40 CFR 60.4330, NSPS Subpart KKKK is not applicable to the #2 fuel oil (Process 005) combusting in the two combustion turbines (Emission Sources TURB1 & TURB2).

40 CFR 63.6585
Emission Unit: 200000 Emission Point: 00002 Process: JEN Source: ENG08

Reason: NESHAPs for Stationary RICE at area sources of HAPs for new or reconstructed Reciprocating Internal Combustion Engine (RICE) is met by meeting the requirements of 40 CFR Part 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

Therefore, 40 CFR 63.6585, Subpart ZZZZ is not applicable to the 2.6 MW GE-Jenbacher lean burn spark-ignited (Emission Source ENG08) natural gas-fired (Process JEN) lean burn reciprocating internal combustion engine (RICE).

40 CFR 63.6585
Emission Unit: 200000 Emission Point: 00002 Process: CAT Source: ENG09

Reason: NESHAPs for Stationary RICE at area sources of HAPs for new or reconstructed Reciprocating Internal Combustion Engine (RICE) is met by meeting the requirements of 40 CFR Part 60 Subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part.

Therefore, 40 CFR 63.6585, Subpart ZZZZ is not applicable to the 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 reciprocating internal combustion engine (RICE).

40 CFR 63.6590 (c)
Emission Unit: 200000 Emission Point: 00002 Process: CAT Source: ENG09

Reason: NESHAPs for Stationary RICE at area sources of HAPs for new or reconstructed Reciprocating Internal Combustion Engine (RICE) is met by meeting the requirements of 40 CFR Part 60 Subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part.

Therefore, 40 CFR 63.6590 (c), Subpart ZZZZ is not applicable to the 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 reciprocating internal combustion engine (RICE).

40 CFR 63.6590 (c)
Emission Unit: 200000 Emission Point: 00002 Process: JEN Source: ENG08

Reason: NESHAPs for Stationary RICE at area sources of HAPs for new or reconstructed Reciprocating Internal Combustion Engine (RICE) is met by meeting the requirements of 40 CFR Part 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

Therefore, 40 CFR 63.6590 (c), Subpart ZZZZ is not applicable to the 2.6 MW GE-Jenbacher lean burn spark-ignited (Emission Source ENG08) natural gas-fired (Process JEN) lean burn reciprocating internal

combustion engine (RICE).

Condition 26: Visible Emissions Limited
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 211.2

Item 26.1:
Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

Condition 27: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 225-1.2 (h)

Item 27.1:
The Compliance Certification activity will be performed for the Facility.

Item 27.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:

Owners and/or operators of a stationary combustion installations that fire distillate oil are limited to the firing of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2016. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME
(INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 28: Compliance Certification

Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 225-1.6

Item 28.1:
The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 28.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
§225-1.6 Reports, sampling, and analysis.

(a) The department will require fuel analyses, information on the quantity of fuel received, fired or sold, and results of stack sampling, stack monitoring, and other procedures to ensure compliance with the provisions of this Subpart.

(b) (1) Any person who sells oil and/or coal must retain, for at least five years, records containing the following information:

(i) fuel analyses and data on the quantities of all oil and coal received; and

(ii) the names of all purchasers, fuel analyses, and data on the quantities of all oil and coal sold.

(2) Such fuel analyses must contain, as a minimum:

(i) data on the sulfur content, ash content, specific gravity, and heating value of residual oil;

(ii) data on the sulfur content, specific gravity, and heating value of distillate oil; and

(iii) data on the sulfur content, ash content, and heating value of coal.

(c) Sampling, compositing, and analysis of fuel samples must be done in accordance with methods acceptable to the department.

(d) Facility owners or fuel distributors required to maintain and retain records pursuant to this Subpart must make such records available for inspection by the department.

(e) Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the department, and must be retained for at least five years. The owner of a Title V facility must furnish to the department such records and summaries, on a semiannual

calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the department.

(f) Facility owners subject to this Subpart must submit a written report of the fuel sulfur content exceeding the applicable sulfur-in-fuel limitation, measured emissions exceeding the applicable sulfur-in-fuel limitation, measured emissions exceeding the applicable equivalent emission rate, and the nature and cause of such exceedances if known, for each calendar quarter, within 30 days after the end of any quarterly period in which an exceedances takes place.

Monitoring Frequency: PER DELIVERY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 29: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.4 (b)

Item 29.1:
The Compliance Certification activity will be performed for the Facility.

Item 29.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The owner or operator of a stationary combustion installation which utilizes a continuous opacity monitoring system (COMS) shall include the following in their quarterly excess emission reports:

1) Magnitude, date, and time of each exceedence;

2) For each period of excess emissions, specific identification of the cause and corrective action taken;

3) Date, time, and duration of each period of COMS downtime, and the corrective action for each period of downtime;

4) Total time the COMS is required to record data during the reporting period;

5) The total number of exceedences and the duration of exceedences expressed as a percentage of the total time in which the COMS are required to record data; and

6) Such other requirements as the Department may deem necessary in order to enforce Article 19 of the Environmental Conservation Law (ECL).

Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 3 calendar month(s).

Condition 30: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-2.4 (f) (1)

Item 30.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 30.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

This condition applies to the 2.6 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 0.3 grams per brake horsepower-hour 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.

The NYSDEC implemented regulation 6 NYCRR 227-2.4(f) for controlling NOx emissions from such engines, which requires engine owners and operates to have a plan in place for a reduced rate of NOx emissions.

(f) Stationary internal combustion engines.

The owner or operator of a stationary internal combustion engine either having a maximum mechanical output rating equal to or greater

than 200 brake horsepower in a severe ozone nonattainment area or having a maximum mechanical output rating equal to or greater than 400 brake horsepower outside a severe ozone nonattainment area must comply with one of the emission limits in paragraph (1), (2), or (3) of this subdivision or a case-by-case RACT determination made pursuant to paragraph (4) of this subdivision, as applicable:

(1) For internal combustion engines fired solely with natural gas: 1.5 grams per brake horsepower-hour of NOx emission.

The Federal 40 CFR 60.4243 (b) (2) (ii) NOx emission limit is 0.3 gm/bhp-hr for a lean burn spark-ignited reciprocating internal combustion engine having a maximum mechanical output rating equal to or greater than 200 brake horsepower in a severe ozone nonattainment area firing natural gas. This NOx emission limit of 0.3 gm/bhp-hr is superceded by the New York state regulation 6 NYCRR 227-2.4 (f) (1) NOx limit of 1.5 gm/bhp-hr for a lean burn spark-ignited reciprocating internal combustion engine having a maximum mechanical output rating equal to or greater than 200 brake horsepower in a severe ozone nonattainment area firing natural gas.

Compliance with this NOx RACT emission limit regulatory standard for a lean burn internal combustion ignition source must be determined with a one hour average in accordance with section 227-2.6(a)(7) of this Subpart unless the owner or operator chooses to use a CEMS under the provisions of section 227- 2.6(b) of this Subpart of this Subpart apply, including the use of a 24-hour averaging period.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: GE-Jenbacher / JSM-616
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.3 grams per brake horsepower-hour
Reference Test Method: 40 CFR Part 60, Appendix A, Method 7, or 7E, or 19
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 31: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-2.4 (f) (3)

Item 31.1:

The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 31.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

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).

Stack testing will be required in order to demonstrate compliance with the 0.59 grams per brake horsepower-hour 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.

The NYSDEC implemented regulation 6 NYCRR 227-2.4(f) for controlling NOx emissions from such engines, which requires engine owners and operates to have a plan in place for a reduced rate of NOx emissions.

(f) Stationary internal combustion engines.

The owner or operator of a stationary internal combustion engine either having a maximum mechanical output rating equal to or greater than 200 brake horsepower in a severe ozone nonattainment area or having a maximum mechanical output rating equal to or greater than 400 brake horsepower outside a severe ozone nonattainment area must comply with one of the emission limits in paragraph (1), (2), or (3) of this subdivision or a case-by-case RACT determination made pursuant to paragraph (4) of this subdivision, as applicable:

(3) For internal combustion engine fired with distillate oil (solely

or in combination with other fuels): 2.3 grams per brake horsepower-hour.

The Federal 40 CFR 60.4211 (g) NOx emission limit is 0.59 gm/bhp-hr for Tier 4 lean burn compression ignition reciprocating internal combustion engines greater than 500 HP firing # 2 fuel oil. This NOx emission limit of 0.59 gm/bhp-hr is superceded by the the New York state regulation of 6 NYCRR 227-2.4 (f) (3) NOx limit of 2.3 gm/bhp-hr for lean burn internal combustion ignition engines greater than 500 HP firing # 2 fuel oil.

Compliance with this NOx RACT emission limit regulatory standard for a lean burn internal combustion ignition source must be determined with a one hour average in accordance with section 227-2.6(a)(7) of this Subpart unless the owner or operator chooses to use a CEMS under the provisions of section 227- 2.6(b) of this Subpart of this Subpart apply, including the use of a 24-hour averaging period.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: Caterpillar / 3516C
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.59 grams per brake horsepower-hour
Reference Test Method: 40 CFR Part 60, Appendix A, Method 7, or 7E, or 19
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 32: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-2.5 (a)

Item 32.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-00000	Emission Point: 00001
Process: 001	Emission Source: 0BLRA
Emission Unit: 1-00000	Emission Point: 00001
Process: 001	Emission Source: 0BLRB
Emission Unit: 1-00000	Emission Point: 00001

Process: 001 Emission Source: 0BLRC

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRA

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRB

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRC

Item 32.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The owner or operator of an affected facility must monitor the amount of each fuel fired during the calendar year and calculate the percentage of operations for each fuel fired. The owner or operator will maintain these records at the facility for a minimum of five years and shall provide copies to the Department upon request. These records must be included as part of the annual NOx RACT fuel switching compliance report.

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 33: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-2.5 (a)

Item 33.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-00000 Emission Point: 00001
Process: 001 Emission Source: 0BLRA

Emission Unit: 1-00000 Emission Point: 00001
Process: 001 Emission Source: 0BLRB

Emission Unit: 1-00000 Emission Point: 00001
Process: 001 Emission Source: 0BLRC

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRA

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRB

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRC

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 33.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

The owner or operator, of an affected facility, that chooses to comply with the requirements of NOx RACT via fuel switching, must perform a stack test on both oil (distillate and/or residual) and natural gas once every five years. The test results must be submitted to the Department for approval with 60 days of stack test completion. The results of the tests will be maintained at the facility for a minimum of five years and used to determine the annual NOx RACT compliance.

The following formula shall be used to calculate compliance with the calendar annual NOx RACT emission limit:

NGR * NGO + DOR * DOO + ROR * ROO <= 0.20 lbs/mmBtu

Where:

NGR = Tested natural gas emission rate in lbs/mmBtu

NGO = Annual percentage of natural gas operation

DOR = Tested distillate oil emission rate in lbs/mmBtu

DOO = Annual percentage of distillate oil operation

ROR = Tested residual oil emission rate in lbs/mmBtu

ROO = Annual percentage of residual oil operation

The owner or operator shall submit a report containing this calculation and the supporting annual percentage of each fuel operations records within 30 days of the end of each calendar year. All corresponding records used to calculate compliance with the applicable limit must be maintained at the facility for a minimum of five years and must be provided to the Department upon request.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.20 pounds per million Btus
Reference Test Method: 7, 7E, or 19 from 40 CFR appendix A
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: CALENDAR YEAR AVERAGE

Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 34: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227.2 (b) (1)

Item 34.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 34.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

The owner or operator of a stationary combustion installation shall not exceed 0.10 pounds per million Btu of particulate matter based on a two hour average. The owner or operator shall:

1) Submit to the Department an acceptable test protocol for determining compliance with the limit cited in this condition.

2) Perform a stack test, based upon the approved test protocol.

3) Submit an acceptable stack test report that outlines the results.

4) Maintain records of all testing done at this stationary combustion installation for a minimum period of 5 years.

Please note that compliance with the standard is based on a two hour average and is not equivalent to EPA Reference Test Method 5 (Method 5) which requires compliance be determined using the average of three one hour test runs. If the owner or operator chooses to utilize Method 5 they must meet the prescribed limit based on a one hour average. The Department has determined this to be an acceptable alternative to the two hour average requirement.

This condition applies to Emission Unit: 2-00000, EP: 00002, Process: CAT (# 2 diesel fuel oil), and the 2.5 MW fuel oil-fired (Process CAT) Tier 4 compression ignition engine (Emission Source ENG09) for black start and utility demand programs, with "built-in" catalyst-based emissions control (Emission Control OXC09) for reducing CO and VOC emission.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: Caterpillar / 3516C
Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.10 pounds per million Btus
Reference Test Method: SEE MONITORING DESCRIPTION
Monitoring Frequency: Once every five years
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 35: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227.2 (b) (1)

Item 35.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRA

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRB

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRC

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 35.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
The owner or operator of a stationary combustion installation shall not exceed 0.10 pounds per million Btu of particulate matter based on a two hour average. The owner or operator shall:

1) Submit to the Department an acceptable test protocol for determining compliance with the limit cited in this condition.

2) Perform a stack test, based upon the approved test protocol.

3) Submit an acceptable stack test report that outlines the results.

4) Maintain records of all testing done at this stationary combustion installation for a minimum period of 5 years.

Please note that compliance with the standard is based on a two hour average and is not equivalent to EPA Reference Test Method 5 (Method 5) which requires compliance be determined using the average of three one hour test runs. If the owner or operator chooses to utilize Method 5 they must meet the prescribed limit based on a one hour average. The Department has determined this to be an acceptable alternative to the two hour average requirement.

This condition applies to Emission Unit: 1-00000, EP: 00001, Process: 006 (# 2 diesel fuel oil), and the three identical mid size high temperature hot water boilers of 65 MM Btu/hr each (Emission Sources: 0BLRA, 0BLRB & 0BLRC) used for hot water.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.10 pounds per million Btus
Reference Test Method: SEE MONITORING DESCRIPTION
Monitoring Frequency: Once every five years
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 36: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227.2 (b) (1)

Item 36.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 36.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

The owner or operator of a stationary combustion installation shall not exceed 0.10 pounds per million Btu of particulate matter based on a two hour average. The owner or operator shall:

1) Submit to the Department an acceptable test protocol for determining compliance with the limit cited in this condition.

2) Perform a stack test, based upon the approved test protocol.

3) Submit an acceptable stack test report that outlines the results.

4) Maintain records of all testing done at this stationary combustion installation for a minimum period of 5 years.

Please note that compliance with the standard is based on a two hour average and is not equivalent to EPA Reference Test Method 5 (Method 5) which requires compliance be determined using the average of three one hour test runs. If the owner or operator chooses to utilize Method 5 they must meet the prescribed limit based on a one hour average. The Department has determined this to be an acceptable alternative to the two hour average requirement.

This condition applies to the two 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 & turbine # 2 (Emission Sources TURB1 & TURB2) in Emission Unit: 1-00000, EP: 00001, firing # 2 distillate fuel oil (Process 005) with their corresponding duct burners (Emission Controls DUCT1 & DUCT2; respectively).

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.10 pounds per million Btus
Reference Test Method: SEE MONITORING DESCRIPTION
Monitoring Frequency: Once every five years

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 37: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 231-6.2

Item 37.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: DUCT1

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: DUCT2

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB1

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 37.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
The two turbines (Emission Sources TURB1 and TURB2) have been operating since 6/30/2010). The total combined NOx emissions from the two turbines (Emission Sources TURB1 & TURB2) and their associated duct burners (Emission Controls DUCT1 & DUCT2; respectively) burning both natural gas (Process 004) and # 2 fuel oil (Process 005) are limited to an overall combined NOx emissions cap of 104.23 tpy. Each turbine has a maximim of 60.5 MM Btu/hr.

Potential to emit (PTE) for each of the two combustion turbines is based on the equivalent of combusting 9 months (6,570 hrs/yr) of natural gas, and 3 months of # 2 fuel oil (2,190 hrs/yr) or a ratio of

3:1 for natural gas to # 2 fuel oil. But, the facility does not have limitations based on hours of operation, the facility has limited emissions based on the calculated ton-per-year voluntary PTE.

Since both turbines combined have a NOx PTE based on operating on #2 fuel oil for 3 months and on natural gas for 9 months, then:

PTE (both turbines, #2 fuel oil only): 130.66 tpy
PTE (both turbines, natural gas only): 32.34 tpy

Thus, PTE NOx for both turbines combined = 0.25 (130.66) + 0.75 (32.34) = 32.67 + 24.26 = 56.93 tpy

Both HRSG duct burners (Emission Sources DUCT1 & DUCT2) combined will have a NOx PTE based on operating on natural gas for 12 months. Each duct burner has a maximum heat input of 70 MM Btu/hr. Since the HRSGs duct burners will never operate by themselves without the turbines, then:

PTE (both HRSG duct burners operating only on natural gas) : 47.30 tpy NOx

Thus, both turbines (Emission Sources TURB1 & TURB2) and their corresponding HRSG duct burners (Emission Controls DUCT1 & DUCT2) will have a NOx PTE = 56.93 + 47.30 = 104.23 tpy

The HRSG duct burners operate only when the turbines are operating; the duct burners do not operate independent of the turbines.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 104.23 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 38: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 231-6.2

Item 38.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB1

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 38.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:

The two turbines (Emission Sources TURB1 and TURB2) have been operating since 6/30/2010). The total combined NOx emissions from the two turbines (Emission Sources TURB1 & TURB2) burning both natural gas (Process 004) and # 2 fuel oil (Process 005) are limited to an overall combined NOx emissions cap of 56.93 tpy. Each turbine has a maximum of 60.5 MM Btu/hr. The facility's NOx emissions will not exceed 158.5 tpy.

Potential to emit (PTE) for each of the two combustion turbines is based on the equivalent of combusting 9 months (6,570 hrs/yr) of natural gas, and 3 months of # 2 fuel oil (2,190 hrs/yr) or a ratio of 3:1 for natural gas to # 2 fuel oil. But, the facility does not have limitations based on hours of operation, the facility has limited the emissions based on the calculated ton-per-year voluntary PTE.

Since both turbines combined have a NOx PTE based on operating on #2 fuel oil for 3 months and on natural gas for 9 months, then:

PTE (both turbines, #2 fuel oil only): 130.66 tpy
PTE (both turbines, natural gas only): 32.34 tpy

Thus, PTE NOx for both turbines combined = 0.25 (130.66) + 0.75 (32.34) = 32.67 + 24.26 = 56.93 tpy

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 56.93 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 39: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 231-6.2

Item 39.1:

The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-00000 Emission Point: 00001
Process: 001 Emission Source: 0BLRA

Emission Unit: 1-00000 Emission Point: 00001
Process: 001 Emission Source: 0BLRB

Emission Unit: 1-00000 Emission Point: 00001
Process: 001 Emission Source: 0BLRC

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRA

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRB

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRC

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 39.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
The three boilers @ 65 MM Btu/hr (Emission Sources 0BLRA, 0BLRB and 0BLRC) have an overall emissions cap for all parameters equivalent to the PTE emissions of two of the boilers, which for NOx is 40.4 tons/year. The three boilers may be used singularly or in any combination at different times. The cap applies to the overall combination of both fuels (natural gas & #2 fuel oil) and is not prorated for any single fuel.

Manufacturer Name/Model Number: INTERNATIONAL LFW-30
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 40.4 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 40: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 231-6.2

Item 40.1:

The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 40.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Emission Unit 2-0000 consists of two engines one is the 2.6 MW GE-Janbacher /JSM-616 natural gas fired (Process JEN) lean burn spark-ignited engine (Emission Source ENG08) with BACT approved add-on pollution controls using selective catalytic reduction (SCR) for NOx (Emission Control SCR08). This engine will require monthly monitoring and record keeping of NOx emissions based on the manufacturer's emission factors and fuel use (consumption).

The other engine is a Caterpillar/3516C, defined as Emission Source ENG09, a 2.5 MW ultra-low sulfur distillate fuel oil fired (Process CAT) Tier 4 compression ignition engine serving as dispatch for black start power and utility demand response programs for the plant with "built-in" catalyst-based emissions controls (Emission Control SCR09) for NOx. The hours of operation are capped at 500 per year for the Caterpillar engine (Emission Source ENG09).

The emissions from the two engines exhaust through a common stack identified as Emission Point 00002.

NOx emissions from the two (2) new reciprocating engines (Emission Sources ENG08 & ENG09) in Emission Unit 2-0000 will be capped at 11.83

tons per year: 10.67 tpy of NOx for the stationary spark ignited GE-Jenbacher engine (Emission Source ENG08) firing natural gas 8760 hours/year and based on a NOx emission factor of 0.3 g/bhp-hr, and 1.16 tons per year (4.63 lb/hr x 500 hours) for the stationary compression ignition Caterpillar D3516C engine (Emission Source ENG09) with a NOx emission factor of 0.59 g/bhp-hr (4.63 lb/hr) firing distillate oil and capped at 500 hrs/yr. The Net Emission Increase (NEI):

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 (23,660 lbs/yr) of NOx

The permanently removed seven old diesel-fired Caterpillar D399 engines resulted in 13.9 tons of NOx per year for Emission Unit 2-0000. The addition of the two (2) new reciprocating engines (Emission Sources ENG08 & ENG09) in Emission Unit 2-0000 will be capped at 11.83 tons per year. Therefore, there is a decrease of 2.07 tpy in NOx for the modified Emission Unit 2-0000.

This facility is an existing major facility in a non-attainment area within the Ozone Transport Region according to 6 NYCRR 231-6.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 11.83 tons per year
Reference Test Method: EPA RM 7
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL TOTAL ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 41: Applicability
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60, NSPS Subpart IIII

Item 41.1:
Facilities that have stationary compression ignition internal combustion engines must comply with applicable portions of 40 CFR 60 Subpart IIII.

Condition 42: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4211(a), NSPS Subpart IIII

Item 42.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000	Emission Point: 00002
Process: CAT	Emission Source: ENG09
Emission Unit: 2-00000	Emission Point: 00002
Process: CAT	Emission Source: OXC09
Emission Unit: 2-00000	Emission Point: 00002
Process: CAT	Emission Source: SCR09

Item 42.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

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 Controls SCR09 and OXC09).

The owner or operator of a stationary compression ignition (CI) internal combustion engine must comply with the emission standards specified in 40 CFR 60 Subpart IIII and must do all of the following:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer. Monthly emissions calculation based on manufacturer's emission factors and operational parameters will be maintained; and

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to the facility.

Operation and maintenance records showing completion of manufacturer's recommended maintenance activities shall be maintained onsite with all supporting documentation that verifies compliance with these requirements. A copy of the Operation & Maintenance manual for each engine shall be kept on-site and be readily available for review by NYSDEC and/or USEPA representatives upon request.

New York University has submitted the following Maintenance Interval

Schedule for the Caterpillar 3516 C standby engine:

CATERPILLAR 3516 C ENGINE STANDBY MAINTENANCE INTERVAL SCHEDULE:

When Required:
Air Compressor Filter – Inspect
Air Inlet Filter – Inspect/Clean/Test
Air Tank Moisture and Sediment – Drain
Battery or Battery Cable-Disconnect
Engine-Clean
Engine Air Cleaner Service Indicator-Inspect
Fuel System-Prime
Fuel System Primary Filter/Water Separator-Drain
Generator-Dry
Generator Bearing-Lubricate
Generator Set-Test
Generator Set Alignment-Check
Generator Winding-Test
Maintenance Recommendations

Daily:
Coolant Level-Check
Engine Oil Level-Check

Every Week:
Air Starting Motor Lubricator Oil Level-Check
Battery Charger-Check
Battery Electrolyte Level-Check
Control Panel-Inspect/Test
Electrical Connections-Check
Fuel Tank Water and Sediment-Drain
Generator-Inspect
Generator Bearing Temperature-Test/Record
Generator Lead-Check
Generator Load-Check
Jacket Water Heater-Check
Power Factor-Check
Space Heater-Test
Standby Generator Set Maintenance Recommendations
Stator Winding Temperature-Test
Voltage and Frequency-Check
Walk-Around Inspection
Initial 250 Service Hours:
Engine Valve Lash-Check
Fuel Injector-Inspect/Adjust

Every 250 Service Hours:
Engine Oil Sample-Obtain

Every 500 Service hours or 1 Year:

Fan Drive Bearing-Lubricate
Every 6 Months:
Coolant Sample (Level 1)-Obtain

Every 1000 Service Hours:
Rotating Rectifier-Check

Every 2000 Service Hours:
Air Dryer Desiccant-Replace
Generator Set Vibration-Test/Record

Every Year:
Air Starting Motor Lubricator
Bowl-Clean
Alternator-Inspect
Belts-Inspect/Adjust/Replace
Coolant Sample (Level 2)-Obtain
Cooling System Supplemental Coolant Additive-Test/Add
Crankshaft Vibration Damper-Inspect
Engine Air Cleaner (Dual) Element-Inspect/Clean/Replace
Engine Air Cleaner (Single) Element-Inspect/Clean/Replace
Engine Crankcase Breather-Clean
Engine Mounts-Inspect
Engine Oil and Filter-Change
Engine Protective Devices-Check
Engine Valve Lash-Check
Fuel Injector-Inspect/Adjust
Fuel System Primary Filter (Water Separator) Element-Replace
Fuel System Secondary Filter-Replace
Generator Bearing-Inspect
Generator Set Vibration-Test/Record
Generator Winding Insulation-Test
Hoses and Clamps-Inspect/Replace
Radiator-Clean
Starting Motor-Inspect
Stator Lead-Check
Varistor-Check
Water Pump-Inspect

Every 3
Years:
Battery-Recycle
Battery-Replace
Coolant-Change
Coolant Extender-Add
Coolant Temperature Regulator-Replace

Manufacturer Name/Model Number: Caterpillar / 3516C
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 43: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4211(g), NSPS Subpart IIII

Item 43.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 43.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

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 Controls SCR09 and OXC09).

The owner or operator of a stationary CI internal combustion engine greater than 500 HP must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. Owners and operators may only change those settings that are permitted by the manufacturer. 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.

In addition, the owner or operator of a stationary CI internal combustion engine greater than 500 HP must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine and control device according to the manufacturer's written instructions or procedures developed by the

owner or operator that are approved by the engine manufacturer and in a manner consistent with good air pollution control practice for minimizing emissions. Owners and operators may only change those settings that are permitted by the manufacturer.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

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

For establishing the PTE calculations, an emission factor of 0.59 g/bhp-hr (equivalent to 4.63 lb/hr) for NOx is used in the emission calculations for the Caterpillar, which is NYU's anticipated actual emission factor.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: Caterpillar / 3516C
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.59 grams per brake horsepower-hour
Reference Test Method: Paragraphs (a) through (f) of 40 CFR 60.4244
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 44: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4211(g), NSPS Subpart IIII

Item 44.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 44.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

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).

The owner or operator of a stationary CI internal combustion engine greater than 500 HP must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. Owners and operators may only change those settings that are permitted by the manufacturer. 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.

In addition, the owner or operator of a stationary CI internal combustion engine greater than 500 HP must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer and in a manner consistent with good air pollution control practice for minimizing emissions. Owners and operators may only change those settings that are permitted by the manufacturer.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

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

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: Caterpillar / 3516C
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 0.03 grams per brake horsepower-hour
Reference Test Method: Paragraphs (a) through (f) of 40 CFR 60.4244
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 45: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4211(g), NSPS Subpart IIII

Item 45.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 45.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
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).

The owner or operator of a stationary CI internal combustion engine greater than 500 HP must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. Owners and operators may only change those settings that are permitted by the manufacturer. 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.

In addition, the owner or operator of a stationary CI internal combustion engine greater than 500 HP must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine and control device according to the

manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer and in a manner consistent with good air pollution control practice for minimizing emissions. Owners and operators may only change those settings that are permitted by the manufacturer.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

The Particulates (PM) limit for this engine is 0.03 g/bhp-hr.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: Caterpillar / 3516C
Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.03 grams per brake horsepower-hour
Reference Test Method: Paragraphs (a) through (f) of 40 CFR 60.4244
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 46: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4211(g), NSPS Subpart IIII

Item 46.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 46.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
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).

The owner or operator of a stationary CI internal combustion engine greater than 500 HP must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. Owners and operators may only change those settings that are permitted by the manufacturer. 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.

In addition, the owner or operator of a stationary CI internal combustion engine greater than 500 HP must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer and in a manner consistent with good air pollution control practice for minimizing emissions. Owners and operators may only change those settings that are permitted by the manufacturer.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

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

The 0.01 g/bhp-hr emission factor is actually for "hydrocarbons", not strictly VOCs. At the time of testing, NYU will test for VOCs and for total hydrocarbons minus methane and ethane, and compare the results to interpret the discrepancy between hydrocarbon (HC) and VOC. To establish a PTE, the facility will use the manufacturer's emission factor of 0.01 g/bhp-hr for the Caterpillar / 3516C engine at a lower load (75%).

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: Caterpillar / 3516C
Parameter Monitored: VOC
Upper Permit Limit: 0.01 grams per brake horsepower-hour
Reference Test Method: Paragraphs (a) through (f) of 40 CFR 60.4244

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 47: Applicability
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60, NSPS Subpart JJJJ

Item 47.1:
Facilities that have stationary spark ignition internal combustion engines must comply with applicable portions of 40 CFR 60 subpart JJJJ.

Condition 48: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4243(b)(2)(ii), NSPS Subpart JJJJ

Item 48.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 48.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
This condition applies to the 2.6 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 (Emission Control SCR08) for NOx and catalytic oxidation (Emission Control OXC08) for CO and VOC.

The NSPS Particulates limit for this engine is 0.04 g/bhp-hr or 4.05 ppmvd. The manufacturer's emission factor is 0.156 g/bhp-hr. This will be confirmed by stack testing.

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.

In addition, the owner or operator of a stationary SI internal combustion engine greater than 500 HP must 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.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: GE-Jenbacher / JSM-616
Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.04 grams per brake horsepower-hour
Reference Test Method: Paragraphs (a) through (f) of 40 CFR 60.4244
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 49: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4243(b)(2)(ii), NSPS Subpart JJJJ

Item 49.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 49.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Maintenance and Planning:

This condition applies to the 2.6 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 (Emission Control SCR08) for NOx and catalytic oxidation (Emission Control OXC08) for CO and VOC.

The owner or operator of a stationary spark-ignited (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.

In addition, the owner or operator of a stationary spark-ignited (SI) internal combustion engine greater than 500 HP must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

The owner or operator of a stationary SI internal combustion engine must comply with the emission standards specified in 40 CFR 60 Subpart JJJJ and must do all of the following:

(1) Operate and maintain the stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer. Monthly emissions calculation based on manufacturer's emission factors and operational parameters will be maintained; and

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to the facility.

Operation and maintenance records showing completion of manufacturer's recommended maintenance activities shall be maintained on-site with all supporting documentation that verifies compliance with these requirements. A copy of the Operation & Maintenance manual for each engine shall be kept on-site and be readily available for review by NYSDEC and/or USEPA representatives upon request.

Manufacturer Name/Model Number: GE-Jenbacher / JSM-616
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 50: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4243(b)(2)(ii), NSPS Subpart JJJJ

Item 50.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 50.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

This condition applies to the 2.6 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 (Emission Control SCR08) for NOx and catalytic oxidation (Emission Control OXC08) for CO and VOC.

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

For establishing the PTE calculations, NYU has chosen an emission factor of 0.30 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.

Stack testing will be required in order to demonstrate compliance with

the 0.3 grams per brake horsepower-hour CO emission limit, which NYU has chosen, even though the CO limit per 40 CFR 60.4243 (b) (2) (ii), NSPS Part JJJJ is 2.0 g/bhp-hr. 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.

In addition, the owner or operator of a stationary SI internal combustion engine greater than 500 HP must 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.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: GE-Jenbacher / JSM-616
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 0.3 grams per brake horsepower-hour
Reference Test Method: Paragraphs (a) through (f) of 40 CFR 60.4244
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 51: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4243(b)(2)(ii), NSPS Subpart JJJJ

Item 51.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 51.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

This condition applies to the 2.6 MW (equivalent to 2649 KW or 4.55 MMBtu/hr) GE-Jenbacher / JSM-616 lean burn engine (Emission Source ENG08) natural gas fired spark-ignited (Process JEN) is equipped with selective catalytic reduction (Emission Control SCR08) for NOx and catalytic oxidation (Emission Control OXC08) for CO and OC.

The NSPS Oxides of Nitrogen (NOx) limit for this engine is 1.0 g/bhp-hr or 82 ppmvd. NYU has chosen a value of 0.3 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.

For establishing the PTE calculations, NYU has chosen an emission factor of 0.30 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 (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.

Stack testing will be required in order to demonstrate compliance with the 0.3 grams per brake horsepower-hour NOx emission limit, which NYU has chosen, even though the NOx limit per 40 CFR 60.4243 (b) (2) (ii), NSPS Part JJJJ is 1.0 g/bhp-hr. 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.

In addition, the owner or operator of a stationary SI internal combustion engine greater than 500 HP must 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.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: GE-Jenbacher / JSM-616
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.3 grams per brake horsepower-hour

Reference Test Method: Paragraphs (a) through (f) of 40 CFR 60.4244
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 52: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4243(b)(2)(ii), NSPS Subpart JJJJ

Item 52.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 2-00000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 52.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
This condition applies to the 2.6 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 (Emission Control SCR08) for NOx and catalytic oxidation (Emission Control OXC08) for CO and VOC.

The NSPS Volatile Organic Compounds (VOC) limit for this engine is 0.7 g/bhp-hr or 60 ppmvd. NYU has chosen a value of 0.3 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.

For establishing the PTE calculations, NYU has chosen an emission factor of 0.30 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 (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.

Stack testing will be required in order to demonstrate compliance with the 0.3 grams per brake horsepower-hour VOC emission limit, which NYU has chosen, even though the VOC limit per 40 CFR 60.4243 (b) (2) (ii), NSPS Part JJJJ is 0.7 g/bhp-hr. 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.

In addition, the owner or operator of a stationary SI internal combustion engine greater than 500 HP must 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.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: GE-Jenbacher / JSM-616
Parameter Monitored: VOC
Upper Permit Limit: 0.3 grams per brake horsepower-hour
Reference Test Method: Paragraphs (a) through (f) of 40 CFR 60.4244
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 53: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4305, NSPS Subpart KKKK

Item 53.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB1

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 53.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
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.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 54: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4340, NSPS Subpart KKKK

Item 54.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 54.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

NYU Central Plant must perform annual performance tests in accordance with 40 CFR 60.4400, NSPS Subpart KKKK to demonstrate continuous compliance for the two combustion turbines (Emission Sources TURB1 & TURB2). If the NOx emission result from the performance test is less than or equal to 75 percent of the NOx emission limit for the turbine, frequency of subsequent tests may be reduced to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit for the turbine, performance testing shall resume to annual.

The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Performance testing at the highest achievable load point is acceptable if at least 75 percent of peak load cannot be achieved in practice. Three separate test runs (minimum 20 minutes each) are required for each performance test.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

The two combustion turbines (Emission Soures TURB1 & TURB2) are identical and each combustion turbine is rated at 60.5 MM Btu/hr. The NOx emission limit is 74 ppm at 15 % O2 for > 50 MM Btu/hr new turbines firing fuels other than natural gas.

Only emissions performance test results are due 60-days after the completion of testing.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 74 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: 40 CFR 60 Appendix A, Method 7
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 55: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4340, NSPS Subpart KKKK

Item 55.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB1

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 55.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

NYU Central Plant must perform annual performance tests in accordance with 40 CFR 60.4400, NSPS Subpart KKKK to demonstrate continuous compliance for the two combustion turbines (Emission Sources TURB1 & TURB2). If the NOx emission result from the performance test is less than or equal to 75 percent of the NOx emission limit for the turbine, frequency of subsequent tests may be reduced to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit for the turbine, performance testing shall resume to annual.

The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Performance testing at the highest achievable load point is acceptable if at least 75 percent of peak load cannot be achieved in practice. Three separate test runs (minimum 20 minutes each) are required for each performance test.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

The two combustion turbines (Emission Soures TURB1 & TURB2) engines are identical and each combustion turbine is rated at 60.5 MM Btu/hr. The NOx emission limit is 25 ppm at 15 % O2 for > 50 MM Btu/hr new turbines firing natural gas.

Only emissions performance test results are due 60-days after the completion of testing.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 25 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: 40 CFR 60 Appendix A, Method 7
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 56: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4365(a), NSPS Subpart KKKK

Item 56.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB1

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 56.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:

The sulfur content in the natural gas combusting in the two combustion turbines (Emission Sources TURB1 & TURB2) is limited to 0.05 % sulfur by weight (20 grains per 100 scf). Therefore; the potential sulfur dioxide emissions are less than 0.06 lbs per MM Btu heat input(which is equivalent to 500 ppm).

The SO2 emission has to be less than 0.06 lbs/MM Btu to be exempt. If not, then the facility will monitor SO2 emissions which will be calculated hourly based on fuel usage and sulfur content.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NATURAL GAS
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 20 grains per 100 scf
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME
(INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 57: Applicability

Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63, Subpart JJJJJJ

Item 57.1:
This Condition applies to:

Emission Unit: 100000 Emission Point: 00001
Process: 006 Emission Source: 0BLRA

Emission Unit: 100000 Emission Point: 00001
Process: 006 Emission Source: 0BLRB

Emission Unit: 100000 Emission Point: 00001
Process: 006 Emission Source: 0BLRC

Item 57.2:
Facilities that are area sources of HAP with industrial, commercial, or institutional boilers must comply with applicable portions of 40 CFR 63 JJJJJJ.

Condition 58: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 80.510(b), Subpart I

Item 58.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 2-00000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 58.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:
(b) 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.

To demonstrate compliance, the facility shall obtain from the fuel supplier a certification that verifies that each batch of fuel delivered for use in the engines meets the requirements of §80.510 (b) and the sampling and testing requirements of 40CFR 80, Subpart A and 40CFR 80.585, respectively. All records shall be maintained onsite for 5 years and shall be readily available for review by NYSDEC and/or USEPA representatives upon request.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DIESEL OIL
Manufacturer Name/Model Number: Caterpillar / 3516C
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 15 parts per million by weight
Reference Test Method: Test Method Approved under Part 80.585
Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL CHANGE
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME
(INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

****** Emission Unit Level ******

Condition 59: Emission Point Definition By Emission Unit
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 59.1:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 1-00000

Emission Point: 00001
Height (ft.): 222 Diameter (in.): 108
NYTMN (km.): 4509.2 NYTME (km.): 584.8 Building: 251

Item 59.2:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 2-00000

Emission Point: 00002
Height (ft.): 167 Diameter (in.): 36
NYTMN (km.): 4509.2 NYTME (km.): 584.8 Building: 40

Condition 60: Process Definition By Emission Unit
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 60.1:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-00000
Process: 001 Source Classification Code: 1-02-006-02
Process Description:
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).

Emission Source/Control: 0BLRA - Combustion

Emission Source/Control: 0BLRB - Combustion

Emission Source/Control: 0BLRC - Combustion

Item 60.2:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-00000
Process: 004 Source Classification Code: 2-01-002-01
Process Description:
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.

Emission Source/Control: TURB1 - Combustion
Design Capacity: 5.5 megawatt

Emission Source/Control: TURB2 - Combustion
Design Capacity: 5.5 megawatt

Emission Source/Control: DUCT1 - Control
Control Type: LOW NOx BURNER

Emission Source/Control: DUCT2 - Control
Control Type: LOW NOx BURNER

Item 60.3:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-00000
Process: 005 Source Classification Code: 2-01-001-01
Process Description:

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).

Emission Source/Control: TURB1 - Combustion
Design Capacity: 5.5 megawatt

Emission Source/Control: TURB2 - Combustion
Design Capacity: 5.5 megawatt

Item 60.4:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-00000
Process: 006 Source Classification Code: 1-03-005-02
Process Description:

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).

Emission Source/Control: 0BLRA - Combustion
Design Capacity: 65 million Btu per hour

Emission Source/Control: 0BLRB - Combustion
Design Capacity: 65 million Btu per hour

Emission Source/Control: 0BLRC - Combustion
Design Capacity: 65 million Btu per hour

Item 60.5:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-00000
Process: CAT Source Classification Code: 2-03-001-01
Process Description:

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 internal combustion engine (Emission Source ENG09) for black start and utility demand programs, with "built-in" catalyst-based emissions control (Emission Controls OXC09 and SCR09) in Emission Unit 2-00000. The emissions exhaust through a stack identified as Emission Point 00002. The hours of operation will be capped at 500 per year.

Emission Source/Control: ENG09 - Combustion
Design Capacity: 2.5 megawatt

Emission Source/Control: OXC09 - Control
Control Type: OXIDATION CATALYST

Emission Source/Control: SCR09 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Item 60.6:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-00000
Process: JEN Source Classification Code: 2-03-002-01
Process Description:

Process JEN is the burning of utility-provided natural gas for firing the 2.6 MW GE-Jenbacher lean burn spark-ignited reciprocating internal combustion engine (Emission Source GEN08) with add-on selective catalytic reduction (Emission Control SCR08) for NOx and catalytic oxidation for CO and VOC (Emission Control OXC08) in Emission Unit 2-00000. The emissions exhaust through a stack identified as Emission Point 00002.

Emission Source/Control: ENG08 - Combustion
Design Capacity: 2.6 megawatt

Emission Source/Control: OXC08 - Control
Control Type: OXIDATION CATALYST

Emission Source/Control: SCR08 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Condition 61: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.3 (a)

Item 61.1:
The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 61.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
No person or operator of a combustion installation shall emit greater than 20 percent opacity except for one six minute period per hour, not to exceed 27 percent, based upon the six minute average utilizing a continuous opacity monitor (COM).

The existing continuous opacity monitoring system (COMS) unit will remain voluntarily on the stack of Emission Point 00001.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Monitoring Frequency: CONTINUOUS
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 3 calendar month(s).

Condition 62: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.4 (b)

Item 62.1:
The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001

Item 62.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
NYU will maintain a voluntary COMS on Emission Point 00001. The existing continuous opacity monitoring system (COMS) unit will remain on the stack of Emission Point 00001. The COMS is voluntarily being kept and will continue to be used for the opacity compliance of Emission Point 00001. Either by voluntary COMS or visible emissions observations, NYU will include the following in their quarterly excess emission reports:

(1) Magnitude, date, and time of each exceedence;

(2) For each period of excess emissions, specific identification of the cause and corrective action taken;

(3) Date, time, and duration of each period of COMS downtime, and the corrective action for each period of downtime;

(4) Total time the COMS is required to record data during the reporting period;

(5) The total number of exceedences and the duration of exceedences expressed as a percentage of the total time in which the COMS are required to record data; and

(6) Such other requirements as the Department may deem necessary in order to enforce Article 19 of the Environmental Conservation Law (ECL).

Monitoring Frequency: CONTINUOUS
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 3 calendar month(s).

Condition 63: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.3

Item 63.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-00000	Emission Point: 00001
Process: 006	Emission Source: 0BLRA
Emission Unit: 1-00000	Emission Point: 00001
Process: 006	Emission Source: 0BLRB
Emission Unit: 1-00000	Emission Point: 00001
Process: 006	Emission Source: 0BLRC

Item 63.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Operators of oil-fired boilers which are not exempt from permitting and where a continuous opacity monitor is not utilized for measuring smoke emissions, shall be required to perform the following:

1) Observe the stack for each boiler which is operating on oil once per day for visible emissions. This observation(s) must be conducted during daylight hours except during adverse weather conditions (fog,

rain, or snow).

2) The results of each observation must be recorded in a bound logbook or other format acceptable to the Department. The following data must be recorded for each stack:
- date and time of day
- observer's name
- identity of emission point
- weather condition
- was a plume observed?

Inclement weather conditions shall be recorded for those days when observations are prohibited. This logbook must be retained at the facility for five (5) years after the date of the last entry.

3) If the operator observes any visible emissions (other than steam - see below) two consecutive days firing oil (the firing of other fuels in between days of firing oil does not count as an interruption in the consecutive days of firing oil), then a Method 9 analysis (based upon a 6-minute mean) of the affected emission point(s) must be conducted within two (2) business days of such occurrence. The results of the Method 9 analysis must be recorded in the logbook. The operator must contact the Regional Air Pollution Control Engineer within one (1) business day of performing the Method 9 analysis if the opacity standard is contravened. Upon notification, any corrective actions or future compliance schedules shall be presented to the Department for acceptance.

** NOTE ** Steam plumes generally form after leaving the top of the stack (this is known as a detached plume). The distance between the stack and the beginning of the detached plume may vary, however, there is (normally) a distinctive distance between the plume and stack. Steam plumes are white in color and have a billowy consistency. Steam plumes dissipate within a short distance of the stack (the colder the air the longer the steam plume will last) and leave no dispersion trail downwind of the stack.

Monitoring Frequency: DAILY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 64: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-2.4 (e) (2)

Item 64.1:
The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001

Process: 004 Emission Source: DUCT1

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 64.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 (Emission Sources TURB1) firing natural gas (Process 004) with its corresponding duct burner (Emission Controls DUCT1) and is applicable beginning July 1, 2014. The owner or operator shall submit a testing protocol to the Department for approval, a minimum of 30 days prior to the stack testing.

(3) For all combustion turbines that operate after July 1, 2014, the owner or operator of a combustion turbine with a maximum heat input rate of 10 million Btu per hour or greater must submit a proposal for RACT to be implemented that includes descriptions of:

(i) the available NOx control technologies, the projected effectiveness of the technologies considered, and the costs for installation and operation for each of the technologies; and

(ii) the technology and the appropriate emission limit selected as RACT considering the costs for installation and operation of the technology.

The two 5.5 MW turbines (Emission Sources TURB1 & TURB2) operate with or without their corresponding two new duct burners (Emission Controls DUCT1 & DUCT2; respectively) in Emission Unit 1-00000.

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

For combustion turbines with a duct burner, compliance with the NOx emission limit of 25 parts per million by volume (dry, corrected to 15% O2) when firing gas (Process 004), will be based on the combination of the combustion turbine and the duct burner when both fire, and the combustion turbine alone when not duct-firing. The duct burner will never operate without its concomitant combustion turbine.

Compliance with this emission limit must be determined with a one hour average unless the owner or operator chooses to use a CEMS under the provisions of section 227-2.6(b) of this Subpart.

Since NYU Central Plant will not be using water or steam injection to control NOx emissions, the facility must perform annual performance tests. NYU has chosen NOx stack testing rather than CEMS on the duct burner (Emission Control DUCT1) associated with the combustion gas turbine in accordance with 40 CFR 60 KKKK 4400. The facility will perform annual NOx stack testing as described above of the turbine's emissions. Performance will be confirmed with stack testing and routine compliance reporting, instead of Continuous Emissions Monitoring System (CEMS) on the duct burner (DUCT1) associated with the combustion gas turbine in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 25 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: 40 CFR Appendix A - Method 20
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 65: EPA Region 2 address.
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4, NSPS Subpart A

Item 65.1:
This Condition applies to:

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: DUCT2

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: TURB1

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Emission Unit: 200000 Emission Point: 00002

Process: CAT Emission Source: ENG09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Item 65.1:
This Condition applies to Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: DUCT1

Item 65.2.3:
All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate to the following address:

Director, Division of Enforcement and Compliance Assistance
USEPA Region 2
290 Broadway, 21st Floor
New York, NY 10007-1886

Copies of all correspondence to the administrator pursuant to this part shall also be submitted to the NYSDEC Regional Office issuing this permit (see address at the beginning of this permit) and to the following address:

NYSDEC
Bureau of Quality Assurance
625 Broadway
Albany, NY 12233-3258

Condition 66: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4325, NSPS Subpart KKKK

Item 66.1:
The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: DUCT1

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 66.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
40 CFR 60 KKKK 4325 - NSPS Stationary Combustion Turbine NSPS - NOx emission limits when the turbine burns both natural gas and distillate oil (or some other combination of fuels):

This condition is an NSPS regulation for Stationary Combustion Turbines and it specifies the NOx emission limits specified in Table 1 to this subpart. If the turbine's total heat input is greater than or equal to 50 percent natural gas, then the owner or operator must meet the corresponding limit for 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.

Since NYU Central Plant will not be using water or steam injection to control NOx emissions from the combined combustion turbine 1 (Emission Source TURB1) with its associated duct burner (Emission Control DUCT1), the facility must perform annual performance tests in accordance with 40 CFR 60 KKKK 4400 to demonstrate continuous compliance for the two combustion turbines (Emission Sources TURB1 & TURB2). If the NOx emission result from the performance test is less than or equal to 75 percent of the NOx emission limit for the turbine, then the facility may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit for the turbine, then the facility must resume annual performance tests.

Oxides of Nitrogen emissions from the combined combustion turbine # 1 (Emission Source TURB1) with its associated duct burner (Emission Control DUCT1) in Emission Unit 1-00000 burning natural gas (Process 004) will comply with the 25 parts per million by volume (dry, corrected to 15% O2) limit for the combustion turbine alone. Compliance will be demonstrated with an annual stack testing rather than Continuous Emission Monitoring System (CEMS).

Performance will be confirmed with stack testing and routine compliance reporting, instead of Continuous Emissions Monitoring System (CEMS) on the duct burner outlet (Emission Control DUCT1) associated with the combustion gas turbine in accordance with 40 CFR 60 KKKK 4400.

The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Performance testing at the highest achievable load point is acceptable if at least 75 percent of peak load cannot be achieved in practice. Three separate test runs (minimum 20 minutes each) are required for each performance test.

NYU has chosen NOx stack testing rather than CEMS on the duct burner outlet (Emission Control DUCT1) associated with the combustion gas turbine in accordance with 40 CFR 60 KKKK 4400. The facility will perform annual NOx stack testing as described above of the turbine's emissions.

The two combustion turbines (Emission Soures TURB1 & TURB2) engines are identical and each combustion turbine is rated at 60.5 MM Btu/hr. The NOx emission limit is 25 ppm at 15 % O2 for > 50 MM Btu/hr new turbines firing natural gas.

For combustion turbines with a duct burner, compliance with the NOx emission limit of 25 ppm at 15 % O2 when firing gas, compliance will be based on the combination of the combustion turbine and its duct burner when both fire, and on the combustion turbine alone when not duct firing. The duct burner will never operate without its concomitant combustion turbine.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: Combined TURB1 & DUCT1
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 25 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: 40 CFR 60 Appendix A, Method 7
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 67: Compliance Certification

Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-2.4 (e) (2)

Item 67.1:
The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: DUCT2

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 67.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 2 (Emission Sources TURB2) firing natural gas (Process 004) with its corresponding duct burner (Emission Controls DUCT2) and is applicable beginning July 1, 2014. The owner or operator shall submit a testing protocol to the Department for approval, a minimum of 30 days prior to the stack testing.

(3) For all combustion turbines that operate after July 1, 2014, the owner or operator of a combustion turbine with a maximum heat input rate of 10 million Btu per hour or greater must submit a proposal for RACT to be implemented that includes descriptions of:

(i) the available NOx control technologies, the projected effectiveness of the technologies considered, and the costs for installation and operation for each of the technologies; and

(ii) the technology and the appropriate emission limit selected as RACT considering the costs for installation and operation of the technology.

The two 5.5 MW turbines (Emission Sources TURB1 & TURB2) operate with or without their corresponding two duct burners (Emission Controls DUCT1 & DUCT2; respectively) in Emission Unit 1-00000.

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

For combustion turbines with a duct burner, compliance with the NOx emission limit of 25 parts per million by volume (dry, corrected to 15% O2) when firing gas (Process 004), will be based on the combination of the combustion turbine and the duct burner when both fire, and the combustion turbine alone when not duct-firing. The duct

burner will never operate without its concomitant combustion turbine.

Compliance with this emission limit must be determined with a one hour average unless the owner or operator chooses to use a CEMS under the provisions of section 227-2.6(b) of this Subpart.

Since NYU Central Plant will not be using water or steam injection to control NOx emissions, the facility must perform annual performance tests. NYU has chosen NOx stack testing rather than CEMS on the duct burner (Emission Control DUCT2) associated with the combustion gas turbine in accordance with 40 CFR 60 KKKK 4400. The facility will perform annual NOx stack testing as described above of the turbine's emissions. Performance will be confirmed with stack testing and routine compliance reporting, instead of Continuous Emissions Monitoring System (CEMS) on the duct burner (DUCT1) associated with the combustion gas turbine in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 25 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: 40 CFR Appendix A - Method 20
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 68: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4325, NSPS Subpart KKKK

Item 68.1:
The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: DUCT2

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 68.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

40 CFR 60 KKKK 4325 - NSPS Stationary Combustion Turbine NSPS - NOx emission limits when the turbine burns both natural gas and distillate oil (or some other combination of fuels):

This condition is an NSPS regulation for Stationary Combustion Turbines and it specifies the NOx emission limits specified in Table 1 to this subpart. If the turbine's total heat input is greater than or equal to 50 percent natural gas, then the owner or operator must meet the corresponding limit for 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.

Since NYU Central Plant will not be using water or steam injection to control NOx emissions from the combined combustion turbine 2 (Emission Source TURB2) with its associated duct burner (Emission Control DUCT2), the facility must perform annual performance tests in accordance with 40 CFR 60 KKKK 4400 to demonstrate continuous compliance for the two combustion turbines (Emission Sources TURB1 & TURB2). If the NOx emission result from the performance test is less than or equal to 75 percent of the NOx emission limit for the turbine, then the facility may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit for the turbine, then the facility must resume annual performance tests.

Oxides of Nitrogen emissions from the combined combustion turbine # 2 (Emission Source TURB2) with its associated duct burner (Emission Control DUCT2) in Emission Unit 1-00000 burning natural gas (Process 004) will comply with the 25 parts per million by volume (dry, corrected to 15% O2) limit for the combustion turbine alone. Compliance will be demonstrated with an annual stack testing rather than Continuous Emission Monitoring System (CEMS).

Performance will be confirmed with stack testing and routine compliance reporting, instead of Continuous Emissions Monitoring System (CEMS) on the duct burner outlet (DUCT2) associated with the combustion gas turbine in accordance with 40 CFR 60 KKKK 4400.

The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Performance testing at the highest achievable load point is acceptable if at least 75 percent of peak load cannot be achieved in practice. Three separate test runs (minimum 20 minutes each) are required for each performance test.

NYU has chosen NOx stack testing rather than CEMS on the duct burner

outlet (Emission Control DUCT2) associated with the combustion gas turbine in accordance with 40 CFR 60 KKKK 4400. The facility will perform annual NOx stack testing as described above of the turbine's emissions.

The two combustion turbines (Emission Soures TURB1 & TURB2) engines are identical and each combustion turbine is rated at 60.5 MM Btu/hr. The NOx emission limit is 25 ppm at 15 % O2 for > 50 MM Btu/hr new turbines firing natural gas.

For combustion turbines with a duct burner, compliance with the NOx emission limit of 25 ppm at 15 % O2 when firing gas, compliance will be based on the combination of the combustion turbine and its duct burner when both fire, and on the combustion turbine alone when not duct firing. The duct burner will never operate without its concomitant combustion turbine.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: Combined TURB2 & DUCT2
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 25 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: 40 CFR 60 Appendix A, Method 7
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 69: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-2.4 (e) (2)

Item 69.1:
The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB1

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 69.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 (Emission Source TURB1) firing natural gas (Process 004) without its corresponding duct burner (Emission Control DUCT1) and is applicable beginning July 1, 2014. The owner or operator shall submit a testing protocol to the Department for approval, a minimum of 30 days prior to the stack testing.

(3) For all combustion turbines that operate after July 1, 2014, the owner or operator of a combustion turbine with a maximum heat input rate of 10 million Btu per hour or greater must submit a proposal for RACT to be implemented that includes descriptions of:

(i) the available NOx control technologies, the projected effectiveness of the technologies considered, and the costs for installation and operation for each of the technologies; and

(ii) the technology and the appropriate emission limit selected as RACT considering the costs for installation and operation of the technology.

The two 5.5 MW turbines (Emission Sources TURB1 & TURB2) operate with or without their corresponding two duct burners (Emission Controls DUCT1 & DUCT2; respectively) in Emission Unit 1-00000.

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) without its corresponding duct burner (Emission Control DUCT1) in Emission Unit 1-00000.

For combustion turbines with a duct burner, compliance with the NOx emission limit of 25 parts per million by volume (dry, corrected to 15% O2) when firing gas (Process 004), will be based on the combination of the combustion and the duct burner when both fire, and the combustion turbine alone when not duct-firing. The duct burner will never operate without its concomitant combustion turbine.

Compliance with this emission limit must be determined with a one hour average unless the owner or operator chooses to use a CEMS under the provisions of section 227-2.6(b) of this Subpart.

Since NYU Central Plant will not be using water or steam injection to control NOx emissions, the facility must perform annual performance tests. NYU has chosen NOx stack testing rather than CEMS on the duct burner (Emission Control DUCT1) associated with the combustion gas turbine in accordance with 40 CFR 60 KKKK 4400. The facility will perform annual NOx stack testing as described above of the turbine's emissions. Performance will be confirmed with stack testing and routine compliance reporting, instead of Continuous Emissions

Monitoring System (CEMS) on the duct burner (DUCT1) associated with the combustion gas turbine in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 25 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: 40 CFR 60 Appendix A - Method 20
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 70: Recordkeeping requirements.
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.7(b), NSPS Subpart A

Item 70.1:
This Condition applies to:

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: DUCT1

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: DUCT2

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Item 70.1:
This Condition applies to Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB1

Item 70.2.3:
Affected owners or operators shall maintain records of occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

Condition 71: Facility files for subject sources.
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.7(f), NSPS Subpart A

Item 71.1:
This Condition applies to:

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: DUCT1

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: DUCT2

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 200000 Emission Point: 00002

Process: CAT Emission Source: SCR09

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Item 71.1:
This Condition applies to Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB1

Item 71.2.3:
The following files shall be maintained at the facility for all affected sources: all measurements, including continuous monitoring systems, monitoring device, and performance testing measurements; all continuous monitoring system evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part, recorded in permanent form suitable for inspection. The file shall be maintained for at least two years following the date of such measurements, reports, and records.

Condition 72: Performance Test Methods - Waiver EU Level
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.8(b), NSPS Subpart A

Item 72.1:
This Condition applies to:

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: DUCT1

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: DUCT2

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Emission Unit: 200000 Emission Point: 00002

Process: CAT Emission Source: ENG09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Item 72.1:
This Condition applies to Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB1

Item 72.2.3:
Performance testing shall be conducted in accordance with the methods and procedures prescribed in 40 CFR Part 60 unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternate method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrators satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.

Condition 73: Prior notice.
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.8(d), NSPS Subpart A

Item 73.1:
This Condition applies to:

Emission Unit: 100000
Process: 004 Emission Source: DUCT1

Emission Unit: 100000
Process: 004 Emission Source: DUCT2

Emission Unit: 100000
Process: 004 Emission Source: TURB2

Emission Unit: 100000
Process: 005 Emission Source: TURB1

Emission Unit: 100000
Process: 005 Emission Source: TURB2

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Item 73.1:
This Condition applies to Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB1

Item 73.2.3:
The owner or operator shall provide the Administrator with prior notice of any performance test at least 30 days in advance of testing.

Condition 74: Performance testing facilities.
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.8(e), NSPS Subpart A

Item 74.1:
This Condition applies to:

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: DUCT1

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: DUCT2

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Item 74.1:
This Condition applies to Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB1

Item 74.2.3:
The following performance testing facilities shall be provided during all tests:

1) sampling ports adequate for tests methods applicable to such facility;

2) a safe sampling platform;

3) a safe access to the sampling platform; and

4) utilities for sampling and testing equipment.

Condition 75: Number of required tests.
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.8(f), NSPS Subpart A

Item 75.1:
This Condition applies to:

Emission Unit: 100000 Emission Point: 00001

Process: 004 Emission Source: DUCT1

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: DUCT2

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Item 75.1:
This Condition applies to Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB1

Item 75.2.3:
Each performance test shall consist of three separate runs, at the specified duration required in the applicable test method. Compliance with all applicable standards shall be determined by using the arithmetic means of the results of the three runs.

Condition 76: Availability of information.
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.9, NSPS Subpart A

Item 76.1:
This Condition applies to:

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: DUCT1

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: DUCT2

Emission Unit: 100000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: ENG08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Item 76.1:
This Condition applies to Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB1

Item 76.2.3:
The availability to the public of information provided to, or otherwise obtained by, the Administrator under this part shall be governed by part 2 of this chapter.

Condition 77: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4325, NSPS Subpart KKKK

Item 77.1:
The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001

Process: 004 Emission Source: TURB1

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 77.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

40 CFR 60 KKKK 4325 - NSPS Stationary Combustion Turbine NSPS - NOx emission limits when the turbine burns both natural gas and distillate oil (or some other combination of fuels):

This condition is an NSPS regulation for Stationary Combustion Turbines and it specifies the NOx emission limits specified in Table 1 to this subpart. If the turbine's total heat input is greater than or equal to 50 percent natural gas, then the owner or operator must meet the corresponding limit for 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.

Since NYU Central Plant will not be using water or steam injection to control NOx emissions from the combustion turbine 1 (Emission Source TURB2) alone, the facility must perform annual performance tests in accordance with 40 CFR 60 KKKK 4400 to demonstrate continuous compliance for the two combustion turbines (Emission Sources TURB1 & TURB2). If the NOx emission result from the performance test is less than or equal to 75 percent of the NOx emission limit for the turbine, then the facility may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit for the turbine, then the facility must resume annual performance tests.

Oxides of Nitrogen emissions from the 5.5 megawatt combustion turbine # 1 (Emission Source TURB1) in Emission Unit 1-00000 burning natural gas (Process 004) will comply with the 25 parts per million by volume (dry, corrected to 15% O2) limit for the combustion turbine alone. Compliance will be demonstrated with an annual stack testing rather than Continuous Emission Monitoring System (CEMS).

Performance will be confirmed with stack testing and routine compliance reporting, instead of Continuous Emissions Monitoring System (CEMS) on the combustion turbine outlet (Emission Source TURB 1) in accordance with 40 CFR 60 KKKK 4400.

The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Performance testing at the highest achievable load point is acceptable if at least 75 percent of peak load cannot be achieved in practice. Three separate test runs (minimum 20 minutes each) are required for each performance test.

NYU has chosen NOx stack testing rather than CEMS on the combustion gas turbine outlet (Emission Source TURB1) in accordance with 40 CFR 60 KKKK 4400. The facility will perform annual NOx stack testing as described above of the turbine's emissions.

The two combustion turbines (Emission Soures TURB1 & TURB2) engines are identical and each combustion turbine is rated at 60.5 MM Btu/hr. The NOx emission limit is 25 ppm at 15 % O2 for > 50 MM Btu/hr new turbines firing natural gas.

For combustion turbines with a duct burner, compliance with the NOx emission limit of 25 ppm at 15 % O2 when firing gas, compliance will be based on the combination of the combustion turbine and its duct burner when both fire, and on the combustion turbine alone when not duct firing. The duct burner will never operate without its concomitant combustion turbine.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: TURB1
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 25 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: 40 CFR 60 Appendix A, Method 7
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 78: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4340(a), NSPS Subpart KKKK

Item 78.1:
The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001

Process: 004 Emission Source: TURB1

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 78.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
If the facility is not using water or steam injection to control NOx emissions, the facility must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance.

If the NOx emission result from the performance test is less than or equal to 75% of the NOx emission limit for the turbine, the facility may reduce the frequency of subsequent performance tests to once every two years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceeds 75% of the NOx emission limit for the turbine, the facility must resume annual performance tests.

Reference Test Method: 40 CFR 60 Appendix A, Method 7
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 79: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-2.4 (e) (2)

Item 79.1:
The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 79.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
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 corresponding duct burner (Emission Control DUCT2) and is applicable beginning July 1, 2014. The owner or operator shall submit a testing protocol to the Department for approval, a minimum of 30 days prior to the stack testing.

(3) For all combustion turbines that operate after July 1, 2014, the owner or operator of a combustion turbine with a maximum heat input rate of 10 million Btu per hour or greater must submit a proposal for RACT to be implemented that includes descriptions of:

(i) the available NOx control technologies, the projected effectiveness of the technologies considered, and the costs for installation and operation for each of the technologies; and

(ii) the technology and the appropriate emission limit selected as RACT considering the costs for installation and operation of the technology.

The two 5.5 MW turbines (Emission Sources TURB1 & TURB2) operate with or without their corresponding two duct burners (Emission Controls DUCT1 & DUCT2; respectively) in Emission Unit 1-00000.

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) without its corresponding duct burner (Emission Control DUCT2) in Emission Unit 1-00000.

For combustion turbines with a duct burner, compliance with the NOx emission limit of 25 parts per million by volume (dry, corrected to 15% O2) when firing gas (Process 004), will be based on the combustion turbine alone when not duct-firing. The duct burner will never operate without its concomitant combustion turbine.

Compliance with this emission limit must be determined with a one hour average unless the owner or operator chooses to use a CEMS under the provisions of section 227-2.6(b) of this Subpart.

Since NYU Central Plant will not be using water or steam injection to control NOx emissions, the facility must perform annual performance tests. NYU has chosen NOx stack testing rather than CEMS on the duct burner (Emission Control DUCT1) associated with the combustion gas turbine in accordance with 40 CFR 60 KKKK 4400. The facility will perform annual NOx stack testing as described above of the turbine's emissions. Performance will be confirmed with stack testing and routine compliance reporting, instead of Continuous Emissions Monitoring System (CEMS) on the duct burner (DUCT1) associated with the combustion gas turbine in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 25 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: 40 CFR 60 Appendix A - Method 20
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 80: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4325, NSPS Subpart KKKK

Item 80.1:
The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 80.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
40 CFR 60 KKKK 4325 - NSPS Stationary Combustion Turbine NSPS - NOx emission limits when the turbine burns both natural gas and distillate oil (or some other combination of fuels):

This condition is an NSPS regulation for Stationary Combustion Turbines and it specifies the NOx emission limits specified in Table 1 to this subpart. If the turbine's total heat input is greater than or equal to 50 percent natural gas, then the owner or operator must meet the corresponding limit for 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.

Since NYU Central Plant will not be using water or steam injection to control NOx emissions from the combustion turbine 2 (Emission Source TURB2) alone, the facility must perform annual performance tests in accordance with 40 CFR 60 KKKK 4400 to demonstrate continuous compliance for the two combustion turbines (Emission Sources TURB1 & TURB2). If the NOx emission result from the performance test is less than or equal to 75 percent of the NOx emission limit for the turbine, then the facility may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following

the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit for the turbine, then the facility must resume annual performance tests.

Oxides of Nitrogen emissions from the 5.5 megawatt combustion turbine # 2 (Emission Source TURB2) in Emission Unit 1-00000 burning natural gas (Process 004) will comply with the 25 parts per million by volume (dry, corrected to 15% O2) limit for the combustion turbine alone. Compliance will be demonstrated with an annual stack testing rather than Continuous Emission Monitoring System (CEMS).

Performance will be confirmed with stack testing and routine compliance reporting, instead of Continuous Emissions Monitoring System (CEMS) on the combustion turbine outlet (Emission Source TURB 2) in accordance with 40 CFR 60 KKKK 4400.

The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Performance testing at the highest achievable load point is acceptable if at least 75 percent of peak load cannot be achieved in practice. Three separate test runs (minimum 20 minutes each) are required for each performance test.

NYU has chosen NOx stack testing rather than CEMS on the combustion gas turbine outlet (Emission Source TURB2) in accordance with 40 CFR 60 KKKK 4400. The facility will perform annual NOx stack testing as described above of the turbine's emissions.

The two combustion turbines (Emission Soures TURB1 & TURB2) engines are identical and each combustion turbine is rated at 60.5 MM Btu/hr. The NOx emission limit is 25 ppm at 15 % O2 for > 50 MM Btu/hr new turbines firing natural gas.

For combustion turbines with a duct burner, compliance with the NOx emission limit of 25 ppm at 15 % O2 when firing gas, compliance will be based on the combination of the combustion turbine and its duct burner when both fire, and on the combustion turbine alone when not duct firing. The duct burner will never operate without its concomitant combustion turbine.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: TURB2
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 25 parts per million by volume (dry, corrected to 15% O2)

Reference Test Method: 40 CFR 60 Appendix A, Method 7
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 81: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4340(a), NSPS Subpart KKKK

Item 81.1:
The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001
Process: 004 Emission Source: TURB2

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 81.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
If the facility is not using water or steam injection to control NOx emissions, the facility must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance.

If the NOx emission result from the performance test is less than or equal to 75% of the NOx emission limit for the turbine, the facility may reduce the frequency of subsequent performance tests to once every two years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceeds 75% of the NOx emission limit for the turbine, the facility must resume annual performance tests.

Reference Test Method: 40 CFR 60 Appendix A, Method 7
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 82: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.3

Item 82.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Item 82.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Operators of oil-fired combustion turbines which are not exempt from permitting and where a continuous opacity monitor is not utilized for measuring smoke emissions, shall be required to perform the following:

1) Observe the stack for each combustion turbine which is operating on oil once per day for visible emissions. This observation(s) must be conducted during daylight hours except during adverse weather conditions (fog, rain, or snow).

2) The results of each observation must be recorded in a bound logbook or other format acceptable to the Department. The following data must be recorded for each stack:

- date and time of day
- observer's name
- identity of emission point
- weather condition
- was a plume observed?

Inclement weather conditions shall be recorded for those days when observations are prohibited. This logbook must be retained at the facility for five (5) years after the date of the last entry.

3) If the operator observes any visible emissions (other than steam - see below) two consecutive days firing oil (the firing of other fuels in between days of firing oil does not count as an interruption in the consecutive days of firing oil), then a Method 9 analysis (based upon a 6-minute mean) of the affected emission point(s) must be conducted within two (2) business days of such occurrence. The results of the Method 9 analysis must be recorded in the logbook. The operator must contact the Regional Air Pollution Control Engineer within one (1) business day of performing the Method 9 analysis if the opacity standard is contravened. Upon notification, any corrective actions or future compliance schedules shall be presented to the Department for acceptance.

** NOTE ** Steam plumes generally form after leaving the top of the stack (this is known as a detached plume). The distance between the stack and the beginning of the detached plume may vary, however, there is (normally) a distinctive distance between the plume and stack.

Steam plumes are white in color and have a billowy consistency. Steam plumes dissipate within a short distance of the stack (the colder the air the longer the steam plume will last) and leave no dispersion trail downwind of the stack.

Monitoring Frequency: DAILY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 83: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-2.4 (e) (2)

Item 83.1:
The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 83.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 (Emission Source TURB1) firing # 2 distillate fuel oil (Process 005) without its corresponding duct burner (Emission Control DUCT1) and is applicable beginning July 1, 2014. The owner or operator shall submit a testing protocol to the Department for approval, a minimum of 30 days prior to the stack testing.

(3) For all combustion turbines that operate after July 1, 2014, the owner or operator of a combustion turbine with a maximum heat input rate of 10 million Btu per hour or greater must submit a proposal for RACT to be implemented that includes descriptions of:

(i) the available NOx control technologies, the projected effectiveness of the technologies considered, and the costs for installation and operation for each of the technologies; and

(ii) the technology and the appropriate emission limit selected as RACT considering the costs for installation and operation of the technology.

The two 5.5 MW turbines (Emission Sources TURB1 & TURB2) operate with or without their corresponding two new duct burners (Emission Controls

DUCT1 & DUCT2; respectively) in Emission Unit 1-00000.

The proposed NOx RACT limit is 65 parts per million by volume (dry, corrected to 15% O2) for the combined cycle combustion turbine (Emission Source TURB1) firing # 2 distillate fuel oil (Process 005) without its corresponding duct burner (Emission Control DUCT1) in Emission Unit 1-00000.

For combustion turbines with a duct burner, compliance with the NOx emission limit of 65 parts per million by volume (dry, corrected to 15% O2) when firing # 2 distillate fuel oil (Process 005), will be based on the combustion turbine alone when not duct-firing. The duct burner will never operate without its concomitant combustion turbine.

Compliance with this emission limit must be determined with a one hour average unless the owner or operator chooses to use a CEMS under the provisions of section 227-2.6(b) of this Subpart.

Since NYU Central Plant will not be using water or steam injection to control NOx emissions, the facility must perform annual performance tests. NYU has chosen NOx stack testing rather than CEMS on the duct burner (Emission Control DUCT1) associated with the combustion gas turbine in accordance with 40 CFR 60 KKKK 4400. The facility will perform annual NOx stack testing as described above of the turbine's emissions. Performance will be confirmed with stack testing and routine compliance reporting, instead of Continuous Emissions Monitoring System (CEMS) on the duct burner (DUCT1) associated with the combustion gas turbine in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 65 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: 40 CFR 60 Appendix A - Method 20
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 84: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4325, NSPS Subpart KKKK

Item 84.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 84.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
40 CFR 60 KKKK 4325 - NSPS Stationary Combustion Turbine NSPS - NOx emission limits when the turbine burns both natural gas and distillate oil (or some other combination of fuels):

This condition is an NSPS regulation for Stationary Combustion Turbines and it specifies the NOx emission limits specified in Table 1 to this subpart. If the turbine's total heat input is greater than or equal to 50 percent natural gas, then the owner or operator must meet the corresponding limit for 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.

Since NYU Central Plant will not be using water or steam injection to control NOx emissions from the combustion turbine 1 (Emission Source TURB1) alone, the facility must perform annual performance tests in accordance with 40 CFR 60 KKKK 4400 to demonstrate continuous compliance for the two combustion turbines (Emission Sources TURB1 & TURB2). If the NOx emission result from the performance test is less than or equal to 75 percent of the NOx emission limit for the turbine, then the facility may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit for the turbine, then the facility must resume annual performance tests.

Oxides of Nitrogen emissions from the 5.5 megawatt combustion turbine # 1 (Emission Source TURB1) in Emission Unit 1-00000 burning # 2 fuel oil (Process 005) will comply with the 74 parts per million by volume (dry, corrected to 15% O2) limit for the combustion turbine alone. Compliance will be demonstrated with an annual stack testing rather than Continuous Emission Monitoring System (CEMS).

Performance will be confirmed with stack testing and routine compliance reporting, instead of Continuous Emissions Monitoring

System (CEMS) on the combustion turbine outlet (Emission Source TURB1) in accordance with 40 CFR 60 KKKK 4400.

The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Performance testing at the highest achievable load point is acceptable if at least 75 percent of peak load cannot be achieved in practice. Three separate test runs (minimum 20 minutes each) are required for each performance test.

NYU has chosen NOx stack testing rather than CEMS on the combustion gas turbine outlet (Emission Source TURB1) in accordance with 40 CFR 60 KKKK 4400. The facility will perform annual NOx stack testing as described above of the turbine's emissions.

The two combustion turbines (Emission Soures TURB1 & TURB2) engines are identical and each combustion turbine is rated at 60.5 MM Btu/hr. The NOx emission limit is 74 ppm at 15 % O2 for > 50 MM Btu/hr new turbines firing # 2 fuel oil.

For the combustion turbines with a duct burner, compliance with the NOx emission limit is 74 ppm at 15 % O2 when firing # 2 fuel oil, compliance will be based on the combination of the combustion turbine and its duct burner when both fire, and on the combustion turbine alone when not duct firing. The duct burner will never operate without its concomitant combustion turbine.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: TURB1
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 74 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: 40 CFR 60 Appendix A, Method 7
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 85: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-2.4 (e) (2)

Item 85.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 85.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 2 (Emission Source TURB2) firing # 2 distillate fuel oil (Process 005) without its corresponding duct burner (Emission Control DUCT2) and is applicable beginning July 1, 2014. The owner or operator shall submit a testing protocol to the Department for approval, a minimum of 30 days prior to the stack testing.

(3) For all combustion turbines that operate after July 1, 2014, the owner or operator of a combustion turbine with a maximum heat input rate of 10 million Btu per hour or greater must submit a proposal for RACT to be implemented that includes descriptions of:

(i) the available NOx control technologies, the projected effectiveness of the technologies considered, and the costs for installation and operation for each of the technologies; and

(ii) the technology and the appropriate emission limit selected as RACT considering the costs for installation and operation of the technology.

The two 5.5 MW turbines (Emission Sources TURB1 & TURB2) operate with or without their corresponding two new duct burners (Emission Controls DUCT1 & DUCT2; respectively) in Emission Unit 1-00000.

The proposed NOx RACT limit is 65 parts per million by volume (dry, corrected to 15% O2) for the combined cycle combustion turbine (Emission Source TURB2) firing # 2 distillate fuel oil (Process 005) without its corresponding duct burner (Emission Control DUCT2) in Emission Unit 1-00000.

For combustion turbines with a duct burner, compliance with the NOx emission limit of 65 parts per million by volume (dry, corrected to 15% O2) when firing # 2 distillate fuel oil (Process 005), will be based on the combustion turbine alone when not duct-firing. The duct burner will never operate without its concomitant combustion turbine.

Compliance with this emission limit must be determined with a one hour

average unless the owner or operator chooses to use a CEMS under the provisions of section 227-2.6(b) of this Subpart.

Since NYU Central Plant will not be using water or steam injection to control NOx emissions, the facility must perform annual performance tests. NYU has chosen NOx stack testing rather than CEMS on the duct burner (Emission Control DUCT1) associated with the combustion gas turbine in accordance with 40 CFR 60 KKKK 4400. The facility will perform annual NOx stack testing as described above of the turbine's emissions. Performance will be confirmed with stack testing and routine compliance reporting, instead of Continuous Emissions Monitoring System (CEMS) on the duct burner (DUCT1) associated with the combustion gas turbine in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 65 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: 40 CFR 60 Appendix A - Method 20
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 86: Date of Construction Notification - if a COM is used.
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.7(a), NSPS Subpart A

Item 86.1:
This Condition applies to:

Emission Unit: 100000 Emission Point: 00001
Process: 005 Emission Source: TURB1

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: ENG09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: OXC09

Emission Unit: 200000 Emission Point: 00002
Process: CAT Emission Source: SCR09

Emission Unit: 200000 Emission Point: 00002

Process: JEN Emission Source: ENG08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: OXC08

Emission Unit: 200000 Emission Point: 00002
Process: JEN Emission Source: SCR08

Item 86.1:
This Condition applies to Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Item 86.2.3:
Any owner or operator subject to this part shall furnish the Administrator with the following information:

1) a notification of the date construction or reconstruction commenced, postmarked no later than 30 days after such date;

3) a notification of the actual date of initial start up, postmarked within 15 days after such date;

4) a notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless the change is specifically exempted under 40 CFR 60. The notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capability of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional information regarding the change;

5) a notification of the date upon which the demonstration of continuous monitoring system performance commences, postmarked not less than 30 days prior to such date;

6) a notification of the anticipated date for conducting the opacity observations, postmarked not less than 30 days prior to such date; and

7) a notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during the performance test, postmarked not less than 30 days prior to the performance test.

Condition 87: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.4325, NSPS Subpart KKKK

Item 87.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001
Process: 005 Emission Source: TURB2

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 87.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

40 CFR 60 KKKK 4325 - NSPS Stationary Combustion Turbine NSPS - NOx emission limits when the turbine burns both natural gas and distillate oil (or some other combination of fuels):

This condition is an NSPS regulation for Stationary Combustion Turbines and it specifies the NOx emission limits specified in Table 1 to this subpart. If the turbine's total heat input is greater than or equal to 50 percent natural gas, then the owner or operator must meet the corresponding limit for 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.

Since NYU Central Plant will not be using water or steam injection to control NOx emissions from the combustion turbine 2 (Emission Source TURB2) alone, the facility must perform annual performance tests in accordance with 40 CFR 60 KKKK 4400 to demonstrate continuous compliance for the two combustion turbines (Emission Sources TURB1 & TURB2). If the NOx emission result from the performance test is less than or equal to 75 percent of the NOx emission limit for the turbine, then the facility may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit for the turbine, then the facility must resume annual performance tests.

Oxides of Nitrogen emissions from the 5.5 megawatt combustion turbine # 2 (Emission Source TURB2) in Emission Unit 1-00000 burning # 2 fuel oil (Process 005) will comply with the 74 parts per million by volume (dry, corrected to 15% O2) limit for the combustion turbine alone. Compliance will be demonstrated with an annual stack testing rather than Continuous Emission Monitoring System (CEMS).

Performance will be confirmed with stack testing and routine compliance reporting, instead of Continuous Emissions Monitoring

System (CEMS) on the combustion turbine outlet (Emission Source TURB 2) in accordance with 40 CFR 60 KKKK 4400.

The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Performance testing at the highest achievable load point is acceptable if at least 75 percent of peak load cannot be achieved in practice. Three separate test runs (minimum 20 minutes each) are required for each performance test.

NYU has chosen NOx stack testing rather than CEMS on the combustion gas turbine outlet (Emission Source TURB2) in accordance with 40 CFR 60 KKKK 4400. The facility will perform annual NOx stack testing as described above of the turbine's emissions.

NYU has chosen NOx stack testing rather than CEMS on the combustion gas turbine outlet (Emission Source DUCT2) in accordance with 40 CFR 60 KKKK 4400. The facility will perform annual NOx stack testing as described above of the turbine's emissions.

The two combustion turbines (Emission Soures TURB1 & TURB2) engines are identical and each combustion turbine is rated at 60.5 MM Btu/hr. The NOx emission limit is 74 ppm at 15 % O2 for > 50 MM Btu/hr new turbines firing # 2 fuel oil.

For the combustion turbines with a duct burner, compliance with the NOx emission limit of 74 ppm at 15 % O2 when firing # 2 fuel oil, compliance will be based on the combination of the combustion turbine and its duct burner when both fire, and on the combustion turbine alone when not duct firing. The duct burner will never operate without its concomitant combustion turbine.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Only emissions performance test results are due 60-days after the completion of testing.

Manufacturer Name/Model Number: TURB2
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 74 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: 40 CFR 60 Appendix A, Method 7
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 88: Compliance Certification

Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.3 (a)

Item 88.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRA

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRB

Emission Unit: 1-00000 Emission Point: 00001
Process: 006 Emission Source: 0BLRC

Item 88.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
No owner or operator of a combustion installation shall emit greater than 20 percent opacity except for one six minute period per hour, not to exceed 27 percent, based upon the six minute average utilizing a continuous opacity monitor (COM).

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Monitoring Frequency: CONTINUOUS
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 3 calendar month(s).

Condition 89: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.4 (b)

Item 89.1:
The Compliance Certification activity will be performed for:

Emission Unit: 2-00000 Emission Point: 00002

Item 89.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The owner or operator of a stationary combustion installation which utilizes a continuous opacity monitoring system (COMS) shall include

the following in their quarterly excess emission reports:

1) Magnitude, date, and time of each exceedence;

2) For each period of excess emissions, specific identification of the cause and corrective action taken;

3) Date, time, and duration of each period of COMS downtime, and the corrective action for each period of downtime;

4) Total time the COMS is required to record data during the reporting period;

5) The total number of exceedences and the duration of exceedences expressed as a percentage of the total time in which the COMS are required to record data; and

6) Such other requirements as the Department may deem necessary in order to enforce Article 19 of the Environmental Conservation Law (ECL).

Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 3 calendar month(s).

Condition 90: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.3

Item 90.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 2-00000	Emission Point: 00002
Process: CAT	Emission Source: ENG09
Emission Unit: 2-00000	Emission Point: 00002
Process: CAT	Emission Source: OXC09
Emission Unit: 2-00000	Emission Point: 00002
Process: CAT	Emission Source: SCR09

Item 90.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Operators of oil-fired internal combustion engines which are not exempt from permitting and where a continuous opacity monitor is not utilized for measuring smoke emissions, shall be required to perform the following:

1) Observe the stack for each internal combustion engine which is operating on oil once per day for visible emissions. This observation(s) must be conducted during daylight hours except during adverse weather conditions (fog, rain, or snow).

2) The results of each observation must be recorded in a bound logbook or other format acceptable to the Department. The following data must be recorded for each stack:

- weather condition
- was a plume observed?

This logbook must be retained at the facility for five (5) years after the date of the last entry.

3) If the operator observes any visible emissions (other than steam - see below) two consecutive days firing oil (the firing of other fuels in between days of firing oil does not count as an interruption in the consecutive days of firing oil), then a Method 9 analysis (based upon a 6-minute mean) of the affected emission point(s) must be conducted within two (2) business days of such occurrence. The results of the Method 9 analysis must be recorded in the logbook. The operator must contact the Regional Air Pollution Control Engineer within one (1) business day of performing the Method 9 analysis if the opacity standard is contravened. Upon notification, any corrective actions or future compliance schedules shall be presented to the Department for acceptance.

** NOTE ** Steam plumes generally form after leaving the top of the stack (this is known as a detached plume). The distance between the stack and the beginning of the detached plume may vary, however, there is (normally) a distinctive distance between the plume and stack. Steam plumes are white in color and have a billowy consistency. Steam plumes dissipate within a short distance of the stack (the colder the air the longer the steam plume will last) and leave no dispersion trail downwind of the stack.

Monitoring Frequency: DAILY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

STATE ONLY ENFORCEABLE CONDITIONS
****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

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 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.

STATE ONLY APPLICABLE REQUIREMENTS

The following conditions are state applicable requirements and are not subject to compliance certification requirements unless otherwise noted or required under 6 NYCRR Part 201.

Condition 91: Contaminant List
Effective for entire length of Permit

Applicable State Requirement:ECL 19-0301

Item 91.1:
Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000630-08-0
Name: CARBON MONOXIDE

CAS No: 007446-09-5
Name: SULFUR DIOXIDE

CAS No: 0NY075-00-0
Name: PARTICULATES

CAS No: 0NY210-00-0
Name: OXIDES OF NITROGEN

CAS No: 0NY998-00-0
Name: VOC

Condition 92: Malfunctions and start-up/shutdown activities
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 201-1.4

Item 92.1:
(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

(b) The facility owner or operator shall compile and maintain records of all equipment malfunctions, maintenance, or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when requested to do so, or when so required by a condition of a permit issued

for the corresponding air contamination source. Such reports shall state whether any violations occurred and, if so, whether they were unavoidable, include the time, frequency and duration of the maintenance and/or start-up/shutdown activities, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous stack monitoring and quarterly reporting requirements need not submit additional reports for equipment maintenance or start-up/shutdown activities for the facility to the department.

(c) In the event that emissions of air contaminants in excess of any emission standard in this Subchapter occur due to a malfunction, the facility owner or operator shall compile and maintain records of the malfunction and notify the department as soon as possible during normal working hours, but not later than two working days after becoming aware that the malfunction occurred. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates.

(d) The department may also require the owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.

(e) A violation of any applicable emission standard resulting from start-up, shutdown, or malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

Condition 93: CLCPA Applicability
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 201-6.5 (a)

Item 93.1:
Pursuant to The New York State Climate Leadership and Community Protection Act (CLCPA) and Article 75 of the Environmental Conservation Law, emission sources shall comply with regulations to be promulgated by the Department to ensure that by 2030 statewide greenhouse gas emissions are reduced by 40% of 1990 levels, and by 2050 statewide greenhouse gas emissions are reduced by 85% of 1990 levels.

Condition 94: Air pollution prohibited
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 211.1

Item 94.1:
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. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

****** Emission Unit Level ******

Condition 95: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 227-1.4 (a)

Item 95.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-00000 Emission Point: 00001

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 95.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:
Any person who owns stationary combustion installation (excluding gas turbines), with a total maximum heat input capacity exceeding 250 million Btu per hour shall install, operate in accordance with manufacturer's instructions, and properly maintain, accurate instruments satisfying the criteria in Appendix B of Title 40, Part 60 of the Code of Federal Regulations, or approved by the commissioner on an individual case basis, for continuously monitoring and recording opacity, and when sulfur dioxide continuous monitoring is required by Part 225 of this Title, for continuously monitoring and recording either the percent oxygen or carbon dioxide in the flue gases from such installations at all times that the combustion installation is in service. When gas is the only fuel burned, monitoring and recording of opacity is not required.

The total heat input from the three boilers in Emission Unit 1-00000 & Emission Point 00001 is as follows:

Boiler 0BLRA 65 MM Btu/hr

Boiler 0BLRB 65 MM Btu/hr

Boiler 0BLRC 65 MM Btu/hr

Total heat capacity from the above stationary combustion installation is 195 MM Btu/hr, which does not exceed the 250 MM Btu/hr applicability. Since the total heat input for the combustion sources (excluding gas turbines) is < 250 MM Btu/hr threshold, the existing

COMS will be utilized as voluntary COMS.

The existing continuous opacity monitoring system (COMS) unit will remain on the stack of Emission Point 00001. The COMS is voluntarily being kept and will continue to be used for the opacity compliance of Emission Point 00001.

All records used to determine compliance with the applicable limit(s) must be kept at the facility (or other approved location) for a minimum of five years.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: 40 CFR 60, Appendix B
Monitoring Frequency: CONTINUOUS
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 3 calendar month(s).

Division of Air Resources

Permit Review Report

Permit ID: 2-6205-00246/00005
Renewal Number: 3
08/20/2020

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: Caitlyn P Nichols
Address: 1 HUNTERS POINT PLAZA
47-40 21ST ST
LONG ISLAND CITY, NY 11101
Phone:

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: Brian Burke
Address: New York University
10 Astor Pl 7th Fl
New York, NY 10003
Phone:2129981416

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
Application for renewal of Air Title V Facility.

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:
New York University's Central Plant is an on campus, subterranean, central cogeneration power plant at a major urban university in New York City. NYU is an existing Title V major facility in a non-attainment area, and attainment area of the state within the ozone transport region, pending the particular contaminant in question. The plant consists of:

Emission Unit 1-0000: 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-fired, natural gas and ultra-low sulfur distillate #2 fuel oil boilers.

Emission Unit 2-0000: Currently, two engines are being constructed and installed (in the space vacated by the removal of the seven old diesel-fired, Caterpillar D399 compression ignition engines combustion Emission Sources ENG01 through ENG07) and anticipated to go on-line during the first year of the renewed 5-year permit term:

1. The first engine identified as Emission Source ENG08 is a 2.6 MW (4.55 MM Btu/hr or 2649 KW) four stroke lean burn spark ignited natural gas-fired GE-Jenbacher JSM-616 engine generator (PTE 10.67 tons of NOx per year). Approved control technology pollution controls include add-on selective catalytic reduction with urea feed for NOx reduction, and an oxidation catalyst for CO and VOC reduction. The engine will meet the NYSDEC presumptive standard for natural gas-fired engines, the federal New Source Performance Standards (NSPS) for stationary spark ignition internal combustion engines (40 CFR 60 Subpart JJJJ) for NOx, CO and VOC. The PTE-establishing arbtrary 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 NSPS Subpart JJJJ compliance of 1.0 g/bhp-hr, which meets the NYSDEC presumptive standard for natural gas-fired engines of 1.5 g/bhp-hr. Applicability to NESHAPs Subpart ZZZZ (40 CFR 63.6590) is met by meeting the requirenents of Subpart JJJJ.

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

2. The second engine identified as Emission Source ENG08 is a 2.5 MW diesel-fired certified Caterpillar 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. Capping at 500 hours/year calculates to 1.16 tons of NOx/year (4.63 lb/hr x 500 hours/year). The 4.63 lb/hr NOx emission factor is equivalent to 0.59 g/bhp-hr. This engine utilizes proprietary built-in emissions controls and its exhaust will not pass through the Jenbacher SCR system: features diesel oxidation catalyst combined with a selective catalytic reduction module and an air-assisted urea injection system. The catalyst-based control systems 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. Applicability to NESHAPs Subpart ZZZZ is met by meeting the requirenents of Subpart IIII.

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 Caterpillar engine NSPS Subpart IIII general standards for engines of KW >560 / HP > 750 will be met as listed below:

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

Based on an arbitrary NOx emission factor for the GE-Jenbacher engine of 0.3 g/bhp-hr for NOx (which will be confirmed by the emission control technology plan and the add-on pollution controls), 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 (23,660 lbs/yr).

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

Both engines require an initial performance test within one year after start-up to demonstrate compliance with the applicable emissions standard, and subsequent testing every 8760 hours or every three years, whichever comes first, to demonstrate on-going compliance according to 40 CFR 60.4211, Subpart IIII for the CI - Compression Ignition Caterpillar engine and according to 40 CFR 63.4243, Subpart JJJJ for the SI -Spark Ignited Jenbacher engine.

The permit includes all caps/netting out of NOx in tons per year, the capping certification is annual for the following:

Facility	158.5
Turbines and duct burners, oil & gas	104.23
Turbines only, oil & gas	40.4
Jenbacher gas engine	10.67
Caterpillar oil engine	1.16 and 500 hours per year operation
Combined Jenbacher and Caterpillar engine	11.83

The facility conducts stack testing on the following emission sources:

Turbines and duct burners - annually.
Boilers - once every 5 years.
Jenbacher engine - initial and subsequent every 8760 hours or 3 years, whichever comes first.
Caterpillar engine - initial and subsequent every 8760 hours or 3 years, whichever comes first.

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 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 the existing continuous opacity monitoring system (COMS) unit will voluntarily remain on the stack of Emission Point 00001 will continue to be used for the opacity compliance of Emission Point 00001as per 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).

Emission unit 200000 - Emission Unit 2-00000, located in the Tisch Hall sub-basement of 40 West 4th Street, will contain the two new reciprocating internal combustion engines (Emission Sources ENG08 & ENG09) which will be installed and on line during 2020, in the space previously occupied by the seven diesel-fired Caterpillar D399 engines that were permanently removed and had NOx limit of 13.9 tons per year. These two new engines will utilize the same existing stack (Emission Point 00002). The existing Continuous Opacity Monitoring System (COMS) at Emission point 00002 will remain in use by these two new engines.

One engine is defined as Emission Source ENG08, stationary spark ignited 2.6 MW GE-Jenbacher / JSM-616 natural gas fired (Process JEN) lean burn engine with approved emission control technology add-on selective catalytic reduction (SCR) for NOx (Emission Control SCR08) and catalytic oxidation (Emission Control OXC08) for CO and VOC.

The other engine is defined as Emission Source ENG09, Caterpillar / 3516C, a 2.5 MW (3627 HP) fuel oil-fired (Process CAT) Tier 4 compression ignition engine for black start and utility demand programs with "built-in" approved emission control technology catalyst-based emissions controls also using SCR for NOx, and oxidation catalysis for CO and VOC (Emission Controls SCR09 and OXC09;respectively).

NOx emissions for the combined ENG08 and ENG09 are netted out at 11.83 tons per year: 10.67 tpy of NOx for the GE-Jenbacher engine (Emission Source ENG08) firing natural gas (Process JEN) at 8760 hrs/yr (based on an arbitrary NOx emission factor for the JEN of 0.3 g/bhp-hr), and 1.16 tpy (4.63 lb/hr x 500 hours) for the Caterpillar / D3516C engine (Emission Source ENG09) firing distillate oil and capped at 500 hrs/yr. The Net Emission Increase (NEI):

NEI = NOx emissions from GE-Jenbacher engine + NOx emissions from Caterpillar / D3516C engine =

NEI = NOx PTE for JEN + NOx PTE for CAT =
10.67 + 1.16 = 11.83 tpy or 23,660 lbs/yr of NOx

This facility is an existing major facility in a non-attainment area within the Ozone Transport Region according to 6 NYCRR 231-6.

Emission unit 200000 is associated with the following emission points (EP):
00002

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 internal combustion engine (Emission Source ENG09) for black start and utility demand programs, with "built-in" catalyst-based emissions control (Emission Controls OXC09 and SCR09) in Emission Unit 2-00000. 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 internal combustion engine (Emission Source GEN08) with add-on selective catalytic reduction (Emission Control SCR08) for NOx and catalytic oxidation for CO and VOC (Emission Control OXC08) in Emission Unit 2-00000. The emissions exhaust through a stack identified as Emission Point 00002.

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 are greater than the major source thresholds (25 tons/year for oxides of nitrogen and 100 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)	YES
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, 220-1.6, 220-1.7, 220-2.3, 220-2.4, 226, 227-2, 228, 229, 230, 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
2-01-002-01	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		148694000	
000630-08-0	CARBON MONOXIDE	258000		102100	
0NY210-00-0	OXIDES OF NITROGEN	317000		70344	
0NY075-00-0	PARTICULATES	25440		25440	
0NY075-02-5	PM 2.5	16740		7646	
0NY075-00-5	PM-10	16740		7646	
007446-09-5	SULFUR DIOXIDE	66580		625	
0NY100-00-0	TOTAL HAP	50000		4999	
0NY998-00-0	VOC	18600		3375	

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	91	Powers and Duties of the Department with respect to air pollution control
1-00000/00001/004/DUCT1	40CFR 60-A.4	65	General provisions - Address
1-00000/00001/005/TURB2	40CFR 60-A.7(a)	86	Notification and Recordkeeping
1-00000/00001/004/TURB1	40CFR 60-A.7(b)	70	Notification and Recordkeeping
1-00000/00001/004/TURB1	40CFR 60-A.7(f)	71	Notification and Recordkeeping
1-00000/00001/004/TURB1	40CFR 60-A.8(b)	72	Performance Tests
1-00000/00001/004/TURB1	40CFR 60-A.8(d)	73	Performance Tests
1-00000/00001/004/TURB1	40CFR 60-A.8(e)	74	Performance Tests
1-00000/00001/004/TURB1	40CFR 60-A.8(f)	75	Performance Tests
1-00000/00001/004/TURB1	40CFR 60-A.9	76	General provisions - Availability of information
FACILITY	40CFR 60-IIII	41	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
FACILITY	40CFR 60-IIII.4211(a)	42	Stationary Compression Ignition Engines - Compliance Requirements
FACILITY	40CFR 60-IIII.4211(g)	43, 44, 45, 46	Changes to emissions related settings
FACILITY	40CFR 60-JJJJ	47	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

FACILITY	40CFR 60-JJJJ.4243(b)(2	48, 49, 50, 51, 52	SI ICE - Maintenance Plan and testing
FACILITY	40CFR 60-KKKK.4305	53	Stationary Combustion Turbine NSPS - applicability
1-00000/00001/004/DUCT1	40CFR 60-KKKK.4325	66	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/004/DUCT2	40CFR 60-KKKK.4325	68	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/004/TURB1	40CFR 60-KKKK.4325	77	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/004/TURB2	40CFR 60-KKKK.4325	80	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/005/TURB1	40CFR 60-KKKK.4325	84	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/005/TURB2	40CFR 60-KKKK.4325	87	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
FACILITY	40CFR 60-KKKK.4340	54, 55	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)	78	Stationary Combustion Turbine NSPS - Continuous compliance with NOx limit
1-00000/00001/004/TURB2	40CFR 60-KKKK.4340(a)	81	Stationary Combustion Turbine NSPS - Continuous compliance with NOx limit
FACILITY	40CFR 60-KKKK.4365(a)	56	Stationary Combustion Turbine NSPS - Exemption from monitoring total sulfur content of fuel
FACILITY	40CFR 63-JJJJJJ	57	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
FACILITY	40CFR 68	20	Chemical accident prevention provisions
FACILITY	40CFR 80-I.510(b)	58	Motor vehicle diesel fuel: non road, locomotive and marine diesel fuel

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	22	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	92	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	23, 59, 60	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	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4(c)	3	Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.4(c)(2)	4	Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201-6.4(c)(3)(ii	5	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4(d)(4)	24	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4(e)	6, 7, 8	Compliance Certification
FACILITY	6NYCRR 201-6.4(f)(6)	18	Off Permit Changes
FACILITY	6NYCRR 201-6.4(g)	25	Permit Shield
FACILITY	6NYCRR 201-6.5(a)	93	State Enforceable Requirements
FACILITY	6NYCRR 202-1.1	19	Required emissions tests.
FACILITY	6NYCRR 202-2.1	9	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	10	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	94	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	26	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 215.2	11	Open Fires - Prohibitions

FACILITY	6NYCRR 225-1.2(h)	27	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.6	28	Reports, Sampling, and Analysis
FACILITY	6NYCRR 227.2(b)(1)	34, 35, 36	Particulate emissions.
1-00000/00001/001/0BLRA	6NYCRR 227-1.3	63	Smoke Emission Limitations.
1-00000/00001/005/TURB1	6NYCRR 227-1.3	82	Smoke Emission Limitations.
2-00000/00002/CAT/ENG09	6NYCRR 227-1.3	90	Smoke Emission Limitations.
1-00000/00001	6NYCRR 227-1.3(a)	61	Smoke Emission Limitations.
1-00000/00001/006/0BLRA	6NYCRR 227-1.3(a)	88	Smoke Emission Limitations.
1-00000/00001	6NYCRR 227-1.4(a)	95	Stack Monitoring. (see narrative)
FACILITY	6NYCRR 227-1.4(b)	29	Stack Monitoring
1-00000/00001	6NYCRR 227-1.4(b)	62	Stack Monitoring
2-00000/00002	6NYCRR 227-1.4(b)	89	Stack Monitoring
1-00000/00001/004/DUCT1	6NYCRR 227-2.4(e)(2)	64	Combined cycle combustion turbines.
1-00000/00001/004/DUCT2	6NYCRR 227-2.4(e)(2)	67	Combined cycle combustion turbines.
1-00000/00001/004/TURB1	6NYCRR 227-2.4(e)(2)	69	Combined cycle combustion turbines.
1-00000/00001/004/TURB2	6NYCRR 227-2.4(e)(2)	79	Combined cycle combustion turbines.
1-00000/00001/005/TURB1	6NYCRR 227-2.4(e)(2)	83	Combined cycle combustion turbines.
1-00000/00001/005/TURB2	6NYCRR 227-2.4(e)(2)	85	Combined cycle combustion turbines.
FACILITY	6NYCRR 227-2.4(f)(1)	30	Emission limit for natural gas fired engines.
FACILITY	6NYCRR 227-2.4(f)(3)	31	Emission limit for distillate oil fired engines.
FACILITY	6NYCRR 227-2.5(a)	32, 33	Fuel switching option.
FACILITY	6NYCRR 231-6.2	37, 38, 39, 40	Netting

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) (4)
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 211.2
This regulation limits opacity from sources to less than or equal to 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

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 turbine's total heat input is greater than or equal to 50 percent natural gas, then the owner or operator must meet the corresponding limit for 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 60.4340

This regulation requires the facility to perform an annual compliance test on combustion turbines 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 tesitng 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 60.7 (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 (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.

40 CFR 80.510 (b)
This regulation is for motor vehicle dieselfuel: non-road, locomotive and marine diesel fuel.

This regulation requires that beginningb June 1, 2010: Except as otherwise specifically provided in 40 CFR 80 SubpartI, all nonroad and locomotive marine diesel fuel is subject to the following per-gallon standards for sulfur content:

15 ppm maximum for NR diesel fuel.

40 CFR Part 60, Subpart IIII
This regulation defines performance standards for compression ignition stationary reciprocating internal combustion engines.

40 CFR Part 60, Subpart JJJJ
This regulation defines performance standards for stationary spark ignition internal combustion engines.

40 CFR Part 63, Subpart JJJJJJ
This regulation covers facilities that own or operate an industrial, commercial, or institutional boiler as defined in §63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in §63.2, except as specified in §63.11195.

6 NYCRR 201-6.5 (a)
This section identifies state enforceable requirements for Title V permits.

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 225-1.2 (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 227-1.3
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 227-2.4 (e) (2)
Presumptive NOx RACT emission limits for combined cycle combustion turbines.

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 231-6.2

This section establishes the requirements for performing a netting analyses.

Non Applicability Analysis
List of non-applicable rules and regulations:

Location Facility/EU/EP/Process/ES	Regulation	Short Description
FACILITY	40 CFR 60.4330	Stationary Combustion Turbine NSPS - SO2 emission limits

Reason: The condition for 40 CFR 60 KKKK 4330 is an NSPS regulation for Stationary Combustion Turbines (Emission SourcesTURB 1 & TURB2) operating on #2 distillate fuel oil (Process 005) and it specifies the sulfur dioxide emission limit of 0.060 lb SO2/MMBtu heat input. This is equivalent to 500 ppm or 0.05 % sulfur by weight.

Since the New York State Regulation 6 NYCRR 225-1.2 (h) with a sulfur content limit of 15 ppm (0.0015 % by weight) in the #2 fuel oil supersedes the Federal Regulation 40 CFR 60.4330, NSPS Subpart KKKK - Stationary Combustion Turbine NSPS - SO2 emission limits, which is equivalent to 500 ppm or 0.05% by weight sulfur content limit.

Therefore; Regulation 40 CFR 60.4330, NSPS Subpart KKKK is not applicable to the #2 fuel oil (Process 005) combusting in the two combustion turbines (Emission Sources TURB1 & TURB2).

FACILITY	40 CFR 60.4365 (a)	Stationary Combustion Turbine NSPS - Exemption from monitoring total sulfur content of fuel
2-00000/00002/CAT/ENG09	40 CFR 63.6585	Reciprocating Internal Combustion Engine (RICE) NESHAP -

Applicability

Reason: NESHAPs for Stationary RICE at area sources of HAPs for new or reconstructed Reciprocating Internal Combustion Engine (RICE) is met by meeting the requirements of 40 CFR Part 60 Subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part.

Therefore, 40 CFR 63.6585, Subpart ZZZZ is not applicable to the 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 reciprocating internal combustion engine (RICE).

2-00000/00002/JEN/ENG08 40 CFR 63.6585	Reciprocating Internal Combustion Engine (RICE) NESHAP - Applicability

Reason: NESHAPs for Stationary RICE at area sources of HAPs for new or reconstructed Reciprocating Internal Combustion Engine (RICE) is met by meeting the requirements of 40 CFR Part 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

Therefore, 40 CFR 63.6585, Subpart ZZZZ is not applicable to the 2.6 MW GE-Jenbacher lean burn spark-ignited (Emission Source ENG08) natural gas-fired (Process JEN) lean burn reciprocating internal combustion engine (RICE).

2-00000/00002/CAT/ENG09 40 CFR 63.6590 (c)	Reciprocating Internal Combustion Engine (RICE) NESHAP - Stationary RICE subject to Regulations under 40 CFR Part 60

Reason: NESHAPs for Stationary RICE at area sources of HAPs for new or reconstructed Reciprocating Internal Combustion Engine (RICE) is met by meeting the requirements of 40 CFR Part 60 Subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part.

Therefore, 40 CFR 63.6590 (c), Subpart ZZZZ is not applicable to the 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 reciprocating internal combustion engine (RICE).

2-00000/00002/JEN/ENG08	40 CFR 63.6590 (c)	Reciprocating Internal Combustion Engine (RICE) NESHAP - Stationary RICE subject to Regulations under 40 CFR Part 60

Reason: NESHAPs for Stationary RICE at area sources of HAPs for new or reconstructed Reciprocating Internal Combustion Engine (RICE) is met by meeting the requirements of 40 CFR Part 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

Therefore, 40 CFR 63.6590 (c), Subpart ZZZZ is not applicable to the 2.6 MW GE-Jenbacher lean burn spark-ignited (Emission Source ENG08) natural gas-fired (Process JEN) lean burn reciprocating internal combustion engine (RICE).

NOTE: Non-applicability determinations are cited as a permit condition under 6 NYCRR Part 201-6.4(g). This information is optional and provided only if the applicant is seeking to obtain formal confirmation, within an issued Title V permit, that specified activities are not subject to the listed federal applicable or state only requirement. The applicant is seeking to obtain verification that a requirement does not apply for the stated reason(s) and the Department has agreed to include the non-applicability determination in the issued Title V permit which in turn provides a shield against any potential enforcement action.

Compliance Certification
Summary of monitoring activities at NYU CENTRAL PLANT:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring
FACILITY	42	record keeping/maintenance procedures
FACILITY	43	intermittent emission testing
FACILITY	44	intermittent emission testing
FACILITY	45	intermittent emission testing
FACILITY	46	intermittent emission testing
FACILITY	48	intermittent emission testing
FACILITY	49	record keeping/maintenance procedures
FACILITY	50	intermittent emission testing
FACILITY	51	intermittent emission testing
FACILITY	52	intermittent emission testing
FACILITY	53	record keeping/maintenance procedures
1-00000/00001/004/DUCT1	66	intermittent emission testing
1-00000/00001/004/DUCT2	68	intermittent emission testing
1-00000/00001/004/TURB1	77	intermittent emission testing
1-00000/00001/004/TURB2	80	intermittent emission testing

1-00000/00001/005/TURB1	84	intermittent emission testing
1-00000/00001/005/TURB2	87	intermittent emission testing
FACILITY	54	intermittent emission testing
FACILITY	55	intermittent emission testing
1-00000/00001/004/TURB1	78	record keeping/maintenance procedures
1-00000/00001/004/TURB2	81	record keeping/maintenance procedures
FACILITY	56	work practice involving specific operations
FACILITY	58	work practice involving specific operations
FACILITY	22	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	7	monitoring of process or control device parameters as surrogate
FACILITY	8	monitoring of process or control device parameters as surrogate
FACILITY	9	record keeping/maintenance procedures
FACILITY	27	work practice involving specific operations
FACILITY	28	record keeping/maintenance procedures
FACILITY	34	intermittent emission testing
FACILITY	35	intermittent emission testing
FACILITY	36	intermittent emission testing
1-00000/00001/001/0BLRA	63	record keeping/maintenance procedures
1-00000/00001/005/TURB1	82	record keeping/maintenance procedures
2-00000/00002/CAT/ENG09	90	record keeping/maintenance procedures
1-00000/00001	61	monitoring of process or control device parameters as surrogate
1-00000/00001/006/0BLRA	88	monitoring of process or control device parameters as surrogate
1-00000/00001	95	monitoring of process or control device parameters as surrogate
FACILITY	29	record keeping/maintenance procedures
1-00000/00001	62	record keeping/maintenance procedures
2-00000/00002	89	record keeping/maintenance procedures
1-00000/00001/004/DUCT1	64	intermittent emission testing
1-00000/00001/004/DUCT2	67	intermittent emission testing
1-00000/00001/004/TURB1	69	intermittent emission testing
1-00000/00001/004/TURB2	79	intermittent emission testing
1-00000/00001/005/TURB1	83	intermittent emission testing
1-00000/00001/005/TURB2	85	intermittent emission testing
FACILITY	30	intermittent emission testing
FACILITY	31	intermittent emission testing
FACILITY	32	record keeping/maintenance procedures
FACILITY	33	intermittent emission testing
FACILITY	37	monitoring of process or control device parameters as surrogate
FACILITY	38	monitoring of process or control device parameters as surrogate
FACILITY	39	monitoring of process or control device parameters as surrogate
FACILITY	40	monitoring of process or control device parameters as surrogate

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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 # 7 for 6 NYCRR 201-6.4 (e): 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 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 # 8 for 6 NYCRR 201-6.4 (e): This is a facility-wide condition. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen. The facility's NOx emissions will not exceed 158.5 tons per year. The facility's emission sources include the turbines and their duct burners, the boilers, the Jenbacher engine and the Caterpillar engine.

Condition # 27 for 6 NYCRR 225-1.2 (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 # 30 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 # 31 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 0.59 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 # 33 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.

Condition # 34 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/MMBtus based on a 2 hour average emission for any oil fired stationary combustion installation.

Condition # 35 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/MMBtus based on a 2 hour average emission for any oil fired stationary combustion installation.

Condition # 36 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 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/MMBtus based on a 2 hour average emission for any oil fired stationary combustion installation.

Condition # 37 for 6 NYCRR 231-6.2: 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: DUCT1, DUCT2, TURB1 &TURB2 for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen.

The total combined NOx emissions from the two turbines (Emission Sources TURB1 & TURB2) and their associated duct burners (Emission Controls DUCT1 & DUCT2; respectively) burning both natural gas (Process 004) and # 2 fuel oil (Process 005) are limited to an overall combined NOx emissions cap of 104.23 tpy. Each turbine has a maximum of 60.5 MM Btu/hr.

This condition establishes the requirements for performing a netting analysis.

Potential to emit (PTE) for each of the two combustion turbines is based on the equivalent of combusting 9 months (6,570 hrs/yr) of natural gas, and 3 months of # 2 fuel oil (2,190 hrs/yr) or a ratio of 3:1 for natural gas to # 2 fuel oil. But, the facility does not have limitations based on hours of operation, the facility has limited emissions based on the calculated ton-per-year voluntary PTE.

Since both turbines combined have a NOx PTE based on operating on #2 fuel oil for 3 months and on natural gas for 9 months, then:

PTE (both turbines, #2 fuel oil only): 130.66 tpy
PTE (both turbines, natural gas only): 32.34 tpy

Thus, PTE NOx for both turbines combined = 0.25 (130.66) + 0.75 (32.34) = 32.67 + 24.26 = 56.93 tpy

Both HRSG duct burners (Emission Sources DUCT1 & DUCT2) combined will have a NOx PTE based on operating on natural gas for 12 months. Each duct burner has a maximum heat input of 70 MM Btu/hr. Since the HRSGs duct burners will never operate by themselves without the turbines, then:

PTE (both HRSG duct burners operating only on natural gas) : 47.30 tpy NOx

Thus, both turbines (Emission Sources TURB1 & TURB2) and their corresponding HRSG duct burners (Emission Controls DUCT1 & DUCT2) will have a NOx PTE = 56.93 + 47.30 = 104.23 tpy

Condition # 38 for 6 NYCRR 231-6.2: 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 total combined NOx emissions from the two turbines (Emission Sources TURB1 & TURB2) burning both natural gas (Process 004) and # 2 fuel oil (Process 005) are limited to an overall combined NOx emissions cap of 56.93 tpy. Each turbine has a maximum of 60.5 MM Btu/hr. The facility's NOx emissions will not exceed 158.5 tpy.

This condition establishes the requirements for performing a netting analysis.

Potential to emit (PTE) for each of the two combustion turbines is based on the equivalent of combusting 9 months (6,570 hrs/yr) of natural gas, and 3 months of # 2 fuel oil (2,190 hrs/yr) or a ratio of 3:1 for natural gas to # 2 fuel oil. But, the facility does not have limitations based on hours of operation, the facility has limited the emissions based on the calculated ton-per-year voluntary PTE.

Since both turbines combined have a NOx PTE based on operating on #2 fuel oil for 3 months and on natural gas for 9 months, then:

PTE (both turbines, #2 fuel oil only): 130.66 tpy
PTE (both turbines, natural gas only): 32.34 tpy

Thus, PTE NOx for both turbines combined = 0.25 (130.66) + 0.75 (32.34) = 32.67 + 24.26 = 56.93 tpy

Condition # 39 for 6 NYCRR 231-6.2: 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 and 0BLRC for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen.

The three boilers @ 65 MM Btu/hr (Emission Sources 0BLRA, 0BLRB and 0BLRC) have an overall emissions cap for all parameters equivalent to the PTE emissions of two of the boilers, which for NOx is 40.4 tons/year. The three boilers may be used singularly or in any combination at different times. The cap applies to the overall combination of both fuels (natural gas & #2 fuel oil) and is not prorated for any single fuel.

Condition # 43 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 # 44 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 # 45 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 # 46 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 # 48 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 Particulates.

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 Particulates limit for this engine is 0.04 g/bhp-hr or 3.43 ppmvd. 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 # 50 for 40CFR 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 # 51 for 40CFR 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 0.3 g/bhp-hr or 25 ppmvd. 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 # 52 for 40CFR 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 # 54 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 # 55 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 # 56 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 # 58 for 40 CFR 80.510 (b), Subpart I: 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.

This condition is for motor vehicle diesel fuel: non-road, locomotive and marine diesel fuel.

This condition requires that beginning June 1, 2010: Except as otherwise specifically provided in 40 CFR 80 Subpart I, all nonroad and locomotive marine diesel fuel is subject to the following per-gallon standards for sulfur content:

15 ppm maximum for NR diesel fuel.

Condition # 61 for 6 NYCRR 227-1.3 (a): This condition is an emission unit level and 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 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 00001 when the two combustion turbines (Emission Sources TURB1 & TURB2 and the three boilers (Emission Sources 0BLRA, 0BLRB and 0BLRC) are 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 # 64 for 6 NYCRR 227-2.4 (e) (2): 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 # 66 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 # 67 for 6 NYCRR 227-2.4 (e) (2): 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 # 68 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 # 69 for 6 NYCRR 227-2.4 (e) (2): 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 # 77 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 # 79 for 6 NYCRR 227-2.4 (e) (2): 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 # 80 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 # 83 for 6 NYCRR 227-2.4 (e) (2): 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 # 84 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 # 85 for 6 NYCRR 227-2.4 (e) (2): 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 # 87 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 # 88 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 # 95 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).