

BUREAU OF AIR MANAGEMENT TITLE V OPERATING PERMIT

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and Section 22a-174-33 of the Regulations of Connecticut State Agencies (RCSA) and pursuant to the Code of Federal Regulations (CFR), Title 40, Part 70.

Title V Permit Number	104-0106-TV
Client/Sequence/Town/Premises Numbers	138/13/104/24
Date Issued	December 5, 2024
Expiration Date	December 5, 2029

Corporation:

Middletown Power LLC


Premises Location:

1866 River Road, Middletown, CT 06457

Name of Responsible Official and Title:

Michael Chad West, Plant Manager

All the following attached pages, 2 through 66, are hereby incorporated by reference into this Title V permit.

for  _____
Katherine S. Dykes
Commissioner

December 5, 2024
_____ Date

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Title V Operating Permit

All conditions in Sections III, IV, and VI of this Title V permit are enforceable by both the Administrator and the commissioner unless otherwise specified. Applicable requirements and compliance demonstration are set forth in Section III of this Title V permit. The Administrator or any citizen of the United States may bring an action to enforce all permit terms or conditions or requirements contained in Sections III, IV, and VI of this Title V permit in accordance with the Clean Air Act, as amended.

LIST OF ABBREVIATIONS/ACRONYMS

<i>Abbreviation/Acronym</i>	<i>Description</i>
AEL	Allowable Emission Rate
ASTM	American Society for Testing and Material
Btu	British Thermal Unit
CAM	Compliance Assurance Monitoring
CAIR	Clean Air Interstate Rule
CEDRI	Compliance and Emissions Data Reporting Interface
CEM	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CGS	Connecticut General Statutes
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
CO ₂	Carbon Dioxide
DERC	Discrete Emission Reduction Credits
DEEP	Department of Energy & Environmental Protection
EPA	Environmental Protection Agency
ESP	Electrostatic Precipitator
EU	Emission Unit
^o F	Degrees Fahrenheit
ft ³	Cubic Feet
gal	Gallons
gph	Gallons per Hour
GEU	Grouped Emission Unit
HAP	Hazardous Air Pollutant
HHV	Higher Heating Value
hr	Hour
IFGR	Induced Flue Gas Recirculation
ISO-NE	ISO-New England
kW	Kilowatt
lb	Pound
MASC	Maximum Allowable Stack Concentration
MATS	Mercury and Air Toxics Standard
MMBtu	Million Btu
MW	Megawatt
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
O ₂	Oxygen
Pb	Lead
PEMS	Predictive Emissions Monitoring System
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 microns
PM _{2.5}	Particulate Matter less than 2.5 microns
ppm	Parts per million
ppmvd	Parts per million, volumetric dry basis
ppbvd	Parts per billion, volumetric dry basis
QA/QC	Quality Assurance and Quality Control
RACT	Reasonably Available Control Technology

LIST OF ABBREVIATIONS/ACRONYMS, continued

<i>Abbreviation/Acronym</i>	<i>Description</i>
RCSA	Regulations of Connecticut State Agencies
scf	Standard Cubic Feet
scfh	Standard Cubic Feet per Hour
SCR	Selective Catalytic Reduction
SIC	Source Identification Code
SNCR	Selective Non-Catalytic Reduction
SO ₂	Sulfur Dioxide
SOS	Standard Operating Scenario
SO _x	Sulfur Oxides
tpy	Tons per year
TR	Transformer Rectifier
TSP	Total Suspended Particulate
ULSD	Ultra-Low Sulfur Distillate
VOC	Volatile Organic Compound
yr	Year

Section I: Premises Information/Description

A. PREMISES INFORMATION

Nature of Business: Electric Power Generation
Primary SIC: 4911
Other SIC: None

Facility Mailing Address: Middletown Power LLC, P.O. Box 1001, 1866 River Road, Middletown, CT 06457
Telephone Number: (860) 638-3031

B. PREMISES DESCRIPTION

Middletown Power LLC is located on River Road in Middletown, Connecticut. The station produces electricity for sale. The station consists of three steam electric generating boilers (Units 2, 3 and 4) and five combustion turbines (Units 10 and 12-15) for the production of electricity. Additional emissions units at the station include one auxiliary steam boiler (Unit 4A). The total electrical output from the station is 953 megawatts (MW).

Unit 2 (EU-1), Registration No. 104-0098-R, is a traditionally fired Riley boiler rated at 1,295 MMBtu/hr and capable of producing 117 MW. Unit 2 is capable of burning No. 6 oil, ULSD (for ignition only) and natural gas on an interruptible basis. Unit 2 uses over-fire air and urea injection to control NOx emissions. Unit 2 is subject to Consent Order No. 1888 and RCSA §22a-174-22c (CAIR). Unit 2 is equipped with the following CEM for compliance verification: CO₂, NO_x, SO₂, and opacity.

Unit 3 (EU-2), Registration No. 104-0100-R, is a Babcock and Wilcox cyclone boiler rated at 2,370 MMBtu/hr and capable of producing 236 MW. Unit 3 is capable of burning No. 6 oil, ULSD (for ignition only) and natural gas on an interruptible basis. Unit 3 is subject to the requirements of RCSA §22a-174-22c (CAIR). Unit 3 may use the following to control NOx emissions: Over-Fire Air and/or SNCR. Unit 3 is equipped with the following CEM for compliance verification: CO₂, NO_x, SO₂, and opacity.

Unit 4 (EU-3), Permit No. 104-0003, is a tangentially fired Combustion Engineering boiler rated at 4,684 MMBtu/hr and capable of producing 400 MW. Unit 4 is capable of burning No. 6 oil and ULSD (for ignition only). Unit 4 is subject to Consent Order No. 1888 and RCSA §22a-174-22c (CAIR). Unit 4 is also subject to Consent Order No. 8377 for Alternative NOx RACT compliance and uses the following to control NOx emissions: Combustion Modification [Low-NOx burners, Excess Air Control, (i.e. Low-NOx vanes, Separated Over-Fire Air)], installed in January 2022. Unit 4 may use Urea Injection as allowed by Permit No. 104-003, modified on May 13, 2020. Unit 4 is equipped with the following CEM for compliance verification: CO₂, NO_x, SO₂, and opacity.

Units 2, 3 and 4 are Phase II Acid Rain Sources and their CEM system has been certified in accordance with 40 CFR Part 75.

Units 2, 3 and 4 are considered Electric Generating Units as defined by the Mercury and Air Toxics Standards (MATS), 40 CFR Part 63 Subpart UUUUU, for power plants.

Section I: Premises Information/Description

Unit 4A (EU-4), Permit No. 104-0002, is a Babcock and Wilcox auxiliary steam boiler which provides steam for boiler warm-up and plant heating. Unit 4A is capable of firing ULSD fuel oil and natural gas on an interruptible basis. Unit 4A is located within the main power plant building and shares a stack with EU-3. Unit 4A is operated under the *light liquid fuel* subcategory with an oxygen trim system to maintain the air-to-fuel ratio in accordance with 40 CFR Part 63 Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.

EU-12 and EU-13 are natural gas fired Cleaver Brooks Model FLX glycol process heaters used to pre-heat the natural gas for steam production in GEU-1. EU-12 is rated at 4.9 MMBtu/hr and EU-13 is rated at 2.5 MMBtu/hr. Both of these units are considered new process heaters with respect to 40 CFR Part 63 Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, with an expected in-service date of 4th quarter 2024. Neither of these units require a permit so they are also subject to the Premises-Wide General Requirements.

Unit 10 (EU-5), Registration 104-0102-R, is a 20 MW Pratt & Whitney FT4A-8 combustion turbine. It is located east of the main power plant building. This unit is subject to Consent Order No. 8377 for Alternative NO_x RACT. Compliance. The registration for this unit was modified on May 29, 2013 to restrict sulfur content in the fuel to 0.05%, by weight (500 ppm).

Units 12-15 (EU-8 through EU-11), Permit Nos. 104-0144 through 104-0147, are each 50 MW General Electric LM6000 dual fuel fired combustion turbines. They are located east of the main power plant building each with its own stack. These units utilize water injection, selective catalytic reduction (SCR) and oxidation catalyst to control NO_x, CO and VOC. These units are subject to 40 CFR Part 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines and 40 CFR Part 63 Subpart YYYYY, National Emission Standards for Stationary Combustion Turbines. These turbines operate *as new lean premix subcategory units* with respect to 40 CFR Part 63 Subpart YYYYY. The emission rates for SO_x and NO_x in the NSR permits are below the limitations outlined in Subpart KKKK. Units 12-15 are Phase II Acid Rain sources and their CEM system is certified in accordance with 40 CFR Part 75.

The Middletown Power LLC has been given approval to blend No. 6 oil with > 0.5% sulfur. This activity has been determined to be less than 1.0 ton per year of potential emissions and thus is deemed an insignificant activity. However, the approval continues to be in effect provided that Middletown Power LLC complies with the terms and conditions listed for fuel blending in Section III.G Premises-Wide General Requirements of this Title V permit.

Section II: Emissions Units Information

A. EMISSIONS UNITS DESCRIPTION

Emissions units are set forth in Table II.A. It is not intended to incorporate by reference these NSR Permits, Orders, Registrations, or Regulations into this Title V permit.

TABLE II.A: EMISSIONS UNIT DESCRIPTION			
Emissions Units	Emissions Unit Description	Control Unit Description	Permit, Order, Registration, or Regulation Number
EU-1	Unit 2: Riley Dual fuel fired 1,295 MMBtu/hr electric utility steam boiler Installed 11/01/1958	Electrostatic Precipitator and Boiler over-fire air and urea injection	104-0098-R Consent Order No. 1888 40 CFR Part 63 Subpart UUUUU 40 CFR Parts 72-78, inclusive RCSA §§22a-174-19a, 22c, 22e
EU-2	Unit 3: Babcock and Wilcox Dual fuel fired 2,370 MMBtu/hr electric utility steam boiler Installed 12/01/1964	Electrostatic Precipitator, Boiler over-fire air and/or SNCR	104-0100-R 40 CFR Part 63 Subpart UUUUU 40 CFR Parts 72-78, inclusive RCSA §§22a-174-19a, 22c, 22e
EU-3	Unit 4: Combustion Engineering No. 6 oil fired 4,684 MMBtu/hr electric utility steam boiler Installed 03/01/1973	Unit 4 uses the following to control NO _x emissions: Combustion Modification [Low-NO _x burners, Excess Air Control, (i.e. Low-NO _x vanes, Over-Fire Air)], installed January 2022, as allowed by Permit No. 104-0003, modified on November 26, 2024 Unit 4 may use Urea Injection as allowed by Permit No. 104-0003, modified on May 13, 2020	P104-0003 Consent Order No. 1888 Consent Order No. 8377 40 CFR Part 63 Subpart UUUUU 40 CFR Parts 72-78, inclusive RCSA §§22a-174-19a, 22c, 22e
EU-4	Unit 4A: Babcock and Wilcox Dual fuel fired auxiliary steam boiler Installed 03/05/1982	Low NO _x Burner and Induced Flue Gas Recirculation	P104-0002 40 CFR Part 63 Subpart DDDDD
EU-5	Unit 10: Pratt & Whitney 20 MW ULSD fired Combustion Turbine Model FT4A-8 Installed 08/01/1966	None	104-0102-R Consent Order No. 8377 RCSA §§22a-174-19a, 22c, 22e
EU-12	Cleaver Brooks FLX natural gas fired Glycol Process Heater	Oxygen Trim System	40 CFR Part 63 Subpart DDDDD, New Process Heater Subcategory

Section II: Emissions Units Information

TABLE II.A: EMISSIONS UNIT DESCRIPTION			
Emissions Units	Emissions Unit Description	Control Unit Description	Permit, Order, Registration, or Regulation Number
	rated at 4.9 MMBtu/hr, In-Service expected 4 th Quarter 2024		
EU-13	Cleaver Brooks FLX natural gas fired 2.5 MMBtu/hr Glycol Process Heater In-Service expected 4 th Quarter 2024	Oxygen Trim System	40 CFR Part 63 Subpart DDDDD, New Process Heater Subcategory
EU-8	Unit 12: General Electric dual fired 50 MW Combustion Turbine Model LM6000 Installed June 2011	Water Injection, SCR, Oxidation Catalyst	P104-0144 40 CFR Part 60 Subpart KKKK 40 CFR Part 63 Subpart YYYY 40 CFR Parts 72-78, inclusive RCSA §§22a-174-19, 22c, 22e
EU-9	Unit 13: General Electric dual fired 50 MW Combustion Turbine Model LM6000 Installed June 2011	Water Injection, SCR, Oxidation Catalyst	P104-0145 40 CFR Part 60 Subpart KKKK 40 CFR Part 63 Subpart YYYY 40 CFR Parts 72-78, inclusive RCSA §§22a-174-19a, 22c, 22e
EU-10	Unit 14: General Electric dual fired 50 MW Combustion Turbine Model LM6000 Installed June 2011	Water Injection, SCR, Oxidation Catalyst	P104-0146 40 CFR Part 60 Subpart KKKK 40 CFR Part 63 Subpart YYYY 40 CFR Parts 72-78, inclusive RCSA §§22a-174-19a, 22c, 22e
EU-11	Unit 15: General Electric dual fired 50 MW Combustion Turbine Model LM6000 Installed June 2011	Water Injection, SCR, Oxidation Catalyst	P104-0147 40 CFR Part 60 Subpart KKKK 40 CFR Part 63 Subpart YYYY 40 CFR Parts 72-78, inclusive RCSA §§22a-174-19a, 22c, 22e
GEU-1	EU-1 through EU-3	See above	See above
GEU-2	EU-8 through EU-11	See above	See above
GEU-3	EU-12 and EU-13	See above	See above

Section II: Emissions Units Information

B. OPERATING SCENARIO IDENTIFICATION

The Permittee shall be allowed to operate under the following Standard Operating Scenarios (SOS) and Alternative Operating Scenarios (AOS) without notifying the commissioner, provided that such operations are explicitly provided for and described in Table II.B.

TABLE II.B: OPERATING SCENARIO IDENTIFICATION	
Emissions Units Associated with the Scenario	Description of Scenarios
All Emissions Units	All emissions units associated with SOS shall be operated in accordance with applicable permit or registration terms and conditions and in accordance with best management practices while combusting liquid fuels or natural gas as allowed.

Section III: Applicable Requirements and Compliance Demonstration

The following contains summaries of applicable regulations and compliance demonstration for each identified Emissions Unit and Operating Scenario, regulated by this Title V permit.

A. GROUPED EMISSIONS UNIT 1 (GEU-1): Three steam electric generating boilers: EU-1, EU-2, EU-3

Registration Nos. 104-0098-R, 104-0100-R, and Permit No. 104-0003; Consent Order No. 1888 (EU-1 and EU-3 only); Consent Order No. 8377 (EU-3 only); 40 CFR Part 63 Subpart UUUUU (MATS); RCSA §§22a-174-19a, 22c, 22e

1. Nitrogen Oxides (NO_x):

a. Limitation or Restriction

- i. NO_x emissions for GEU-1 shall not exceed the following:

[RCSA §22a-174-22e(d)(2)(C); P104-0003 (EU-3)]

(A) No. 6 Oil (Daily Block Average)

- (1) Less than or equal to 0.20 lb/MMBtu

(B) ULSD Oil (Daily Block Average)

- (1) Less than or equal to 0.10 lb/MMBtu

(C) Natural Gas (Daily Block Average)

- (1) Less than or equal to 0.10 lb/MMBtu

(D) Non-Ozone Season Average

- (1) Less than or equal to 0.15 lb/MMBtu (5 month average) during the period from October 1 through April 30, inclusive (All Fuels)

[RCSA §22a-174-22e(d)(2)(D)]

- ii. NO_x Emissions Limits while combusting 1 or more fuels shall be determined in accordance with RCSA §22a-174-22e(d)(10).

b. Monitoring Requirements

- i. For each fuel combusted the Permittee shall monitor monthly and annual fuel consumption.

[RCSA §22a-174-33(j)(1)(K)(ii)]

- ii. The Permittee shall install, calibrate, maintain, operate and certify a CEM for NO_x and comply with the applicable monitoring specified in RCSA §§22a-174-22e(k) and 22a-174-22e(m).

c. Record Keeping Requirements [RCSA §22a-174-22e(j)]

- i. The Permittee shall comply with the applicable record keeping requirements specified in RCSA §22a-174-22e(j). [RCSA §22a-174-22e(j)]

Section III: Applicable Requirements and Compliance Demonstration

- ii. The Permittee shall make and keep records in accordance with 40 CFR §§75.50-75.59.
[40 CFR §§75.50-75.59]

d. Reporting Requirements

- i. The Permittee shall comply with the applicable reporting requirements specified in RCSA §22a-174-22e(k). [RCSA §22a-174-22e(k)]
- iii. The Permittee shall submit all required reports in accordance with 40 CFR §§75.60-75.67.
[40 CFR §§75.60-75.67]

2. EU-3 Case-by-Case NOx RACT Requirements [Consent Order No. 8377]

a. Limitation or Restriction

- i. The Permittee shall install NOx emissions controls by May 1, 2020. Following the installation and tuning of the NOx emissions control system on EU-3, the Permittee shall operate the boiler in compliance with the applicable Phase 2 emissions limits specified in RCSA §22a-174-22e(d)(2)(C). (see Section III.A.1.a.i of this Title V permit) [CO No. 8377, para C.4]
- ii. Optimization of NOx Emission Controls. After initial start-up following the installation of NOx emissions controls, the commissioner will allow the Permittee to operate EU-3 for a period of 240 run hours combusting No. 6 oil to tune the boiler, optimize controls and meet the Phase 2 emissions limits specified in RCSA §22a-174-22e(d)(2)(C). [CO No. 8377, para. C.5]
- iii. Baseline Emissions Analysis. If the commissioner requires that any boiler operate without NOx controls during a stack test, the data collected during the no-control test runs shall not be used to determine compliance with the emissions limits specified in RCSA §22a-174-22e(d)(2)(C). The Permittee shall include such emissions when calculating and recording monthly and consecutive 12-month NOx emissions.
[CO No. 8377, para. C.6]
- iv. The Permittee shall notify the commissioner, in writing, of the dates of commencement of construction, completion of construction, and initial startup of the urea injection and combustion modification equipment, as applicable, no later than 30 days after the subject event. [CO No. 8377, para. C.9]

b. Recordkeeping and Reporting

- i. The Permittee shall by the close of each calendar day record the actual 24-hour average NOx emission rate, the actual fuel type and the actual quantity of each type of fuel in units of volume per day or MMBtu per day for each fuels used on the preceding day. [CO No. 8377, para. C.10.b]
- ii. The Permittee shall provide the records required by Section III.A.2.b.i. of this Title V permit to the commissioner within thirty (30) days of receipt of a written request from the commissioner.
[CO No. 8377, para. C.10.e]
- iii. No later than March 1 of every year, the Permittee shall submit to the commissioner a written report containing copies of all records required by Section III.A.2.b.i. of this Title V permit.

Section III: Applicable Requirements and Compliance Demonstration

[CO No. 8377, para. C.10.f]

3. CAIR NO_x Ozone Season Trading Program

Grouped Emissions Unit 1 (GEU1) is comprised of CAIR NO_x Ozone season units and therefore subject to RCSA §22a-174-22c. The units shall comply with all applicable requirements stated in RCSA §22a-174-22c and the standard requirements of the CAIR permit application.

4. Particulate Matter Emissions (PM)

a. Limitation or Restriction

- i. 0.14 lb/MMBtu No. 6 Oil [RCSA §22a-174-18(e)(2)(A) (GEU-1); P104-0003 (EU-3)]
- ii. 0.12 lb/MMBtu when operating on ULSD [RCSA §22a-174-18(e)(2)(B) (GEU-1); P104-0003 (EU-3)]
- iii. 0.10 lb/MMBtu when operating on natural gas (EU-1 and EU-2 only)
[RCSA §22a-174-18(e)(2)(C)]

b. Monitoring Requirements

Record keeping specified in Section III.A.4.c of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(l)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.A.4.a. of this Title V permit.

[RCSA §22a-174-33(j)(l)(K)]

d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

4a. Compliance Assurance Monitoring (CAM) Plan for EU-1 (Unit No. 2) and EU-2 (Unit No. 3) only

Hamon Research Cottrell Electrostatic Precipitator (ESP) Monitoring

a. CAM Plan Justification

EU-1 and EU-2 are subject to CAM since the potential uncontrolled particulate matter (PM) emissions exceed major source threshold and are subject to an emissions limitation or standard which is not otherwise exempt under 40 CFR §64.2(b)(1).

An ESP Performance Model using actual stack test data, opacity, and secondary voltage was used to estimate actual PM emission across all modes of operation.

The justification for using secondary kilowatts to the ESP as an indicator is based on the principle that adequate power must be applied to the ESP in order to develop the electrically charged field that collects PM as the exhaust gas passes through the various electrical fields. As power fluctuates from moderate to high levels the

Section III: Applicable Requirements and Compliance Demonstration

relationship between power and performance becomes relatively “flat”.

Unit No. 2 and No. 3 were last tested for PM on July 20, 2006 and October 3, 2001, respectively, while firing No. 6 oil to demonstrate compliance with the PM limit. Compliance was demonstrated well below the PM limit for both No. 6 oil and natural gas. These tests along with the engineering assessment, conducted as required by 40 CFR §64.4(d)(2), are used to demonstrate that operation of the ESP is not required to meet the PM while firing natural gas. The breakpoint on the PM efficiency curve while firing natural gas on Unit No. 2 and Unit No. 3 therefore is zero because the ESP is not being operated in order to achieve the PM emission limit, but rather to reduce accumulations of debris, including rust from the ESP that would be exhausted through the stack upon the next startup of the boiler.

When firing No. 6 oil the breakpoint below which the ESP becomes inefficient for Unit No. 2 is 28 kW and 19 kW of total secondary power for Unit No. 3. Therefore the total secondary power delivered to the ESP will be monitored to maintain these power levels while firing No. 6 oil, except during periods of startup and shutdown to ensure compliance with the PM limit. Startup is defined as the period of time between boiler light-off and the online connection to the electrical grid. Shutdown is defined as the period beginning when the unit is disconnected from the electrical grid to the extinguishment of fires in the boiler.

The justification for using opacity COMS data as an indicator of PM compliance is based on the assumption that as opacity increases PM emissions are also increasing. However, the relationship between increasing opacity and PM emissions does not necessarily result in an absolute quantifiable PM emissions rate. Opacity can still be used as an indicator of PM emissions and serve as a warning that additional action may be required. The correlation data between opacity and PM emission rates using the ESP Performance Model clearly shows if the boilers were to emit at the regulatory PM limit of 0.14 lb/MMBtu, the corresponding opacity would exceed the regulatory opacity limits in the range of 2-4 times the allowable. Historical steady state opacity for these units is usually significantly less than the regulatory limit. Therefore using an opacity operational limit of 50% of the regulatory limit as a CAM excursion will provide reasonable confidence of PM compliance and will also require the Permittee to check the secondary power levels to the transformer-rectifier (TR) Sets.

b. CAM Indicator(s)

- i. An excursion is defined as the following:
 - (A) When total secondary kilowatts falls below 28 kW for Unit No. 2 ESP TR Sets; or
 - (B) When total secondary kilowatts falls below 19 kW for Unit No. 3 ESP TR Sets; or
 - (C) Greater than 10% opacity during any one hour block.
- ii. When there is an excursion, the Permittee shall:
 - (A) Make a record that there is a problem;
 - (B) Investigate cause of the excursion;
 - (C) Take corrective action; and
 - (D) Take preventative action.
- iii. Quality Assurance and Quality Control (QA/QC)

Section III: Applicable Requirements and Compliance Demonstration

In addition to the monitoring of the indicators, the Permittee shall conduct the following activities to assure compliance:

- (A) TR readings will be recorded when the system is operating under conditions described in this CAM Plan. The Permittee will compare the recorded data with past data under similar operating conditions, looking for changes that signal developing problems with the ESP.
- (B) An annual inspection during the maintenance outage of the ESP will be conducted to assess the general overall condition. The inspection will include visual assessment of the condition of the guards, wires and plates, particulate deposits on the discharge and collecting electrodes, rapper rod insulators, support bushing insulators, lower stabilizer insulators, gas distribution plates, hopper trough, ash clinkers, access doors, shell seams, and alignment between collecting plates and discharge electrodes to assure that each component is in good physical condition and operating properly. These records will be useful in identifying possible patterns of repetitive component failures and will be the basis for future outage inspections.
- (C) In the event that the annual ESP inspections cannot be conducted on the scheduled date due to plant operations, the Permittee shall conduct the inspections within 30 calendar days after the date the unit is released for shutdown by ISO-NE.

c. Monitoring Requirements

The Permittee shall monitor the following:

- i. Total secondary power to the ESP system at least once per eight hour shift while firing No. 6 oil or when opacity, during any 1-hour block average, exceeds 10% when the unit is connected to the electrical grid:
 - (A) Total secondary voltage and amperage from all TR sets combined;
 - (B) Gross electrical load in MW; and
- ii. Opacity using the COMS.

d. Record Keeping Requirements

The Permittee shall make and keep the following records:

- i. The total secondary voltage and amperage from all TR sets combined;
- ii. Gross Electrical load in MW;
- iii. Outage inspections of ESP functional operation;
- iv. Annual inspection of overall ESP condition;
- v. Opacity data shall be collected electronically and maintained on the data acquisition system on a continuous basis, reduced to six-minute and one-minute block averages;
- vi. Daily COMS calibration; and
- vii. Quarterly COMS audit and recalibration.

Section III: Applicable Requirements and Compliance Demonstration

e. Reporting

Semi-annually, as part of the semi-annual monitoring report and/or compliance certification, the Permittee shall submit a report of date, duration, cause and corrective action of any excursions.

5. Opacity

a. Limitation or Restriction

- i. GEU-1 shall comply with Consent Order No. 1888 at all times.
- ii. Except as provided in RCSA §22a-174-18(j), visible emission of no greater than 20% for any six-minute block and no greater than 40% for any one-minute block.
[RCSA §22a-174-18(b)(2); Consent Order No. 1888; P104-0003 (EU-3)]
- iii. The Permittee shall implement the corrective actions approved by the commissioner according to the schedule approved by the commissioner. [Consent Order 1888, Section B.5] (EU-1 and EU-3 only)

b. Monitoring Requirements

The Permittee shall operate and maintain a continuous opacity monitoring system (COMS), for each unit, in accordance with the regulations. [RCSA §22a-174-4a(b)(3); Consent Order No. 1888]

c. Record Keeping Requirements

- i. The Permittee shall make and keep records in accordance with RCSA §22a-174-4a(h).
[RCSA §22a-174-4a(h)]
- ii. The Permittee shall make and keep records required to demonstrate compliance with Consent Order No. 1888. [RCSA §22a-174-33(j)(l)(K)]

d. Reporting Requirements

- i. The Permittee shall submit all required reports in accordance with Consent Order No. 1888.
[RCSA §22a-174-33(j)(l)(X)]
- ii. The Permittee shall submit a report each calendar quarter in accordance with RCSA §22a-174-4a(i)(4).
[RCSA §22a-174-18(i)(4)]
- iii. The Permittee shall notify the commissioner, in writing, within seven days of the discovery of factors that may or will delay the completion of specific tasks set forth in the approved corrective actions. Such notice shall contain a detailed explanation of the reason(s) for the delay and an amended schedule for the implementation of the remaining tasks. [Consent Order No. 1888, Section B.6]
- iv. On or before the fifteenth day of the month immediately following the close of each calendar quarter, the Permittee shall submit a progress report to the commissioner describing the actions that the Permittee has taken to date to comply with this consent order. Such report shall include, at least, the following:

- (A) A list of approved corrective actions completed during the quarter; and

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- (B) A list of any other actions performed during the quarter for the purpose of reducing the frequency of the occurrence of visible emissions that exceed the standards of RCSA §22a-174-18(b)(2). [Consent Order No. 1888, Section B.7]

6. SO₂: RCSA §22a-174-19a

a. Limitation or Restriction

- i. The Permittee shall: [RCSA §22a-174-19a(e); P104-0003 (EU-3)]
- (A) Combust liquid fuel, gaseous fuel or a combination of each provided that each fuel possess a fuel sulfur limit equal to or less than 0.3% sulfur, by weight (dry basis);
- (B) Meet an average emission rate of equal to or less than 0.33 pounds SO₂ per MMBtu for each calendar quarter for an affected unit at the premises; or
- (C) Meet an average emission rate of equal to or less than 0.3 pounds SO₂ per MMBtu calculated for each calendar quarter, if such owner or operator averages the emissions from two or more affected units at the premises.

b. Monitoring Requirements

The Permittee shall maintain and operate CEM to monitor SO₂ emissions from each unit.

[RCSA §22a-174-19a(i)]

c. Record Keeping Requirements

- i. The Permittee shall obtain a fuel certification from the fuel supplier certifying the type of fuel and the weight percent of sulfur in the fuel (dry basis).
[RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall make and keep records that demonstrate the fuel sulfur content of each shipment of fuel received.
[RCSA §22a-174-19a(i)(1)(A)]
- iii. If fuel with sulfur content above any applicable limit is blended at the premises for combustion in an affected unit or units, the Permittee shall make and keep daily records demonstrating that all fuel combusted at the affected unit or units meets the applicable fuel sulfur limits of RCSA §22a-174-19a(e)(1). Fuel sulfur analysis shall be conducted in accordance with the American Society for Testing and Material (ASTM) test method D4294 and automatic sampling equipment shall conform to ASTM test method D4177-82. [RCSA §22a-174-19a(i)(1)(B)]
- iv. The Permittee shall make and keep records of hourly SO₂ emission rate values, as lb/MMBtu heat input, determined from data measured by a CEM in accordance with the applicable provisions of 40 CFR Part 75 and shall determine the averages consistent with Part III.A.6.a of this Title V permit.
[RCSA §22a-174-33(j)(1)(K)(ii)]

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d. Reporting Requirements

The Permittee shall, as part of any compliance certification pursuant to RCSA §22a-174-33(q)(2) certify in writing to the commissioner compliance with the applicable provisions of such section. Such certification shall include actual quarterly SO₂ emissions in tons and either average quarterly fuel sulfur content or average quarterly emission rate, whichever is applicable, for each affected unit.

[RCSA §22a-174-19a(j)(1)]

7. National Emission Standards (NESHAP) for Hazardous Air Pollutants: Coal and Oil Fired Electric Utility Steam Generating Units, 40 CFR Part 63 Subpart UUUUU (Limited-Use Liquid Oil-Fired Subcategory)

a. Limitation or Restriction

i. The Permittee shall comply with the work practice standards in 40 CFR §63.9991.

(A) The Permittee shall conduct a tune-up of the burner and combustion controls at least each 36 calendar months, as specified in 40 CFR §63.10021(e), for each unit in GEU-1.

[40 CFR §63.9991; Table 3, Item No. 1]

ii. The Permittee shall comply with the applicable requirements of the General Provisions, 40 CFR Part 63, Subpart A. [40 CFR §63.10040]

b. Monitoring Requirements

Record keeping specified in Section III.A.7.c of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

i. The Permittee shall keep records of the types and amounts of fuel use in each calendar quarter to document that the capacity factor limitation for the limited-use liquid oil-fired subcategory is met pursuant to 40 CFR §63.10032(j). [40 CFR §63.10032(j)]

d. Reporting Requirements

The Permittee shall submit all required reports pursuant to 40 CFR §63.10030.

8. Hazardous Air Pollutants (State Only Requirement)

a. Limitation or Restriction

GEU-1 shall not cause and exceedance of the Maximum Allowable Stack Concentration (MASC) in accordance with RCSA §22a-174-29, as applicable. [RCSA §22a-174-29; P104-0003]

b. Monitoring Requirements

Record keeping specified in Section III.A.8.c of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33.

[RCSA §22a-174-33(j)(1)(K)(ii)]

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c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.A.8.a of this Title V permit. [RCSA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

9. EU-3 Specific Requirements

a. Limitation or Restriction

- i. No. 6 Fuel Oil and ULSD (ignition only) [P104-0003]
 - (A) Maximum Fuel Firing Rate (gal/hr): 31,864
 - (B) Maximum Fuel Consumption over any 12 Month Period (gal/yr): 2.8×10^8
 - (C) Maximum Fuel Sulfur Content (% by weight, dry basis): 0.3
 - (D) Maximum Heat Input: 4,684
- ii. Urea Injection (TBD) [P104-0003]
- iii. Low NO_x Burner, Over Fire Air, Staged Combustion a. Low NO_x Burner – CCA split flame oil tips & low NO_x swirlers (Installed January 2022) [P104-0003]
- iv. Separated Over Fire Air (SOFA) – Custom Design (Installed January 2022) [P104-0003]
- v. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations. [P104-0003]

b. Monitoring Requirements

- i. The Permittee shall continuously monitor fuel consumption using a non-resettable totalizing fuel meter. [P104-0003]
- ii. The Permittee shall continuously monitor the urea injection rate (lb/hr or gal/hr), if applicable. [P104-0003]
- iii. The Permittee shall continuously monitor SO₂, NO_x, and CO₂ using CEM. [P104-0003]
- iv. Stack Emission Test Requirements [P104-0003]
 - (A) Stack testing shall be required for the following pollutants: PM₁₀, PM_{2.5}, CO, and Ammonia
 - (1) The Permittee shall conduct emissions testing for PM₁₀, PM_{2.5}, and ammonia with and without the urea injection in operation, after initial start-up of urea injection system.

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Emissions testing shall be conducted within 240 operating hours on No. 6 Fuel Oil.

- (B) Recurrent testing for the above pollutants shall be conducted within five years from the date of the previous test.
- (C) Stack test results shall be reported as follows: all pollutants in lb/MMBtu
- v. Record keeping specified in Section III.A.9.c of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption, for each fuel. The consecutive 12 month fuel consumption shall be determined by adding (for each fuel) the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P104-0003]
- ii. The Permittee shall keep records of the fuel certification for each delivery of fuel oil from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by this equipment that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. [P104-0003]
- iii. The Permittee shall continuously record urea injection rate, if applicable. [P104-0003]
- iv. The Permittee shall records of each delivery of urea. The records shall include: [P104-0003]
 - (A) the date of delivery;
 - (B) the name of the supplier;
 - (C) the quantity of aqueous ammonia delivered; and
 - (D) the percentage of ammonia in solution, by weight.
- v. The Permittee shall calculate and record the monthly and consecutive 12 month PM, PM₁₀, PM_{2.5}, SO₂, NO_x, VOC, CO and Ammonia emissions in tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. [P104-0003]
 - (A) Demonstration of compliance may be met by using emission factors from the following sources:
 - (1) All Particulate, Ammonia: Latest Approved Stack Test
 - (2) NO_x, SO₂, CO₂: The Permittee shall comply with the CEM requirements as set forth in RCSA §22a-174-4a. CEM shall be enforced on the following basis:
 - (a) NO_x: As required by RCSA §22a-174-22e(m)
 - (b) SO₂: 3 hour rolling; calendar quarter

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(c) CO₂: 1 hour block

- v. The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.A.9.a of this Title V permit. [RCSA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

- i. The Permittee shall notify the commissioner, in writing, of the dates of commencement of construction, completion of construction, and initial startup of the urea injection and combustion modification equipment no later than 30 days after each subject event. [P104-0003]
- ii. No later than March 1 of each year the Permittee shall submit a written report of the actual annual emissions of PM₁₀, PM_{2.5}, SO₂, NO_x, VOC, CO, Pb, and ammonia for the prior calendar year compared to the 2-year baseline average emissions, immediately preceding the installation of the urea injection and/or combustion modification equipment, on an annual basis for five years after the installation of such controls. Such report shall be submitted to Office of Director, Engineering, Bureau of Air Management, Department of Energy and Environmental Protection, 79 Elm Street, 5th Floor, Hartford, CT 06106-5127. [P104-0003]
- iii. The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

10. Baseline Annual Emissions Analysis for EU-2 and EU-3 only

a. Limitation or Restriction

- i. The Permittee shall not exceed a significant emissions increase for any pollutant subject to regulation under the CAA, for a period of five years after EU-2 (Unit 3) resumes normal operation, after the installation of the over-fire air system, except as provided in 40 CFR §§51.165(a)(1)(v)(A) and 51.165(a)(1)(xxi).
- ii. The Permittee shall not exceed a significant emissions increase for any pollutant subject to regulation under the CAA, for a period of five years after EU-3 (Unit 4) resumes normal operation, after the installation of the Combustion Modification and/or Urea Injection System, except as provided in 40 CFR §§51.165(a)(1)(v)(A) and 51.165(a)(1)(xxi). [P104-0003]

b. Monitoring and Testing Requirements

- i. The Permittee shall conduct emissions testing on EU-2 for PM_{2.5}, PM₁₀, and ammonia, with and without the SNCR in operation for natural gas and No. 6 Oil. Emissions testing shall be conducted for each fuel within 240 operating hours on such fuel after December 22, 2020, which is the date of issuance of the revision/minor modification to this permit. (Application Nos. 201912584 & 202008146). [RCSA §22a-174-33(j)(1)(K)(ii)]
- ii. The Permittee shall conduct emissions testing on EU-3 for PM_{2.5}, PM₁₀, and ammonia, with and without the Urea Injection System in operation for natural gas and No. 6 Oil. Emissions testing shall be conducted for each fuel within 240 operating hours on such fuel after December 22, 2020, which is the date of issuance of the revision/minor modification to this permit. (Application Nos. 201912584 & 202008146). [RCSA §22a-174-33(j)(1)(K)(ii)]

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c. Record Keeping Requirements

The Permittee shall calculate and record the monthly and consecutive 12 month PM_{2.5}, PM₁₀, SO₂, NO_x, VOC, CO, Pb, and ammonia emissions in units of tons for each unit of EU-2 and EU-3. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of the previous month. [P104-0003; RSCA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

- i. The Permittee shall notify the commissioner, in writing, of the dates of commencement of construction, completion of construction, and initial startup of the urea injection and combustion modification equipment no later than 30 days after the subject event.

[P104-0003; RSCA §22a-174-33(j)(1)(X)]

- ii. No later than March 1 of each year the Permittee shall submit a written report of the actual annual emissions of PM_{2.5}, PM₁₀, SO₂, NO_x, VOC, CO, Pb, and ammonia for the prior calendar year compared to the 2-year baseline average emissions, immediately preceding the installation of the urea injection and/or combustion modification equipment, on an annual basis for five (5) years after the installation of the control systems for EU-2 and EU-3. Such report shall be submitted to Office of Director, Engineering, Bureau of Air Management, Department of Energy and Environmental Protection, 79 Elm Street, 5th Floor, Hartford, CT 06106-5127 [P104-0003; 40 CFR §51.165(a)(1)(xii)(E)]

B. EMISSIONS UNIT 4 (EU-4): Babcock and Wilcox ULSD and natural gas fired auxiliary steam boiler; Permit No. 104-0002; NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD. The boiler is operated under the *light liquid* subcategory with an oxygen trim system to maintain the air-to-fuel ratio in accordance with 40 CFR Part 63 Subpart DDDDD; Installed March 1982

1. Allowable Fuel Use

a. Limitation or Restriction

- i. ULSD [P104-0002]

(A) 873 gallons/hour, daily block average

(B) Maximum Fuel Consumption over any 12 Month Period: 3,874,374 gallons

(C) Maximum Sulfur Content: 0.0015%, by weight

(D) Maximum Heat Input: 117 MMBtu/hr, based on HHV of 134,000 Btu/gal (daily block average)

- ii. Natural Gas [P104-0002]

(A) 90,196 ft³/hour, daily block average

(B) Maximum Fuel Consumption over any 12 Month Period: 790,116,960 cubic feet

(C) Maximum Heat Input: 92 MMBtu/hr, daily block average

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b. Monitoring Requirements

For each fuel, the Permittee shall continuously monitor fuel consumption using a totalizing fuel meter and a daily block average. [P104-0002]

c. Record Keeping Requirements

- i. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption, for each fuel. The consecutive 12 month fuel consumption shall be determined by adding (for each fuel) the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P104-0002]
- ii. The Permittee shall keep records of the fuel certification for each delivery of fuel oil from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by this equipment that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. [P104-0002]
- iii. The Permittee shall keep records of the fuel flow rate using a daily block average. [P104-0002]

d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

2. Pollutant Emissions

a. Limitation or Restriction

- i. The Permittee shall not exceed the following ULSD emission limits (lb/MMBtu): [P104-0002]
 - (A) PM₁₀: 0.025
 - (B) PM_{2.5}: 0.025
 - (C) SO₂: 1.6 E-03
 - (D) NO_x: 0.15 lb/MMBtu (Daily Block Average)
[RCSA §22a-174-22e(d)(3)(C)]
 - (E) VOC: 8.5 E-03
 - (F) CO: 0.064
 - (G) Pb: 8.98E-06
- ii. The Permittee shall not exceed the following Natural Gas emission limits (lb/MMBtu): [P104-0002]
 - (A) PM₁₀: 7.4 E-03

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- (B) PM_{2.5}: 7.4 E-03
 - (C) SO₂: 5.4 E-04
 - (H) NO_x: 0.10 lb/MMBtu (Daily Block Average)
 - (D) [RCSA §22a-174-22e(d)(3)(C)]
 - (E) VOC: 5.3 E-03
 - (F) CO: 8.1 E-02
- iii. The Permittee shall not exceed the following ULSD annual emission limits (tpy): [P104-0002]
- (A) PM₁₀: 6.4
 - (B) PM_{2.5}: 6.4
 - (C) SO₂: 0.4
 - (D) NO_x: 38.9
 - (E) VOC: 2.2
 - (F) CO: 16.6
 - (G) Pb: 2.33 E-03
- iv. The Permittee shall not exceed the following Natural Gas annual emission limits (tpy): [P104-0002]
- (A) PM₁₀: 3.0
 - (B) PM_{2.5}: 3.0
 - (C) SO₂: 0.24
 - (D) NO_x: 40.3
 - (E) VOC: 2.2
 - (F) CO: 33.2
- v. The Permittee shall not exceed the Maximum Worst Case annual emissions (tpy): [P104-0002]
- (A) PM₁₀: 7.9
 - (B) PM_{2.5}: 7.9
 - (C) SO₂: 0.51
 - (D) NO_x: 58.8

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- (E) VOC: 3.3
- (F) CO: 33.2
- (G) Pb: 2.33 E-03

b. Monitoring Requirements

- i. The Permittee shall calculate emissions from the following sources: [P104-0002]
 - (A) PM_{2.5/10}, VOC: Manufacturer's data, AP-42 or other appropriate emissions factor
 - (B) NO_x, CO: Most recent stack test data [P104-0002]
 - (1) Recurrent stack testing for NO_x shall be conducted within five years from the date of the previous stack test. Stack test results shall be in units of lb/hr and lb/MMBtu.
 - (2) The Permittee shall conduct NO_x emission testing in accordance with RCSA §22a-174-22e(k)(1) and RCSA §22a-174-22e(l)(1).
 - (3) The Permittee shall comply with the applicable monitoring requirements pursuant to RCSA §22a-174-22e.
 - (4) Record keeping specified in Section III.B.2.c. of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RCSA §22a-174-33.
[RCSA §22a-174-33(j)(1)(K)(ii)]
 - (C) SO₂: Fuel sulfur content based on a HHV of 134,000 Btu/gal [P104-0002]

c. Record Keeping Requirements

- i. The Permittee shall calculate and record the monthly and consecutive 12 month PM₁₀, PM_{2.5}, SO₂, NO_x, VOC, CO, and Lead emissions in units of tons. The consecutive 12 month emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month. [P104-0002]
- ii. The Permittee shall comply with the applicable record keeping requirements specified in RCSA §22a-174-22e(j) for NO_x emissions. [P104-0002]

d. Reporting Requirements

- i. The Permittee shall comply with the applicable reporting requirements specified in RCSA §22a-174-22e(k) for NO_x emissions. [P104-0002]
- ii. For all other pollutants, the Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

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3. Opacity

a. Limitation or Restriction

- i. Except as provided in RCSA §22a-174-18(j): [P104-0002]
 - (A) Visible emissions of no greater than 20% opacity during any six-minute block average as measured by 40 CFR Part 60, Appendix A, Reference Method 9; or
 - (B) Forty percent (40%) opacity during any one-minute block average.
[RCSA §22a-174-18(b)(2)(B)]

b. Monitoring Requirements

- i. The Permittee shall continuously monitor the opacity using COMS. [P104-0002]
- ii. The Permittee shall comply with the COM requirements as set forth in RCSA §22a-174-4a. [P104-0002]

c. Record Keeping Requirements

The Permittee shall keep records of opacity. Records shall include the dates and times of all opacity exceedance and the operating conditions at the time of the exceedance. [P104-0002]

d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

4. Hazardous Air Pollutants

a. Limitation or Restriction

This equipment shall not cause an exceedance of the MASC for any hazardous air pollutant (HAP) emitted and listed in RCSA §22a-174-29. (STATE ONLY REQUIREMENT) [P104-0002]

b. Monitoring Requirements

Record keeping specified in Section III.B.4.c of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.B.4.a of this Title V permit. [RCSA §22a-174-33(j)(1)(K)]

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d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

5. Operation and Maintenance Requirements

a. Limitation or Restriction

- i. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations. [P104-0002]
- ii. The Permittee shall perform inspections of the control devices as recommended by the manufacturer. [P104-0002]
- iii. The Permittee shall properly operate the control equipment at all times that this equipment is in operation and emitting air pollutants. [P104-0002]

b. Monitoring Requirements

Record keeping specified in Section III.B.5.c of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall make and keep records of all maintenance activities performed on combustion or pollution control components, to include the following: [P104-0002]
 - (A) The date of the maintenance activity;
 - (B) The reason for the maintenance; and
 - (C) Documentation that the replacement parts do not result in an increase in emissions, the emissions of any new pollutants, or an increase in unit capacity.

d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

6. National Emission Standards (NESHAP) for Hazardous Air Pollutants: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD

a. Limitation or Restriction

- i. The Permittee shall comply with the applicable requirements found in the General Provisions, 40 CFR §§63.1 through 15. [40 CFR §63.7565]

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- ii. The Permittee shall comply with the applicable emission limits, work practice standards, and operating limits pursuant to 40 CFR §63.7505(a). [40 CFR §63.7505(a)]
- iii. The Permittee shall develop a site-specific monitoring plan according to the requirements in 40 CFR §63.7505(d). [40 CFR §63.7505(d)]
- iv. The Permittee shall comply with the tune-up requirements found in 40 CFR §63.7540(a)(12). [40 CFR §63.7500(e)]
- v. The Permittee shall maintain the 30-day rolling average operating load such that it does not exceed 110 percent of the highest hourly average operating load recorded during the performance test. [40 CFR §63.7540(a)(1), Table 4, Item No. 7]
- vi. The Permittee shall operate the oxygen trim system with the oxygen level set no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test as the operating limit for oxygen according to 40 CFR Part 63 Subpart DDDDD, Table 7. [40 CFR §63.7525(a)(7)]

b. Monitoring Requirements

- i. The Permittee shall comply with the applicable stack test requirements pursuant to 40 CFR §63.7515(a). [40 CFR §63.7515(a)]
- ii. The Permittee shall conduct subsequent tune-ups no more than 61 months after the previous tune-up. [40 CFR §63.7515(d)]
- iii. The Permittee shall monitor the operating load or steam. [40 CFR §63.7540(a)]
- iv. The Permittee shall operate the oxygen trim system with the oxygen level. [40 CFR §63.7525(a)]
- v. The Permittee shall comply with the applicable requirements pursuant to 40 CFR §63.7535. [40 CFR §63.7535]
- vi. The Permittee shall monitor the type of fuel combusted on a monthly basis pursuant to 40 CFR §63.7515(h). [40 CFR §63.7515(h)]

c. Record Keeping Requirements

- i. The Permittee shall keep all applicable records in accordance with 40 CFR §§63.7555(a) through (h). [40 CFR §§63.7555(a) through (h)]
- ii. The Permittee shall reduce load data to 30-day rolling averages. [40 CFR §63.7540(a), Table 8, Item No. 10]
- iii. The Permittee shall keep records of the type of fuel combusted on a monthly basis pursuant to 40 CFR §63.7515(h). [40 CFR §63.7515(h)]

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d. Reporting Requirements

- i. The Permittee shall comply with the notification requirements in accordance with 40 CFR §§63.7545(f) and (h). [40 CFR §§63.7545(f) and (h)]
- ii. The Permittee shall submit all applicable reports pursuant to 40 CFR §63.7540(b). [40 CFR §63.7540(b)]
- iii. The Permittee shall submit all applicable compliance reports pursuant to 40 CFR §63.7550(c). [40 CFR §63.7550(c)]
- iv. The Permittee shall submit all applicable reports pursuant to 40 CFR §63.7515(f). [40 CFR §63.7515(f)]

7. Compliance Assurance Monitoring (CAM) Plan for NOx emissions

a. CAM Plan Justification

EU-4A is subject to CAM since the potential uncontrolled NOx emissions exceed major source threshold, uses a control device, and is subject to an emissions limitation or standard which is not otherwise exempt under 40 CFR §64.2(b)(1).

This unit is also operated as a *light-liquid* subcategory unit pursuant to 40 CFR Part 63 Subpart DDDDD. As such, a minimum percent oxygen limit must be established to ensure compliance with the CO limit contained in this regulation.

The compliance testing determined that the minimum furnace excess oxygen concentration in the flue gas exhaust stack while firing natural gas is 4.4% and the minimum furnace excess oxygen while firing ULSD is 5.9%. The Reference method measures Oxygen (O₂) in dry percent.

Using actual stack test data for fuel flow and furnace percent oxygen, a relationship was developed to estimate actual NOx emissions across all modes of operation.

EU-4 was last tested in December 2018 to establish both the minimum furnace excess oxygen concentration and fuel flow for both natural gas and ULSD firing. Operational curves were established that correlate to a minimum NOx emission rate for each fuel while firing ULSD fuel oil to demonstrate compliance with the PM limit. Compliance was demonstrated well below the NOx and CO limits for both natural gas and ULSD during the December 2018 emissions compliance demonstration test.

Fuel firing rate, furnace excess oxygen and wind box oxygen concentrations provide parametric indication of NOx (CAM) and CO (Subpart DDDDD) emissions and are inter-related to actual emissions of each pollutant.

NOx and CO are directly affected by the furnace excess oxygen concentration, which is matched to the fuel firing rate to ensure compliance with the applicable NOx and CO limits. Additional NOx and CO reductions are achieved by the wind box oxygen concentration which is programmed to operate on a curve between 17.0 and 22.0 percent. The induced flue gas recirculation damper (IFGR) is programmed to modulate between zero and 100 percent open to maintain the wind box oxygen range.

The fuel and air flows are controlled automatically by the boiler management system in response to steam flow demand. Programmed flow curves ensure that the air-to-fuel ratio is maintained within an operation range that is in compliance with the NOx and CO across the operating range of the boiler.

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The furnace excess oxygen concentration is an indicator that ensures compliance with NO_x and CO limits across the fuel firing range of the boiler.

b. Measurement Approach

- i. Fuel flow is monitored as an input to the boiler operating control system. ULSD and natural gas heat content are obtained from fuel analysis to calculate heat input.
- ii. Excess furnace oxygen and wind box oxygen concentrations necessary to ensure compliance with the NO_x and CO limits are programmed into the boiler operating control system. Oxygen is continually measured by the excess furnace oxygen and wind box oxygen analyzers. These analyzer measurements are in wet O₂ percent

c. CAM Indicators

- i. An excursion is defined as the following:
 - (A) When the fuel flow limit exceeds:
 - (1) 90,196 scfh (daily block average) while firing natural gas; or
 - (2) 873 gph (daily block average) while firing ULSD; and
 - (B) The minimum furnace excess oxygen concentration is less than:
 - (1) 4.4% while firing natural gas; or
 - (2) 5.9% while firing ULSD
 - (3) Reference O₂ is dry percent as measured in the flue gas exhaust stack.
 - (C) The wind box oxygen concentration is not maintained between:
 - (1) 17.0 – 22.0 percent oxygen for both oil and gas firing (3 hour block average)
- ii. When there is an excursion, the Permittee shall:
 - (A) Record the excursion;
 - (B) Investigate cause of the excursion;
 - (C) Take corrective action; and
 - (D) Take preventative action.
- iii. Quality Assurance and Quality Control (QA/QC)

In addition to the monitoring of the indicator parameters, the Permittee shall conduct the following activities to assure compliance:

Section III: Applicable Requirements and Compliance Demonstration

- (A) Five year calibration of ULSD flow meter, beginning with the initial calibration date (acceptance criteria: $\pm 2\%$).
- (B) Five year calibration of natural gas flow meter beginning with the initial calibration date (acceptance criteria; $\pm 2\%$).
- (C) Annual calibration of oxygen meter (acceptance criterial: $\pm 0.5\%$).
- (D) Data availability shall not be less than 90% of the quarterly operating time.

d. Monitoring Requirements

The Permittee shall monitor the following:

- i. Fuel Flow, furnace excess oxygen, and wind box oxygen are monitored continuously and logged on an hourly basis.
- ii. Fuel Flow, furnace excess oxygen, and wind box oxygen are logged on a continuous basis
 - (A) Fuel Flow: 24-hour daily block average
 - (B) Percent Oxygen: 1-hour average

e. Record Keeping Requirements

The Permittee shall record and maintain the following:

- i. The data acquisition system (DAS) records of the hourly and daily block average fuel flow.
- ii. The DAS records of the furnace oxygen concentration on an hourly basis.
- iii. Inspections, excursions, and corrective actions

f. Reporting

Semi-annually, as part of the semi-annual monitoring report and/or compliance certification, the Permittee shall submit a report of date, duration, cause and corrective action of any excursions.

C. EMISSIONS UNIT 5 (EU-5): Pratt & Whitney FT4A-8 20 MW Gas Turbine (Unit 10)

104-0102-R; Consent Order No. 8377; RCSA §§22a-174-19a, 22c, 22e; Installed August 1966

1. Nitrogen Oxide (NO_x)

a. Limitation or Restriction

- i. The Permittee shall not exceed the following emissions limitation:
 - (A) Less than or equal to 0.67 lb/MMBtu [CO No. 8377, para. C.1, Table C.1]

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b. Monitoring Requirements

- i. The Permittee shall conduct NO_x emission tests of the unit at least once every five years from the date of the previous stack test. [RCSA § 22a-174-22e(l)]
- ii. Record keeping specified in Section III.C.1.c. of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RCSA §22a-174-33.
[RCSA §22a-174-33(j)(l)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall comply with the applicable record keeping requirements specified in RCSA § 22a-174-22e(j). [RCSA § 22a-174-22e(j)]

d. Reporting Requirements

The Permittee shall comply with the applicable reporting requirements specified in RCSA §22a-174-22e(k). [RCSA §22a-174-22e(k)]

2. Alternate NO_x RACT Compliance: EU-5 shall comply with Consent Order No. 8377 at all times.

a. Limitation or Restriction

- i. The Permittee shall not combust more than 850,000 gallons of fuel during any consecutive 12 month period. [CO No. 8377, para. C.2]
- ii. CO No. 8377 case-by-case NO_x RACT determination expires on May 1, 2028, at which time the Permittee shall operate EU-5 in compliance with the applicable emissions limits and other requirements of RCSA §22a-174-22e or cease operation. [CO No. 8377, para. C.14]

b. Monitoring Requirements

Record keeping specified in Section III.C.2.c. of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RCSA §22a-174-33. [RCSA §22a-174-33(j)(l)(K)(ii)]

c. Record Keeping Requirements

- i. The Permittee shall by the close of each calendar day record the actual hours of operation and the actual quantity of fuel combusted during the preceding day and shall calculate and record NO_x emissions for EU-5. The Permittee shall calculate NO_x emissions using the emissions rate determined during the latest emissions test performed in accordance with RCSA §22a-174-22e(l).
[CO No. 8377, para. C.10.a]
- ii. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption for EU-5. The consecutive 12 month fuel consumption shall be determined by adding the current month's fuel consumption to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [CO No. 8377, para. C.10.c]

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d. Reporting Requirements

- i. The Permittee shall provide the records required by Sections III.C.2.c.i and ii of this Title V permit to the commissioner within thirty (30) days of receipt of a written request from the commissioner. [CO No. 8377, para C.10.e]
- ii. No later than March 1 of every year, the Permittee shall submit to the commissioner a written report containing copies of all records required by Sections III.C.2.c.i and ii of this Title V permit. [CO No. 8377, para. C.10.f]

3. CAIR NOx Ozone Season Trading Program:

EU-5 is a CAIR NOx Ozone season unit and therefore is subject to RCSA §22a-174-22c. The unit shall comply with all applicable requirements stated in RCSA §22a-174-22c and the standard requirements of the CAIR permit application. [RCSA §22a-174-22c]

4. TSP

a. Limitation or Restriction

Less than or equal to 0.20 lb/MMBtu heat input. [RCSA §22a-174-18(e)(2)(D)]

b. Monitoring Requirements

Record keeping specified in Section III.C.4.c. of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RCSA §22a-174-33.

[RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.C.4.a. of this Title V permit.

[RCSA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

5. Opacity

a. Limitation or Restriction

- i. Visible emissions of no greater than 20% opacity during any six-minute block average as measured by 40 CFR Part 60, Appendix A, Reference Method 9; or [RCSA §22a-174-18(b)(1)(A)]
- ii. 40% opacity as measured by 40 CFR Part 60, Appendix A, Reference Method 9, reduced to a one-minute block average. [RCSA §22a-174-18(b)(1)(B)]

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b. Monitoring Requirements

Testing shall be conducted concurrent with the required NO_x testing, using EPA Method 9 (or equivalent EPA approved Method). Recurring tests shall be every five years concurrent with the required NO_x testing.

[RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.C.5.a. of this Title V permit. [RCSA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

- i. The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]
- ii. The Permittee shall submit reports of all testing in accordance with the requirements of this Title V permit. [RCSA §22a-174-33(j)(1)(K)(ii)]

6. SO₂

a. Limitation or Restriction

- i. The Permittee shall comply with the following fuel sulfur limits:
 - (A) Combust liquid fuel, gaseous fuel or a combination of each provided that each fuel possess a fuel sulfur limit equal to or less than 0.05% sulfur, by weight (dry basis). [104-0102-R]
 - (B) Combust liquid fuel, gaseous fuel or a combination of each provided that each fuel possess a fuel sulfur limit of equal to or less than 3000 ppm (0.3 % sulfur, by weight).
[RCSA §22a-174-19a(e)(1)]
 - (C) Notwithstanding the fuel sulfur limit in Section III.C.6.a.i.B. of this Title V Permit, the Permittee shall comply with the most stringent applicable emission limitation or standard.
[RCSA §22a-174-19a(k)(1)]

b. Monitoring Requirements

The Permittee shall obtain a certification from the fuel supplier stating the sulfur content in each fuel shipment received at the premises. [RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall make and keep records pursuant to RCSA §22a-174-19a(i)(1). [RCSA §22a-174-19a(i)(1)]

d. Reporting Requirements

The Permittee shall submit reports in accordance with the requirements RCSA §22a-174-19a(j)(1).

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[RCSA §22a-174-19a(j)(1)]

D. GROUPED EMISSIONS UNIT 2 (GEU-2): Four General Electric LM6000PC 50 MW Gas Turbines: EU-8 through EU-11

NSR Permit Nos. 104-0144; 104-0145, 104-0146, 104-0147; 40 CFR Part 60 Subpart KKKK; 40 CFR Part 63 Subpart YYYY; RCSA §§22a-174-19a, 22c, 22e

1. Allowable Fuel Usage

a. Limitation or Restriction

All fuel firing rate limits are per turbine and all annual fuel usage limits are combined limits for EU-8, EU-9, EU-10, and EU-11.

i. Ultra-Low Sulfur Distillate Fuel Oil (ULSD) [P104-0144, 104-0145, 104-0146, and 104-0147]

(A) Maximum Fuel Firing Rate: 3,600 gallons/hour per turbine

(B) Maximum Fuel Consumption over any Consecutive 12 Month Period: $8,363 \times 10^3$ gallons

(C) Maximum Fuel Sulfur Content: 0.0015% (15 ppmvd)

(D) Maximum Heat Input: 482.4 MMBtu/hr

ii. Natural Gas [P104-0144, 104-0145, 104-0146, and 104-0147]

(A) Maximum Fuel Firing Rate: 498,000 scf/hour per turbine

(B) Maximum Fuel Consumption over any Consecutive 12 Month Period: $2,312 \times 10^6$ scf

(C) Maximum Heat Input: 510.9 MMBtu/hr

iii. Maximum Amount of Fuel Usage [P104-0144, 104-0145, 104-0146, and 104-0147]

The Permittee shall use the following equation to determine the maximum amount of fuel available to be burned in GEU-2:

$$\text{Maximum Natural Gas Use} = \text{Fuel}_{\text{ng}} - (276.45) \times \text{Fuel}_{\text{oil}}$$

Where : $\text{Fuel}_{\text{ng}} = 2,312 \times 10^6$ scf natural gas

$\text{Fuel}_{\text{oil}} =$ gallons of ULSD fuel burned (not to exceed $8,363 \times 10^3$ gal/yr)

b. Monitoring Requirements

- i. The Permittee shall use individual totalizing fuel metering devices or billing meters to continuously monitor fuel feed to each unit of GEU-2. [P104-0144, 104-0145, 104-0146, and 104-0147]

c. Record Keeping Requirements

- i. The Permittee shall keep records of monthly and consecutive 12 month fuel consumption for of each unit of GEU-2 and all units in GEU-2 combined (for each fuel). The consecutive 12 month fuel consumption shall be determined by adding (for each fuel) the current month's fuel consumption to that of the previous

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11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [P104-0144, 104-0145, 104-0146, and 104-0147]

- ii. The Permittee shall keep records of the fuel certification for each delivery of fuel oil from a bulk petroleum provider or a copy of the current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of the fuel as a condition of each shipment. The shipping receipt or contract shall include the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. [P104-0144, 104-0145, 104-0146, and 104-0147]

d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

2. PM_{2.5}

a. Limitations or Restrictions

All short term emission rate limits are per turbine and all annual tonnage limits are combined worst case for GEU-2 using either natural gas, ULSD or a combination thereof.

- i. ULSD [P104-0144, 104-0145, 104-0146, and 104-0147]
Less than or equal to 12.0 lb/hour per turbine
- ii. Natural Gas [P104-0144, 104-0145, 104-0146, and 104-0147]
Less than or equal to 6.0 lb/hour per turbine
- iii. Annual PM_{2.5} for GEU-2 shall not exceed 14.9 ton/yr regardless of fuel.
[P104-0144, 104-0145, 104-0146, and 104-0147]

b. Monitoring and Testing Requirements

The Permittee shall demonstrate compliance with the PM_{2.5} emission limit using the latest stack test data. [P104-0144, 104-0145, 104-0146, and 104-0147]

c. Record Keeping Requirements

- i. The Permittee shall calculate and record the monthly and consecutive 12 month PM_{2.5} emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of the previous month.
[P104-0144, 104-0145, 104-0146, and 104-0147]
- ii. The Permittee shall maintain records of stack test results and make calculations demonstrating continual compliance with the above emission factors and limits. [RCSA §22a-174-33(j)(1)(K)(ii)]

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d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

3. PM₁₀

a. Limitations or Restrictions

All short term emission rate limits are per turbine and all annual tonnage limits are combined worst case for GEU-2, using either natural gas, ULSD or a combination thereof.

- i. ULSD [P104-0144, 104-0145, 104-0146, and 104-0147]
Less than or equal to 12.0 lb/hour per turbine
- ii. Natural Gas [P104-0144, 104-0145, 104-0146, and 104-0147]
Less than or equal to 6.0 lb/hour per turbine
- iii. Annual PM₁₀ for GEU-2 shall not exceed 14.9 ton/yr regardless of fuel.
[P104-0144, 104-0145, 104-0146, and 104-0147]

b. Monitoring and Testing Requirements

The Permittee shall demonstrate compliance with the PM₁₀ emission limit using the latest stack test data. [P104-0144, 104-0145, 104-0146, and 104-0147]

c. Record Keeping Requirements

- i. The Permittee shall calculate and record the monthly and consecutive 12 month PM₁₀ emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of the previous month.
[P104-0144, 104-0145, 104-0146, and 104-0147]
- ii. The Permittee shall maintain records of stack test results and make calculations demonstrating continual compliance with the above emission factors and limits. [RCSA §22a-174-33(j)(1)(K)(ii)]

d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

4. NO_x

a. Limitations or Restrictions

All short term emission rate limits are per turbine and all annual tonnage limits are combined worst case for
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GEU-2, using either natural gas, ULSD or a combination thereof.

- i. ULSD [P104-0144, 104-0145, 104-0146, and 104-0147]
 - (A) Less than or equal to 10.5 lb/hour per turbine
 - (B) Less than or equal to 5.9 ppmvd @15% O₂
 - (A) 42 ppm @ 15% O₂ [40 CFR §60.4320(a), Table 1]
 - (B) Less than or equal to 50 ppmvd (daily block average) [RCSA §22a-174-22e(d)(4)(C)]
- ii. Natural Gas [P104-0144, 104-0145, 104-0146, and 104-0147]
 - (A) Less than or equal to 4.4 lb/hour per turbine
 - (B) Less than or equal to 2.5 ppmvd @15% O₂
 - (C) 15 ppm @ 15% O₂ [40 CFR §60.4320(a), Table 1]
 - (D) Less than or equal to 40 ppmvd (daily block average) [RCSA §22a-174-22e(d)(4)(C)]
- iii. Less than or equal to 0.15 lb/MMBtu (7 month average) during the period October 1 through April 30, inclusive. (Both Fuels) [RCSA §22a-174-22e(d)(4)(D)]
- iv. Annual NOx emissions shall not exceed 10.8 ton/yr regardless of fuel. [P104-0144, 104-0145, 104-0146, and 104-0147]

b. Monitoring and Testing Requirements

- i. The Permittee shall demonstrate compliance with NOx emissions using the latest stack test data.
 - (A) The Permittee shall conduct NOx emission tests of the unit at least once every five years from the date of the previous stack test.
[P104-0144, 104-0145, 104-0146, and 104-0147; RCSA §22a-174-22e(l)(1)]
 - (1) The Permittee shall comply with the applicable NOx monitoring requirements in 40 CFR §§60.4335 through 60.4355.
 - (2) The Permittee shall conduct NOx stack testing, if required, pursuant to 40 CFR Part 75, Appendix E.

c. Record Keeping Requirements

- i. The Permittee shall calculate and record the monthly and consecutive 12 month NOx emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of the previous month.
[P104-0144, 104-0145, 104-0146, and 104-0147]

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- ii. The Permittee shall make and keep records for each tune-up, repairs, replacement of parts and other maintenance, such records shall include the following:
[RCSA §22a-174-22e(j)(2)(E)]
 - (A) The date on which the emissions unit is tuned-up;
 - (B) The name, title and affiliation of the person performing the tune-up; and
 - (C) A description of work performed, including the procedures used to inspect and perform adjustments.
 - iii. The Permittee shall make and keep records of all documents, other records or reports required by an order or permit by the commissioner.
[RCSA §22a-174-22e(j)(F) & (G)]
 - iv. The Permittee shall make and keep records of the dates, times, and places of all emission testing required by RCSA §22a-174-22e(j)(2)(C), the persons performing the measurements, the testing methods used, the operating conditions at the time of testing, and the results of such testing.
[RCSA §22a-174-22e(j)(2)(C)]
 - v. The Permittee shall maintain records of stack test results and make calculations demonstrating continual compliance with the above emission factor and limits.
[RCSA §22a-174-33(j)(1)(K)(ii)]
- d. *Reporting Requirements*
- i. The Permittee shall submit the required reports in accordance with 40 CFR §§60.4375(a) and 60.4395.
[40 CFR §§60.4375(a) and 60.4395]
 - ii. The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

5. CAIR NOx Ozone Season Trading Program

GEU-2 is comprised of CAIR NOx Ozone season units and therefore are subject to RCSA §22a-174-22c. The units shall comply with all applicable requirements stated in RCSA §22a-174-22c and the standard requirements of the CAIR permit application.

6. SO₂

a. Limitations or Restrictions

All short term emission rate limits are per turbine and all annual tonnage limits are combined worst case for GEU-2, using either natural gas, ULSD or a combination thereof.

- i. ULSD [P104-0144, 104-0145, 104-0146, and 104-0147]

Less than or equal to 0.70 lb/hour per turbine

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- ii. Natural Gas [P104-0144, 104-0145, 104-0146, and 104-0147]
Less than or equal to 0.26 lb/hour per turbine
- iii. 0.060 lb/MMBtu, both fuels [40 CFR §60.4330(a)(2)]
- iv. Annual SO₂ emissions shall not exceed 0.9 ton/yr regardless of fuel. [P104-0144, 104-0145, 104-0146, and 104-0147]
- v. The Permittee shall: [RCSA §22a-174-19a]
 - (A) Combust liquid fuel, gaseous fuel or a combination of each provided that each fuel possess a fuel sulfur limit of equal to or less than 0.3 % sulfur, by weight (dry basis);
 - (B) Meet an average emission rate of equal to or less than 0.33 pounds SO₂ per MMBTU for each calendar quarter for an affected unit at a premises; or
 - (C) Meet an average emission rate of equal to or less than 0.3 pounds SO₂ per MMBTU calculated for each calendar quarter, if such owner or operator averages the emissions from two or more affected units at a premises.

b. Monitoring and Testing Requirements

The Permittee shall comply with the monitoring requirements of 40 CFR §§60.4360 through 60.4370.
[40 CFR §§60.4360 through 60.4370]

c. Record Keeping Requirements

- i. The Permittee keep records of the fuel sulfur content in accordance with 40 CFR §60.4365(a).
[40 CFR §60.4365(a)]
- ii. The Permittee shall calculate and record the monthly and consecutive 12 month SO_x emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of the previous month.
[P104-0144, 104-0145, 104-0146, and 104-0147]
- iii. The Permittee shall make and keep records pursuant to RCSA §22a-174-19a(i).
[P104-0144, 104-0145, 104-0146, and 104-0147]

d. Reporting Requirements

- i. The Permittee shall submit reports in accordance with RCSA §22a-174-19a(j). [RCSA §22a-174-19a(j)]
- ii. The Permittee shall submit the required reports pursuant to 40 CFR §60.4375. [40 CFR §60.4375]

7. Volatile Organic Compounds (VOC)

a. Limitations or Restrictions

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All short term emission rate limits are per turbine and all annual tonnage limits are combined worst case for GEU-2, using either natural gas, ULSD or a combination thereof.

- i. ULSD [P104-0144, 104-0145, 104-0146, and 104-0147]
Less than or equal to 0.75 lb/hour
- ii. Natural Gas [P104-0144, 104-0145, 104-0146, and 104-0147]
Less than or equal to 1.11 lb/hour
- iii. Annual VOC emissions shall not exceed 2.8 ton/yr regardless of fuel.
[P104-0144, 104-0145, 104-0146, and 104-0147]

b. *Monitoring Requirements*

The Permittee shall demonstrate compliance with VOC emission limits shall be met by calculating the emission rates using emission factors from AP-42 Chapter 3, Fifth Edition, Volume 1, Table 3.1-2a, dated 04/00.

[P104-0144, 104-0145, 104-0146, and 104-0147]

c. *Record Keeping Requirements*

The Permittee shall calculate and record the monthly and consecutive 12 month VOC emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of the previous month.

[P104-0144, 104-0145, 104-0146, and 104-0147]

d. *Reporting Requirements*

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

8. Carbon Monoxide (CO)

a. *Limitation or Restriction*

All short term emission rate limits are per turbine and all annual tonnage limits are combined worst case for GEU-2, using either natural gas, ULSD or a combination thereof.

- i. ULSD [P104-0144, 104-0145, 104-0146, and 104-0147]
 - (A) Less than or equal to 1.1 lb/hour.
 - (B) Less than or equal to 1.0 ppmvd @ 15% O₂.
- ii. Natural Gas [P104-0144, 104-0145, 104-0146, and 104-0147]
 - (A) Less than or equal to 5.3 lb/hour.

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(B) Less than or equal to 5.0 ppmvd @ 15% O₂.

iii. Annual CO emissions shall not exceed 19.9 ton/yr regardless of fuel.
[P104-0144, 104-0145, 104-0146, and 104-0147]

b. Monitoring and Testing Requirements

i. The Permittee shall conduct stack testing at least once every five years from the date of the last stack test.
[P104-0144, 104-0145, 104-0146, and 104-0147]

ii. The Permittee shall demonstrate compliance with CO emission limits shall be met by calculating the emission rates using the most recent stack test data.
[P104-0144, 104-0145, 104-0146, and 104-0147]

c. Record Keeping Requirements

The Permittee shall calculate and record the monthly and consecutive 12 month CO emissions in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month.

[P104-0144, 104-0145, 104-0146, and 104-0147]

d. Reporting Requirements

i. The Permittee shall submit a written report to the commissioner of any testing results within 30 days of the completion of such CO test. [RCSA §22a-174-33(j)(1)(K)(ii)]

ii. The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

9. Startup and Shutdown: NO_x and CO

a. Limitation or Restriction

i. The Permittee shall minimize emissions during periods of startup and shutdown by the following work practices and time constraints: [P104-0144, 104-0145, 104-0146, and 104-0147]

(A) Start the ammonia injection as soon as the minimum catalyst temperature is reached;

(B) The oxidation catalyst will not be bypassed during startup or shutdown;

(C) The duration of startup and malfunction shall not exceed 60 minutes; and

(D) The duration of the shutdown shall not exceed 30 minutes.

ii. ULSD [P104-0144, 104-0145, 104-0146, and 104-0147]

(A) NO_x:

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- (1) 40 lb/event during startup
 - (2) 25 lb/event during shutdown
- (B) CO:
 - (1) 18 lb/event during startup
 - (2) 9 lb/event during shutdown
- iii. Natural Gas [P104-0144, 104-0145, 104-0146, and 104-0147]
 - (A) NO_x:
 - (1) 20 lb/event during startup
 - (2) 13 lb/event during shutdown
 - (B) CO:
 - (1) 32 lb/event during startup
 - (2) 27 lb/event during shutdown
- iv. Emissions during these periods shall be counted towards the annual emissions limits stated in Sections III.D.4.a.v. and III.D.8.a.iii. of this Title V permit for NO_x and CO respectively. [P104-0144, 104-0145, 104-0146, and 104-0147]

b. Monitoring Requirements

The Permittee shall demonstrate compliance with the NO_x and CO startup and shutdown emission limits by calculating the emission rates using the Manufacturer's Data.

[P104-0144, 104-0145, 104-0146, and 104-0147]

c. Record Keeping Requirements

- i. The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the combustion turbines; any malfunction of the air pollution control equipment; or any periods during which a monitoring device is inoperative.

[P104-0144, 104-0145, 104-0146, and 104-0147]

Such records shall contain the following information:

- (A) Type of event (startup, shutdown, or malfunction);
- (B) Equipment affected;
- (C) Date of event;
- (D) Duration of event;

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- (E) Fuel being used during event; and
- (F) Total NO_x and CO emissions emitted (lb) during event.

d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

10. Lead (Pb)

a. Limitation or Restriction

All short term emission rate limits are per turbine and all annual tonnage limits are for GEU-2, using ULSD.

- i. Less than or equal to 6.4E-3 lb/hour. [P104-0144, 104-0145, 104-0146, and 104-0147]
- ii. Annual Pb emissions shall not exceed 7.94E-3 ton/yr. [P104-0144, 104-0145, 104-0146, and 104-0147]

b. Monitoring and Testing Requirements

The Permittee shall demonstrate compliance with Pb emission limits shall be met by calculating the emission rates using the emission factors from AP-42 Chapter 3, Fifth Edition, Volume 1, Table 3.1-2a, dated 04/00. [P104-0144, 104-0145, 104-0146, and 104-0147]

c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.D.10.a. of this Title V permit. [RCSA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

11. Ammonia

a. Limitations or Restrictions

Ammonia emissions from each unit shall be less than or equal to 5.0 ppmvd @ 15% O₂. [P104-0144, 104-0145, 104-0146, and 104-0147]

b. Monitoring and Testing Requirements

The Permittee shall demonstrate compliance through stack testing once every five years starting from the date of the initial stack test to demonstrate compliance with the permit limit listed above. [P104-0144, 104-0145, 104-0146, and 104-0147]

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c. *Record Keeping Requirements*

- i. The Permittee shall keep records of each delivery of aqueous ammonia. The records shall include:
[P104-0144, 104-0145, 104-0146, and 104-0147]
 - (A) The date of delivery;
 - (B) The name of the supplier;
 - (C) The quantity of aqueous ammonia delivered; and
 - (D) The percentage of ammonia in solution, by weight.
- ii. The Permittee shall maintain records of stack test results and make calculations demonstrating continual compliance with the above emission factor and limits. [RCSA §22a-174-33(j)(1)(K)(ii)]

d. *Reporting Requirements*

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

12. Opacity

a. *Limitation or Restriction*

Each unit in GEU-2 shall not exceed 10% opacity during any six minute block average as measured by 40 CFR Part 60, Appendix A, Reference Method 9. [P104-0144, 104-0145, 104-0146, and 104-0147]

b. *Monitoring Requirements*

Record keeping specified in Section III.D.12.c of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33.

[RCSA §22a-174-33(j)(1)(K)(ii)]

c. *Record Keeping Requirements*

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.D.12.a. of this Title V permit. [RCSA §22a-174-33(j)(1)(K)]

d. *Reporting Requirements*

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

13. Hazardous Air Pollutants

a. *Limitation or Restriction*

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This equipment shall not cause an exceedance of the MASC for any hazardous air pollutant (HAP) emitted and listed in RCSA §22a-174-29. (STATE ONLY REQUIREMENT)
[P104-0144, 104-0145, 104-0146, and 104-0147]

b. Monitoring Requirements

Record keeping specified in Section III.D.13.c of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33.

[RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.D.13.a of this Title V permit. [RCSA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

14. Pollution Control Equipment (SCR/Oxidation Catalyst/Water Injection)

a. Limitation or Restriction

- i. The Permittee shall operate and maintain the air pollution control equipment in accordance with the manufacturer's specifications and written recommendations. The Permittee shall operate and maintain these stationary combustion turbines, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emission at all times including during startup, shutdown, and malfunction.

[P104-0144, 104-0145, 104-0146, and 104-0147; 40 CFR §60.4333(a)]

- ii. The Permittee shall maintain the water-to-fuel ratio when the turbines are in operation between 0.480 – 1.602 lb/lb, as determined by the initial performance test to show compliance with the NOx emission rates in this Title V permit.

[P104-0144, 104-0145, 104-0146, and 104-0147]

- iii. The Permittee shall maintain the following SCR parameters within the ranges recommended by the manufacturer to achieve compliance with the NOx emission limits in Section III.D.4.a. of this Title V permit:

[P104-0144, 104-0145, 104-0146, and 104-0147]

(A) Ammonia injection rate (lb/hr);

(B) SCR operating temperature (°F); and

(C) Pressure Drop across the catalyst bed (inches of water)

- iv. The Permittee shall maintain the oxidation catalyst inlet temperature (°F) within the ranges recommended

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by the manufacturer to achieve compliance with the CO emission limits in Section III.D.8.a. of this Title V permit. [P104-0144, 104-0145, 104-0146, and 104-0147]

b. Monitoring Requirements

- i. The Permittee shall continuously monitor the water-to-fuel ratio.
[P104-0144, 104-0145, 104-0146, and 104-0147]
- ii. The Permittee shall continuously monitor the SCR ammonia injection rate (lb/hr), operating temperature (°F) and the pressure drop (inches of water) across the SCR catalyst bed.
[P104-0144, 104-0145, 104-0146, and 104-0147]
- iii. The Permittee shall continuously monitor the oxidation catalyst inlet temperature (°F).
[P104-0144, 104-0145, 104-0146, and 104-0147]
- iv. The Permittee shall perform inspections of the SCR and oxidation catalysts as recommended by the manufacturer. [P104-0144, 104-0145, 104-0146, and 104-0147]
- v. The Permittee shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in each unit in GEU-2 in accordance with 40 CFR §60.4335(a). [P104-0144, 104-0145, 104-0146, and 104-0147]
- vi. The Permittee must develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NOx emission controls in accordance with 40 CFR §60.4355(a). [P104-0144, 104-0145, 104-0146, and 104-0147]

c. Record Keeping Requirements

- i. The Permittee shall keep records of the inspection and maintenance of the SCR and oxidation catalyst. The records shall include the name of the person, the date, the results or actions and the date the catalyst is replaced. [P104-0144, 104-0145, 104-0146, and 104-0147]
- ii. The Permittee shall continuously record the SCR ammonia injection rate (lb/hr), operating temperature (°F) and the pressure drop (inches of water) across the SCR catalyst bed.
[P104-0144, 104-0145, 104-0146, and 104-0147]
- iii. The Permittee shall continuously record the oxidation catalyst inlet temperature (°F).
[P104-0144, 104-0145, 104-0146, and 104-0147]
- iv. The Permittee shall keep records of manufacturer's specifications and written recommendations.
[P104-0144, 104-0145, 104-0146, and 104-0147]
- v. The Permittee shall keep records of all exceedances of any operating parameter. Such records shall include: [P104-0144, 104-0145, 104-0146, and 104-0147]
 - (A) The date and time of the exceedance;
 - (B) A detailed description of the exceedance; and

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(C) The duration of the exceedance.

d. Reporting Requirements

- i. The Permittee shall notify the commissioner in writing of any exceedance of an operating parameter, and shall identify the cause or likely cause of such exceedance, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures as follows:

[P104-0144, 104-0145, 104-0146, and 104-0147]

(A) For any hazardous air pollutant, no later than 24 hours after such exceedance commenced; and

(B) For any other operating parameter, no later than ten days after such exceedance commenced.

- ii. The Permittee shall notify the commissioner in writing of any malfunction of the stationary gas turbines, the air pollution control equipment or the continuous monitoring system. The Permittee shall submit such notification with seven days of the malfunction. The notification shall include the following:

[P104-0144, 104-0145, 104-0146, and 104-0147]

(A) Description of the malfunction and a description of the circumstances surrounding the cause or likely cause of such malfunction; and

(B) Description of all corrective actions and preventative measures taken and/or planned with respect to such malfunction and the dates of such actions and measures.

15. Turbine Operation and Maintenance

a. Limitation or Restriction

- i. The Permittee shall operate and maintain GEU-2 in accordance with the manufacturer's specifications and written recommendations. [P104-0144, 104-0145, 104-0146, and 104-0147]
- ii. The Permittee shall operate and maintain this equipment, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.
[P104-0144, 104-0145, 104-0146, and 104-0147]
- iii. The Permittee shall properly operate the control equipment at all times that this equipment is in operation and emitting air pollutants, except as allowed during startup/shutdown events in Section III.D.9. of this Title V permit. [P104-0144, 104-0145, 104-0146, and 104-0147]
- iv. The Permittee shall immediately institute a shutdown of GEU-2 in the event of a malfunction that cannot be correct within three hours. [P104-0144, 104-0145, 104-0146, and 104-0147]

b. Monitoring Requirements

Record keeping specified in Section III.D.15.c of this Title V permit shall be sufficient to meet other Monitoring Requirements pursuant to RCSA §22a-174-33.

[RCSA §22a-174-33(j)(1)(K)(ii)]

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c. Record Keeping Requirement

- i. The Permittee shall make and keep records of when the turbines are exchanged for routine maintenance, to include the following: [P104-0144, 104-0145, 104-0146, and 104-0147]
 - (A) The date the turbine was changed;
 - (B) the reason for the change;
 - (C) Documentation that the replacement turbine or gas generator is the same make and model number; and
 - (D) Documentation that the replacement turbine does not result in an increase in emissions, the emission of any new air pollutants, or increases in electrical output of the turbine.
- ii. The Permittee shall maintain records sufficient to determine compliance with the limitation or restriction in Section III.D.15.a of this Title V permit. [RCSA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier. [RCSA §22a-174-33(j)(1)(X)]

16. 40 CFR Part 63 Subpart YYYY National Emission Standards (NESHAP) for Hazardous Air Pollutants: Stationary Combustion Turbines (New Lean Premix Subcategory)

a. Limitation or Restriction

- i. The Permittee shall limit the concentration of formaldehyde from GEU-2 to 91 ppbvd or less at 15-percent O₂, except during turbine startup. The period of time for turbine startup is subject to the limits specified in the definition of startup in 40 CFR §63.6175. [40 CFR §63.6100; Table 1]
- ii. The Permittee shall maintain the 4-hour rolling average of the catalyst inlet temperature within the range suggested by the catalyst manufacturer. GEU-2 units are not required to use the catalyst inlet temperature data that is recorded during engine startup in the calculations of the 4-hour rolling average catalyst inlet temperature. [40 CFR §63.6100; Table 2, Item No. 1]
- iii. The Permittee shall operate and maintain GEU-2, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR §63.6105(c)]

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b. Monitoring Requirements

- i. The Permittee shall conduct performance tests annually in accordance with 40 CFR §§63.6115 and 63.6120. [40 CFR §63.6120; Table 3]
- ii. The Permittee shall continuously monitor the inlet temperature to the catalyst and maintaining the 4-hour rolling average of the inlet temperature within the range suggested by the catalyst manufacturer for each unit of GEU-2. [40 CFR §63.6125(a); 40 CFR §63.6140(a), Table 5 Item No. 1]
- iii. The Permittee must monitor and record the distillate oil usage daily for all new and existing stationary combustion turbines with a non-resettable hour meter to measure the number of hours that distillate oil is fired. [40 CFR §63.6125(d)]
- iv. The Permittee must develop and implement a CMS quality control program that included written procedures for CMS according to 40 CFR §63.8(d)(1) through (2). The Permittee must keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (*i.e.*, superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under 40 CFR §63.8(d)(2). [40 CFR §63.6125(e)]
- v. Except for monitor malfunctions, associated repairs, and required quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments of the monitoring system), the Permittee must conduct all parametric monitoring at all times GEU-2 turbines are operating. [40 CFR §63.6135(a)]
- vi. Do not use data recorded during monitor malfunctions, associated repairs, and required quality assurance or quality control activities for meeting the requirements of this subpart, including data averages and calculations. You must use all the data collected during all other periods in assessing the performance of the control device or in assessing emissions from the new or reconstructed stationary combustion turbine. [40 CFR §63.6135(b)]

c. Record Keeping Requirement

- i. Any records required to be maintained by this part that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation. [40 CFR §63.6155(d)]
- ii. The Permittee shall keep records of the following:
 - (A) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that the Permittee submitted, according to the requirements in 40 CFR §63.10(b)(2)(xiv). [40 CFR §63.6155(a)(1)]
 - (B) Records of performance tests and performance evaluations as required in 40 CFR §63.10(b)(2)(viii). [40 CFR §63.6155(a)(2)]

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- (C) Records of the date, time, and duration of each startup period, recording the periods when the affected source was subject to the standard applicable to startup. [40 CFR §63.6155(a)(6)]
- (D) Record the number of deviations. For each deviation, record the date, time, cause, and duration of the deviation. [40 CFR §63.6155(a)(7)(i)]
- (E) For each deviation, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions. [40 CFR §63.6155(a)(7)(ii)]
- (F) Record actions taken to minimize emissions in accordance with 40 CFR §63.6105(c), and any corrective actions taken to return the affected unit to its normal or usual manner of operation. [40 CFR §63.6155(a)(7)(iii)]
- (G) The Permittee shall keep records of inlet temperature to the catalyst and the 4-hour rolling average of the inlet temperature. [40 CFR §63.6155(c); Table 5 Item No. 1]

d. Reporting Requirements

- i. The Permittee shall submit the applicable notifications in accordance with 40 CFR §63.6145. [40 CFR §63.6145]
- ii. The Permittee shall report each instance in which you did not meet each emission limitation or operating limitation. You must also report each instance in which you did not meet the requirements in Table 7 of this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in 40 CFR §63.6150. [40 CFR §63.6140(b)]
- iii. The Permittee shall submit annual and semiannual compliance report in accordance to Table 6 of 40 CFR Part 63 Subpart YYYY. [40 CFR §63.6150; Table 6 Item Nos. 1 and 3]
- iv. The Permittee shall submit performance test reports in accordance with 40 CFR §63.6150(f). [40 CFR §63.6150(f)]

E. GROUPED EMISSIONS UNIT 3 (GEU-3): One 4.9 MMBtu/hr Cleaver Brooks FLX Glycol Process Heater (EU-12) and one 2.5 MMBtu/hr Cleaver Brooks glycol Process Heater (EU-13), with anticipated in-service date of 4th Quarter of 2024.

40 CFR Part 63 Subpart DDDDD (Process Heater Subcategory); P104-0003 (EU-12 Only)

1. 40 CFR Part 63 Subpart DDDDD (Process Heater Subcategory)

a. Limitation or Restriction

- i. The Permittee shall comply with the applicable requirements found in the General Provisions, 40 CFR §§63.1 through 15. [40 CFR §63.7565]
- ii. The Permittee shall comply with the applicable emission limits, work practice standards, and operating limits pursuant to 40 CFR §63.7505(a). [40 CFR §63.7505(a)]

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iii. The Permittee shall comply with the tune-up requirements found in 40 CFR §63.7540(a)(12).
[40 CFR §63.7500(e)]

b. Monitoring Requirements

The Permittee shall conduct subsequent tune-ups no more than 61 months after the previous tune-up.
[40 CFR §63.7515(d)]

c. Record Keeping Requirements

i. The Permittee shall keep all applicable records in accordance with 40 CFR §§63.7555(a).
[40 CFR §§63.7555(a)]

ii. The Permittee shall keep records of the type of fuel combusted on a monthly basis pursuant to pursuant to 40 CFR §63.7515(h). [40 CFR §63.7515(h)]

iii. The Permittee shall keep records in accordance with 40 CFR §637560. [40 CFR §63.7560]

d. Reporting Requirements

i. The Permittee shall submit all applicable reports pursuant to 40 CFR §63.7540(b). [40 CFR §63.7540(b)]

ii. The Permittee shall submit all applicable reports pursuant to 40 CFR §63.7550(a), (b), and (c).
[40 CFR §63.7550(a), (b), and (c).]

F. FEDERAL ACID RAIN PERMIT REQUIREMENTS

1. SO₂ Allowance Allocations and NO_x Requirements for Each Affected Unit

a. Unit 2: 117 MW Riley Boiler rated at 1,295 MMBtu/hr

		2024	2025	2026	2027	2028
EU-1 Unit 2	SO ₂ Allowances under Tables 2, 3, or 4 of 40 CFR Part 73	1,332	1,332	1,332	1,332	1,332
	NO _x Limit	Not an Affected Unit under 40 CFR Part 76				

b. Unit 3: 236 MW Babcock & Wilcox Cyclone Boiler rated at 2,270 MMBtu/hr

		2024	2025	2026	2027	2028
EU-2 Unit 3	SO ₂ Allowances under Tables 2, 3, or 4 of 40 CFR Part 73	3,345	3,345	3,345	3,345	3,345
	NO _x Limit	Not an Affected Unit under 40 CFR Part 76				

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c. *Unit 4: 400 MW Combustion Engineering Boiler rated at 4,684 MMBtu/hr*

		2024	2025	2026	2027	2028
EU-3 Unit 4	SO ₂ Allowances under Tables 2, 3, or 4 of 40 CFR Part 73	2,393	2,393	2,393	2,393	2,393
	NO _x Limit	Not an Affected Unit under 40 CFR Part 76				

d. *Unit 12: General Electric 50 MW Combustion Turbine Model LM6000PC*

		2024	2025	2026	2027	2028
EU-8 Unit 12	SO ₂ Allowances under Tables 2, 3, or 4 of 40 CFR Part 73	0	0	0	0	0
	NO _x Limit	Not an Affected Unit under 40 CFR Part 76				

e. *Unit 13: General Electric 50 MW Combustion Turbine Model LM6000PC*

		2024	2025	2026	2027	2028
EU-9 Unit 13	SO ₂ Allowances under Tables 2, 3, or 4 of 40 CFR Part 73	0	0	0	0	0
	NO _x Limit	Not an Affected Unit under 40 CFR Part 76				

f. *Unit 14: General Electric 50 MW Combustion Turbine Model LM6000PC*

		2024	2025	2026	2027	2028
EU-10 Unit 14	SO ₂ Allowances under Tables 2, 3, or 4 of 40 CFR Part 73	0	0	0	0	0
	NO _x Limit	Not an Affected Unit under 40 CFR Part 76				

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g. Unit 15: General Electric 50 MW Combustion Turbine Model LM6000PC

		2024	2025	2026	2027	2028
EU-11 Unit 15	SO ₂ Allowances under Tables 2, 3, or 4 of 40 CFR Part 73	0	0	0	0	0
	NO _x Limit	Not an Affected Unit under 40 CFR Part 76				

The attached Phase II Acid Rain Permit Application is hereby incorporated by reference into this Title V permit. If this Title V permit is in conflict with or inconsistent with the Phase II Acid Rain Permit Application, the Title V permit requirements, including any applicable requirement under 40 CFR Parts 72 through 78, inclusive, shall supersede the Phase II Acid Rain Permit Application and the Permittee shall be governed by and adhere to this Title V permit and any applicable requirement under 40 CFR Parts 72 through 78, inclusive.

G. PREMISES-WIDE GENERAL REQUIREMENTS

1. **Annual Emission Statements:** The Permittee shall submit annual emission statements requested by the commissioner as set forth in RCSA §22a-174-4a(b)(1).
2. **Emission Testing:** The Permittee shall comply with the procedures for sampling, emission testing, sample analysis, and reporting as set forth in RCSA §22a-174-5.
3. **Emergency Episode Procedures:** The Permittee shall comply with the procedures for emergency episodes as set forth in RCSA §22a-174-6.
4. **Reporting of Malfunctioning Control Equipment:** The Permittee shall comply with the reporting requirements of malfunctioning control equipment as set forth in RCSA §22a-174-7.
5. **Prohibition of Air Pollution:** The Permittee shall comply with the requirement to prevent air pollution as set forth in RCSA §22a-174-9.
6. **Public Availability of Information:** The public availability of information shall apply, as set forth in RCSA §22a-174-10.
7. **Prohibition Against Concealment/Circumvention:** The Permittee shall comply with the prohibition against concealment or circumvention as set forth in RCSA §22a-174-11.
8. **Violations and Enforcement:** The Permittee shall not violate or cause the violation of any applicable regulation as set forth in RCSA §22a-174-12.
9. **Variances:** The Permittee may apply to the commissioner for a variance from one or more of the provisions of these regulations as set forth in RCSA §22a-174-13.
10. **No Defense to Nuisance Claim:** The Permittee shall comply with the regulations as set forth in RCSA §22a-174-14.
11. **Severability:** The Permittee shall comply with the severability requirements as set forth in RCSA §22a-174-15.

Section III: Applicable Requirements and Compliance Demonstration

12. **Responsibility to Comply:** The Permittee shall be responsible to comply with the applicable regulations as set forth in RCSA §22a-174-16.
13. **Particulate Emissions:** The Permittee shall comply with the standards for control of particulate matter and visible emissions as set forth in RCSA §22a-174-18.
14. **Fuel Sulfur Content:** The Permittee shall not use No. 2 heating oil that exceeds fifteen parts per million of sulfur by weight as set forth in CGS §16a-21a(a)(2)(B) .
15. **(Sulfur Dioxide Emissions:** The Permittee shall comply with the requirements for Control of Sulfur Dioxide Emissions from Power Plants and other large stationary sources of air pollution as set forth in RCSA §22a-174-19a.
16. **Sulfur Compound Emissions:** The Permittee shall comply with the requirements for control of sulfur compound emissions as set forth in RCSA §§22a-174-19, 22a-174-19a and 22a-174-19b, as applicable.
17. **Organic Compound Emissions:** The Permittee shall comply with the requirements for control of organic compound emissions as set forth in RCSA §22a-174-20.
18. **Nitrogen Oxide Emissions:** The Permittee shall comply with the requirements for control of nitrogen oxide emissions as set forth in RCSA §22a-174-22e.
19. **Ambient Air Quality:** The Permittee shall not cause or contribute to a violation of an ambient air quality standard as set forth in RCSA §22a-174-24(b).
20. **Open Burning:** The Permittee is prohibited from conducting open burning, except as may be allowed by CGS §22a-174(f).
21. **Asbestos:** Should the premises, as defined in 40 CFR §61.145, become subject to the national emission standard for asbestos regulations in 40 CFR Part 61 Subpart M when conducting any renovation or demolition at this premises, then the Permittee shall submit proper notification as described in 40 CFR §61.145(b) and shall comply with all other applicable requirements of 40 CFR Part 61 Subpart M.
22. **Emission Fees:** The Permittee shall pay an emission fee as set forth in RCSA §22a-174-26(d).
21. **Fuel Oil Blending:** The DEEP has granted approval to the permittee to receive, store, and blend fuel oil with greater than one half of one percent (0.5%) sulfur by dry weight in its non-operating, non-day tanks which are filled for daily burn, at the site, provided that the permittee complies with the following conditions:
 - a. The permittee shall maintain records of the volume and sulfur content by dry weight of any and all fuel transfers into, out of, and between tanks;
 - b. The permittee shall inform the DEEP in writing at least three (3) days prior to transferring fuel with greater than one half of one percent (0.5%) sulfur dry weight from the facility to site(s) outside of Connecticut and shall specify the volume, percent (%) sulfur content by dry weight, and destination(s) of the fuel transferred;
 - c. The permittee shall not dispense, under any circumstances, any fuel with greater than one half of one percent (0.5%) sulfur content by dry weight or any non-conforming fuel from any tank for distribution to a fuel user in Connecticut. Any fuel with greater than one half of one percent (0.5%) sulfur dry weight at any facility shall only be transferred to sites outside of Connecticut, and never transferred to site(s) in Connecticut; and

Section III: Applicable Requirements and Compliance Demonstration

- d. The permittee shall designate one operating tank on the premises at all times to store fuel with one half of one percent (0.5%) sulfur by dry weight or less to supply its own generating units. Such operating tank(s) may be designated as any of the non-day tanks to allow for routine maintenance or repairs. Failure to maintain such records or failure to inform the DEEP of all transfers may result in the DEEP's revocation of approval.

Section IV: Compliance Schedule

TABLE IV: COMPLIANCE SCHEDULE				
Emissions Unit	Applicable Regulations	Steps Required for Achieving Compliance (Milestones)	Date by which Each Step is to be Completed	Dates for Monitoring, Record Keeping, and Reporting
		No Steps are required for achieving compliance at this time		

Section V: State Enforceable Terms and Conditions

Only the Commissioner of the Department of Energy and Environmental Protection has the authority to enforce the terms, conditions and limitations contained in this section.

SECTION V: STATE ENFORCEABLE TERMS AND CONDITIONS

- A.** This Title V permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the emissions units in compliance with all applicable requirements of any other Bureau of the Department of Energy and Environmental Protection or any federal, local or other state agency. Nothing in this Title V permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- B.** Nothing in this Title V permit shall affect the commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, investigate air pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the commissioner.
- C.** Additional Emissions Units
- 1.** The Permittee shall make and submit a written record, at the commissioner's request, within 30 days of receipt of notice from the commissioner, or by such other date specified by the commissioner, of each additional emissions unit or group of similar or identical emissions units at the premises.
 - 2.** Such record of additional emissions units shall include each emissions unit, or group of emissions units, at the premises which is not listed in Section II.A of this Title V permit, unless the emissions unit, or group of emissions units, is:
 - a. an insignificant emissions unit as defined in RCSA §22a-174-33; or
 - b. an emissions unit or activity listed in *White Paper for Streamlined Development of Part 70 Permit Applications, Attachment A* (EPA guidance memorandum dated July 10, 1995).
 - 3.** For each emissions unit, or group of emissions units, on such record, the record shall include, as available:
 - a. Description, including make and model;
 - b. Year of construction/installation or if a group, range of years of construction/installation;
 - c. Maximum throughput or capacity; and
 - d. Fuel type, if applicable.
- D.** Odors: The Permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor that constitutes a nuisance beyond the property boundary of the premises as set forth in RCSA §22a-174-23.
- E.** Noise: The Permittee shall operate in compliance with the regulations for the control of noise as set forth in RCSA §§22a-69-1 through 22a-69-7.4, inclusive.

Section V: State Enforceable Terms and Conditions

- F.** Hazardous Air Pollutants (HAPs): The Permittee shall operate in compliance with the regulations for the control of HAPs as set forth in RCSA §22a-174-29.
- G.** Permittee shall comply with the requirements for Control of Carbon Dioxide Emissions as set forth in RCSA §22a-174-31.
- H.** The Permittee shall comply with the requirements for Architectural and Industrial Maintenance Coatings as set forth in RCSA §22a-174-41.
- I.** The Permittee shall comply with the requirements for Adhesives and Sealants as set forth in RCSA §22a-174-44.

Section VI: Title V Requirements

The Administrator of the United States Environmental Protection Agency and the Commissioner of the Department of Energy and Environmental Protection have the authority to enforce the terms and conditions contained in this section.

SECTION VI: TITLE V REQUIREMENTS

A. SUBMITTALS TO THE COMMISSIONER & ADMINISTRATOR

The date of submission to the commissioner of any document required by this Title V permit shall be the date such document is received by the commissioner. The date of any notice by the commissioner under this Title V permit, including, but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is delivered or the date three days after it is mailed by the commissioner, whichever is earlier. Except as otherwise specified in this Title V permit, the word "day" means calendar day. Any document or action which is required by this Title V permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

Any document required to be submitted to the commissioner under this Title V permit shall, unless otherwise specified in writing by the commissioner, be directed to: Compliance Analysis and Coordination Unit, Bureau of Air Management, Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

Any submittal to the Administrator of the Environmental Protection Agency shall be submitted per the procedure required by the applicable requirement or otherwise in a computer-readable format and addressed to: Director, Enforcement and Compliance Assurance Division, U.S. EPA Region I, 5 Post Office Square, Suite 100 (Mailcode: 04-02), Boston, Massachusetts 02109-3912, Attn: Air Compliance Clerk.

B. CERTIFICATIONS [RCSA §22a-174-33(b)]

In accordance with RCSA §22a-174-33(b), any report or other document required by this Title V permit and any other information submitted to the commissioner or Administrator shall be signed by an individual described in RCSA §22a-174-2a(a), or by a duly authorized representative of such individual. Any individual signing any document pursuant to RCSA §22a-174-33(b) shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall make inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate, and complete, and shall also sign the following certification as provided in RCSA §22a-174-2a(a)(4):

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under Section 22a-175 of the Connecticut General Statutes, under Section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute.”

C. SIGNATORY RESPONSIBILITY [RCSA §22a-174-2a(a)]

For purposes of signing any Title V-related application, document, report or certification required by RCSA §22a-174-33, any corporation's duly authorized representative may be either a named individual or any individual occupying a named position. Such named individual or individual occupying a named position is a duly authorized representative if such individual is responsible for the overall operation of one or more manufacturing, production or operating facilities subject to RCSA §22a-174-33 and either:

Section VI: Title V Requirements

1. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding 25 million dollars in second quarter 1980 dollars; or
2. The delegation of authority to the duly authorized representative has been given in writing by an officer of the corporation in accordance with corporate procedures and the following:
 - i. Such written authorization specifically authorizes a named individual, or a named position, having responsibility for the overall operation of the Title V premises or activity,
 - ii. Such written authorization is submitted to the commissioner and has been approved by the commissioner in advance of such delegation. Such approval does not constitute approval of corporate procedures, and
 - iii. If a duly authorized representative is a named individual in an authorization submitted under subclause ii. of this subparagraph and a different individual is assigned or has assumed the responsibilities of the duly authorized representative, or, if a duly authorized representative is a named position in an authorization submitted under subclause ii. of this subparagraph and a different named position is assigned or has assumed the duties of the duly authorized representative, a new written authorization shall be submitted to the commissioner prior to or together with the submission of any application, document, report or certification signed by such representative.

D. ADDITIONAL INFORMATION [RCSA §22a-174-33(j)(1)(X), RCSA §22a-174-33(h)(2)]

The Permittee shall submit additional information in writing, at the commissioner's request, within 30 days of receipt of notice from the commissioner or by such other date specified by the commissioner, whichever is earlier, including information to determine whether cause exists for modifying, revoking, reopening, reissuing, or suspending this Title V permit or to determine compliance with this Title V permit.

In addition, the Permittee shall submit information to address any requirements that become applicable to the subject source and shall submit correct, complete, and sufficient information within 15 days of the applicant's becoming aware of any incorrect, incomplete, or insufficient submittal, during the pendency of the application, or any time thereafter, with an explanation for such deficiency and a certification pursuant to RCSA §22a-174-2a(a)(5).

E. MONITORING REPORTS [RCSA §22a-174-33(o)(1)]

A Permittee, required to perform monitoring pursuant to this Title V permit, shall submit to the commissioner, on forms prescribed by the commissioner, written monitoring reports on March 1 and September 1 of each year or on a more frequent schedule if specified in such permit. Such monitoring reports shall include the date and description of each deviation from a permit requirement including, but not limited to:

1. Each deviation caused by upset or control equipment deficiencies; and
2. Each deviation of a permit requirement that has been monitored by the monitoring systems required under this Title V permit, which has occurred since the date of the last monitoring report; and
3. Each deviation caused by a failure of the monitoring system to provide reliable data.

Section VI: Title V Requirements

F. PREMISES RECORDS [RCSA §22a-174-33(o)(2)]

Unless otherwise required by this Title V permit, the Permittee shall make and keep records of all required monitoring data and supporting information for at least five years from the date such data and information were obtained. The Permittee shall make such records available for inspection at the site of the subject source, and shall submit such records to the commissioner upon request. The following information, in addition to required monitoring data, shall be recorded for each permitted source:

1. The type of monitoring or records used to obtain such data, including record keeping;
2. The date, place, and time of sampling or measurement;
3. The name of the individual who performed the sampling or the measurement and the name of such individual's employer;
4. The date(s) on which analyses of such samples or measurements were performed;
5. The name and address of the entity that performed the analyses;
6. The analytical techniques or methods used for such analyses;
7. The results of such analyses;
8. The operating conditions at the subject source at the time of such sampling or measurement; and
9. All calibration and maintenance records relating to the instrumentation used in such sampling or measurements, all original strip-chart recordings or computer printouts generated by continuous monitoring instrumentation, and copies of all reports required by the subject permit.

G. PROGRESS REPORTS [RCSA §22a-174-33(q)(1)]

The Permittee shall, on March 1 and September 1 of each year, or on a more frequent schedule if specified in this Title V permit, submit to the commissioner a progress report on forms prescribed by the commissioner, and certified in accordance with RCSA §22a-174-2a(a)(5). Such report shall describe the Permittee's progress in achieving compliance under the compliance plan schedule contained in this Title V permit. Such progress report shall:

1. Identify those obligations under the compliance plan schedule in this Title V permit which the Permittee has met, and the dates on which they were met; and
2. Identify those obligations under the compliance plan schedule in this Title V permit which the Permittee has not timely met, explain why they were not timely met, describe all measures taken or to be taken to meet them and identify the date by which the Permittee expects to meet them.

Any progress report prepared and submitted pursuant to RCSA §22a-174-33(q)(1) shall be simultaneously submitted by the Permittee to the Administrator.

Section VI: Title V Requirements

H. COMPLIANCE CERTIFICATIONS [RCSA §22a-174-33(q)(2)]

The Permittee shall, on March 1 of each year, or on a more frequent schedule if specified in this Title V permit, submit to the commissioner a written compliance certification certified in accordance with RCSA §22a-174-2a(a)(5) and which includes the information identified in 40 CFR §§70.6(c)(5)(iii)(A) to (C), inclusive.

Any compliance certification prepared and submitted pursuant to RCSA §22a-174-33(q)(2) shall be simultaneously submitted by the Permittee to the Administrator.

I. PERMIT DEVIATION NOTIFICATIONS [RCSA §22a-174-33(p)]

Notwithstanding Section VI.E. of this Title V permit, the Permittee shall notify the commissioner in writing, on forms prescribed by the commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures as follows:

1. For any hazardous air pollutant, no later than 24 hours after such deviation commenced; and
2. For any other regulated air pollutant, no later than ten days after such deviation commenced.

J. PERMIT RENEWAL [RCSA §22a-174-33(j)(1)(B)]

All of the terms and conditions of this Title V permit shall remain in effect until the renewal permit is issued or denied provided that a timely renewal application is filed in accordance with RCSA §§22a-174-33(g), -33(h), and -33(i).

K. OPERATE IN COMPLIANCE [RCSA §22a-174-33(j)(1)(C)]

The Permittee shall operate the source in compliance with the terms of all applicable regulations, the terms of this Title V permit, and any other applicable provisions of law. In addition, any noncompliance constitutes a violation of the Clean Air Act and Chapter 446c of the Connecticut General Statutes and is grounds for federal and/or state enforcement action, permit termination, revocation and reissuance, or modification, and denial of a permit renewal application.

L. COMPLIANCE WITH PERMIT [RCSA §22a-174-33(j)(1)(G)]

This Title V permit shall not be deemed to:

1. Preclude the creation or use of emission reduction credits or allowances or the trading thereof in accordance with RCSA §§22a-174-33(j)(1)(I) and -33(j)(1)(P), provided that the commissioner's prior written approval of the creation, use, or trading is obtained;
2. Authorize emissions of an air pollutant so as to exceed levels prohibited pursuant to 40 CFR Part 72;
3. Authorize the use of allowances pursuant to 40 CFR Parts 72 through 78, inclusive, as a defense to noncompliance with any other applicable requirement; or
4. Impose limits on emissions from items or activities specified in RCSA §§22a-174-33(g)(3)(A) and -33(g)(3)(B) unless imposition of such limits is required by an applicable requirement.

Section VI: Title V Requirements

M. INSPECTION TO DETERMINE COMPLIANCE [RCSA §22a-174-33(j)(1)(M)]

The commissioner may, for the purpose of determining compliance with this Title V permit and other applicable requirements, enter the premises at reasonable times to inspect any facilities, equipment, practices, or operations regulated or required under such permit; to sample or otherwise monitor substances or parameters; and to review and copy relevant records lawfully required to be maintained at such premises in accordance with this Title V permit. It shall be grounds for permit revocation should entry, inspection, sampling, or monitoring be denied or effectively denied, or if access to and the copying of relevant records is denied or effectively denied.

N. PERMIT AVAILABILITY

The Permittee shall have available at the facility at all times a copy of this Title V permit.

O. SEVERABILITY CLAUSE [RCSA §22a-174-33(j)(1)(R)]

The provisions of this Title V permit are severable. If any provision of this Title V permit or the application of any provision of this Title V permit to any circumstance is held invalid, the remainder of this Title V permit and the application of such provision to other circumstances shall not be affected.

P. NEED TO HALT OR REDUCE ACTIVITY [RCSA §22a-174-33(j)(1)(T)]

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Title V permit.

Q. PERMIT REQUIREMENTS [RCSA §22a-174-33(j)(1)(V)]

The filing of an application or of a notification of planned changes or anticipated noncompliance does not stay the Permittee's obligation to comply with this Title V permit.

R. PROPERTY RIGHTS [RCSA §22a-174-33(j)(1)(W)]

This Title V permit does not convey any property rights or any exclusive privileges. This Title V permit is subject to, and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby, including CGS §4-181a(b) and RCSA §22a-3a-5(b). This Title V permit shall neither create nor affect any rights of persons who are not parties to this Title V permit.

S. ALTERNATIVE OPERATING SCENARIO RECORDS [RCSA §22a-174-33(o)(3)]

The Permittee shall, contemporaneously with making a change authorized by this Title V permit from one alternative operating scenario to another, maintain a record at the premises indicating when changes are made from one operating scenario to another and shall maintain a record of the current alternative operating scenario.

T. OPERATIONAL FLEXIBILITY AND OFF-PERMIT CHANGES [RCSA §22a-174-33(r)(2)]

The Permittee may engage in any action allowed by the Administrator in accordance with 40 CFR §§70.4(b)(12)(i) to (iii)(B), inclusive, and 40 CFR §§70.4(b)(14)(i) to (iv), inclusive, without a Title V non-minor permit modification, minor permit modification or revision and without requesting a Title V non-minor permit modification, minor permit modification or revision provided such action does not:

Section VI: Title V Requirements

1. Constitute a modification under 40 CFR Part 60, 61 or 63;
2. Exceed emissions allowable under the subject permit;
3. Constitute an action which would subject the Permittee to any standard or other requirement pursuant to 40 CFR Parts 72 to 78, inclusive; or
4. Constitute a non-minor permit modification pursuant to RCSA §22a-174-2a(d)(4).

At least seven days before initiating an action specified in RCSA §22a-174-33(r)(2)(A), the Permittee shall notify the Administrator and the commissioner in writing of such intended action.

U. INFORMATION FOR NOTIFICATION [RCSA §22a-174-33(r)(2)(A)]

Written notification required under RCSA §22a-174-33(r)(2)(A) shall include a description of each change to be made, the date on which such change will occur, any change in emissions that may occur as a result of such change, any Title V permit terms and conditions that may be affected by such change, and any applicable requirement that would apply as a result of such change. The Permittee shall thereafter maintain a copy of such notice with the Title V permit. The commissioner and the Permittee shall each attach a copy of such notice to their copy of the Title V permit.

V. TRANSFERS [RCSA §22a-174-2a(g)]

No person other than the Permittee shall act or refrain from acting under the authority of this Title V permit unless such permit has been transferred to another person in accordance with RCSA §22a-174-2a(g).

The proposed transferor and transferee of a permit shall submit to the commissioner a request for a permit transfer on a form provided by the commissioner. A request for a permit transfer shall be accompanied by any fees required by any applicable provision of the general statutes or regulations adopted thereunder. The commissioner may also require the proposed transferee to submit with any such request, the information identified in CGS §22a-60.

W. REVOCATION [RCSA §22a-174-2a(h)]

The commissioner may revoke this Title V permit on his own initiative or on the request of the Permittee or any other person, in accordance with CGS §4-182(c), RCSA §22a-3a-5(d), and any other applicable law. Any such request shall be in writing and contain facts and reasons supporting the request. The Permittee requesting revocation of this Title V permit shall state the requested date of revocation and provide evidence satisfactory to the commissioner that the subject source is no longer a Title V source.

Pursuant to the Clean Air Act, the Administrator has the power to revoke this Title V permit. Pursuant to the Clean Air Act, the Administrator also has the power to reissue this Title V permit if the Administrator has determined that the commissioner failed to act in a timely manner on a permit renewal application.

This Title V permit may be modified, revoked, reopened, reissued, or suspended by the commissioner, or the Administrator in accordance with RCSA §22a-174-33(r), CGS §22a-174c, or RCSA §22a-3a-5(d).

Section VI: Title V Requirements

X. REOPENING FOR CAUSE [RCSA §22a-174-33(s)]

This Title V permit may be reopened by the commissioner, or the Administrator in accordance with RCSA §22a-174-33(s).

Y. CREDIBLE EVIDENCE

Notwithstanding any other provision of this Title V permit, for the purpose of determining compliance or establishing whether a Permittee has violated or is in violation of any permit condition, nothing in this Title V permit shall preclude the use, including the exclusive use, of any credible evidence or information.

Print for Compliance Certification or Enforcement

Click the button below to generate the appropriate checklist. Be aware that this macro does not work unless you have access to the DEEP D-Drive.

This macro takes anywhere from 2-5 minutes to run. Your computer will look like it is locked up but it is working. Unfortunately the new DEEP virtual computer system makes this process even slower. Please be patient.

Print Enforcement Checklist

Print Compliance Certification