



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

**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	107-0043-TV
Client/Sequence/Town/Premises Numbers	8856/0003/107/0005
Date Issued	December 20, 2022
Expiration Date	December 20, 2027

Corporation:

Montville Power LLC

Premises Location:

74 Lathrop Road, Uncasville, CT 06382

Name of Responsible Official and Title:

Greg Zis, Plant Manager

All the following attached pages, 2 through 50, are hereby incorporated by reference into this Title V permit.


_____ for
Katherine S. Dykes
Commissioner

December 20, 2022

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
ASC	Actual Stack Concentration
ASTM	American Society for Testing and Material
bhp	brake horse power
Btu	British Thermal Unit
CAM	Compliance Assurance Monitoring
CAIR	Clean Air Interstate Rule
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CGS	Connecticut General Statutes
CI	Compression Ignition
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
CO ₂	Carbon Dioxide
DERC	Discrete Emission Reduction Credit
EU	Emissions Unit
EPA	Environmental Protection Agency
ESP	Electrostatic Precipitator
^o F	Degrees Fahrenheit
FLER	Full Load Emission Rate
ft ³	Cubic Feet
gal	Gallons
GEU	Grouped Emissions Units
H ₂ SO ₄	Sulfuric Acid
HAP	Hazardous Air Pollutants
hr	Hour
lb	Pound
hp	Horsepower
ISO-NE	ISO – New England
kW	Kilowatt
MATS	Mercury and Air Toxics Standard
MMBtu	Million Btu
MW	Megawatt
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSR	New Source Review
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 microns
ppm	parts per million
QA/QC	Quality Assurance and Quality Control
RACT	Reasonable Available Control Technology
RCSA	Regulations of Connecticut State Agencies
RICE	Reciprocating Internal Combustion Engine

LIST OF ABBREVIATIONS/ACRONYMS, continued

<i>Abbreviation/Acronym</i>	<i>Description</i>
SIC	Standard Industrial Classification Code
SNCR	Selective Non-Catalytic Reduction
SO ₂	Sulfur Dioxide
SO _x	Sulfur Oxides
TA&O	Trading Agreement and Order
TBD	To Be Determined
TR	Transformer Rectifier
TSP	Total Suspended Particles
tpy	Tons per year
TSP	Total Suspended Particulate
ug/m ³	microgram per cubic meter
VOC	Volatile Organic Compound

Section I: Premises Information/Description

A. PREMISES INFORMATION

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

Facility Mailing Address: Montville Power LLC
74 Lathrop Road,
Montville, CT 06382

Telephone Number: (860) 848-9248

B. PREMISES DESCRIPTION

Montville Power LLC, is located on Lathrop Road in Uncasville, Connecticut. The station produces electricity for sale. The station consists of two steam electric generating boilers and two diesel generators for the production of electricity. Additional emissions units at the station include two auxiliary boilers for steam, and a diesel-fired fire pump. The total electrical output from the station is 488 megawatts (MW).

The steam electric generating boilers (Units 5 & 6) are Combustion Engineering (CE) tangentially fired boilers. They are located within the main power plant building.

Unit 5 (EU-1), Registration No. 107-0017-R, is rated at 905 million Btu/hr and is capable of producing 82 MW. Unit 5 can burn No. 6 oil and natural gas, on an interruptible basis. No. 2 oil is used for startup, shutdown and operational stabilization. It is equipped with an electrostatic precipitator for particulate emission control. Unit 5 is subject to Trading Agreement & Order No. 8365 (NO_x RACT), Consent Order No. 1887 (Opacity), Consent Order 8377 Mod 1 and RCSA §22a-174-22c (CAIR). In accordance with Consent Order 8377 Mod 1, the unit and may use any of 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)], and/or Urea Injection. Unit 5 is a Phase II Acid Rain Source and the CEM system has been certified in accordance with 40 CFR Part 75. Unit 5 is equipped with CEM for CO₂, NO_x, SO₂ and opacity for compliance verification.

Unit 6 (EU-2), Registration No. 107-0020-R, is rated at 4,658 million Btu/hr and is capable of producing 402 MW. Unit 6 burns No. 6 oil as the primary fuel and No. 2 oil is used for startup, shutdown and operational stabilization. Unit 6 is subject to Trading Agreement & Order No. 8365 (NO_x RACT), Consent Order No. 1887 (Opacity), Consent Order 8377 Mod 1 and RCSA §22a-174-22c (CAIR). In accordance with Consent Order 8377 Mod 1 the unit and may use any of 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)], and/or Urea Injection. Unit 6 is also a Phase II Acid Rain Source and its CEM system is also certified in accordance with 40 CFR Part 75. Unit 6 is equipped with CEM for CO₂, NO_x, SO₂ and opacity for compliance verification.

Units 5 and 6 are considered Electric Generating Units as defined by the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coal and Oil Fired Electric Utility Steam Generating Units [also known as Mercury and Air Toxics Standards (MATS)], 40 CFR Part 63 Subpart UUUUU, for power plants.

Section I: Premises Information/Description

Units 7 and 8 (EU-3 & EU-4), NSR Permit Nos. 107-0012 and 107-0013, are Foster Wheeler front-fired, dual fuel, auxiliary steam boilers. These units are used to provide steam for boiler warm-up. Both boilers are capable of burning No. 2 oil and natural gas. Since Montville Station is considered a major source of HAP emissions these units are subject to the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD. The boilers are operated under the *gas I* subcategory with an oxygen trim system to maintain the air-to-fuel ratio. Therefore, they do not have emission limitations, but only work practice standards under Subpart DDDDD. The units are also subject to the New Source Performance Standards (NSPS) for Industrial, Commercial, and Institutional Steam Generating Units 40 CFR Part 60 Subpart Dc.

Units 10 and 11 (EU-5 & EU-6), Registrations Nos. 107-0021-R and R107-0022-R, are EMD 2.75 MW diesel engines. These units are subject to Trading Agreement and Order No. 8366A and Consent Order No. 8377 Mod 1 for Alternative NOx RACT compliance. These units are located to the west of the main power plant building. These units are subject to collateral conditions in NSR Permit Nos. 107-0012 and 107-0013 that limits the annual amount of combined fuel use and the sulfur content of the fuel. These units are existing stationary diesel engines located at a major source of HAP emissions and are subject to the NESHAP for Reciprocating Internal Combustion Engines (RICE) 40 CFR Part 63 Subpart ZZZZ.

Emissions Unit 7 (EU-7) is a Cummins diesel fire pump for emergency situations. This engine is located to the east of the main power plant building. The unit burns No. 2 oil with a fuel sulfur content of 0.0015%, by weight. The pump is tested for 15 minutes on a monthly basis to assure proper operation. This unit is currently operating under the provisions of RCSA §22a-174-3b(e). EU-7 is considered an existing emergency engine of less than 500 hp pursuant to 40 CFR Part 63 Subpart ZZZZ.

The Montville Station may receive, store, and blend No. 6 oil with > 1.0% 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 given that Montville Power LLC complies with the terms and conditions listed for fuel blending in Section III.A.8.c.iii. of this Title V permit.

Section III: Applicable Requirements and Compliance Demonstration

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/Grouped Emissions Units	Emissions Unit Description	Control Unit Description	Permit, Order, Registration, or Regulation Number
EU-1	Unit 5: Combustion Engineering, Type R Dual fuel fired 905 MMBtu/hr, 82 MW electric utility steam boiler Installed 01/01/54	Electrostatic Precipitator Urea Injection Staged combustion Low NOx burners	Registration No. 107-0017-R TA&O No. 8365 Consent Order 8377 Mod 1 Consent Order No. 1887 40 CFR Part 63 Subpart UUUUU 40 CFR Parts 72-78, inclusive RCSA §22a-174-22c RCSA §22a-174-22e
EU-2	Unit 6: Combustion Engineering, Type RRP No. 6 oil fired 4,658 MMBtu/hr, 402 MW electric utility steam boiler Installed 01/01/71	Staged combustion Low NOx burners Urea Injection	Registration No. 107-0020-R TA&O No. 8365 Consent Order 8377 Mod 1 Consent Order No. 1887 40 CFR Part 63 Subpart UUUUU 40 CFR Parts 72-78, inclusive RCSA §22a-174-22c RCSA §22a-174-22e
EU-3	Unit 7: Dual fuel fired Foster Wheeler AG 560 auxiliary steam boiler Installed 04/01/91	None	Permit No. 107-0012 Consent Order 8377 Mod 1 40 CFR Part 63 Subpart DDDDD 40 CFR Part 60 Subpart Dc RCSA §22a-174-22e
EU-4	Unit 8: Dual fuel fired Foster Wheeler AG 560 auxiliary steam boiler Installed 01/01/91	None	Permit No. 107-0013 Consent Order 8377 Mod 1 40 CFR Part 63 Subpart DDDDD 40 CFR Part 60 Subpart Dc RCSA §22a-174-22e

Section III: Applicable Requirements and Compliance Demonstration

TABLE II.A: EMISSIONS UNIT DESCRIPTION			
Emissions Units/Grouped Emissions Units	Emissions Unit Description	Control Unit Description	Permit, Order, Registration, or Regulation Number
EU-5	Unit 10: EMD#20645 2.75 MW diesel generator Installed 01/01/167	Oxidation Catalyst	Registration No. 107-0021-R TA&O No. 8366A Consent Order 8377 Mod 1 40 CFR Part 63 Subpart ZZZZ RCSA §22a-174-22e Collateral conditions in P107-0012
EU-6	Unit 11; EMD#20645 2.75 MW diesel generator Installed 01/01/67	Oxidation Catalyst	Registration No. 107-0022-R TA&O No. 8366A Consent Order 8377 Mod 1 40 CFR Part 63 Subpart ZZZZ RCSA §22a-174-22e Collateral conditions in P107-0012
EU-7	Cummins #NT855F5 diesel emergency fire pump; Installed 12/01/89	None	RCSA §22a-174-3b(e) RCSA §22a-174-22e 40 CFR Part 63 Subpart ZZZZ
GEU-1	EU-1 and EU-2	None	See Above
GEU-2	EU-3 and EU-4	None	See above
GEU-3	EU-5 and EU-6	None	See above

B. OPERATING SCENARIO IDENTIFICATION

The Permittee shall be allowed to operate under the following Standard Operating Scenarios and Alternative Operating Scenarios without notifying the commissioner, provided that such operations are explicitly provided for and described in Table II.B. There are no alternate operating scenarios.

TABLE II.B: OPERATING SCENARIO IDENTIFICATION	
Emissions Units Associated with the Scenario	Description of Scenario
All Emissions Units	All emissions units 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): Two steam electric generating boilers: EU-1, Registration No. 107-0017-R and EU-2, Registration No. 107-0020-R; TA&O No. 8365; Consent Order No. 8377 Mod 1; Consent Order No. 1887; 40 CFR Part 63 Subpart UUUUU (MATS); 40 CFR Part 72-78, inclusive; RCSA §22a-174-22c (CAIR)

1. Nitrogen Oxides (NO_x) - RCSA §22a-174-22e

a. Limitation or Restriction

- i. Until May 31, 2023, NO_x emissions shall not exceed the following except as specified in Section III.A.2 of this Title V Permit:
 - (A) No. 6 Oil (Daily Block Average)
 - (1) Less than or equal to 0.25 lb/MMBtu [RCSA §22a-174-22e(d)(2)(A)]
 - (B) No. 2 Oil (Daily Block Average)
 - (1) Less than or equal to 0.20 lb/MMBtu [RCSA §22a-174-22e(d)(2)(A)]
 - (C) Natural Gas (Daily Block Average) (EU-1 Only)
 - (1) Less than or equal to 0.20 lb/MMBtu. [RCSA §22a-174-22e(d)(2)(A)]
 - (D) Ozone Season Average (5 month average)
 - (1) Less than or equal to 0.10 lb/MMBtu during the period from May 1 through September 30, inclusive (Gas and Other Oil Fired) [RCSA §22a-174-22e(d)(2)(B)]
 - (2) Less than or equal to 0.20 lb/MMBtu during the period from May 1 through September 30, inclusive (No. 6 Oil Fired) [RCSA §22a-174-22e(d)(2)(B)]
 - (E) Non-Ozone Season (7 month average)
 - (1) Less than or equal to 0.15 lb/MMBtu during the period October 1 through April 30, inclusive (All Fuels) [RCSA §22a-174-22e(d)(2)(B)]
- ii. On and After June 1, 2023, NO_x emissions for GEU-1 shall not exceed the following:
 - (A) No. 6 Oil (Daily Block Average)
 - (1) Less than or equal to 0.20 lb/MMBtu [RCSA §22a-174-22e(d)(2)(C)]
 - (B) No. 2 Oil (Daily Block Average)
 - (1) Less than or equal to 0.10 lb/MMBtu [RCSA §22a-174-22e(d)(2)(C)]
 - (C) Natural Gas (Daily Block Average) (EU-1 Only)
 - (1) Less than or equal to 0.10 lb/MMBtu [RCSA §22a-174-22e(d)(2)(C)]
 - (D) Non-Ozone Season Average (7 month average)
 - (1) Less than or equal to 0.15 lb/MMBtu during the period from October 1 through April 30, inclusive (All Fuels) [RCSA §22a-174-22e(d)(2)(D)]
- iii. NO_x Emissions Limits while combusting one or more fuels shall be determined in accordance with RCSA §22a-174-22e(d)(10). [RCSA §22a-174-22e(d)(10)]

Section III: Applicable Requirements and Compliance Demonstration

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(m). [RCSA §22a-174-22e(m)]
- iii. The Permittee shall calculate the ozone season emission rate as the sum of the emissions unit's NO_x emissions while firing the applicable fuel during the period from May 1 through September 30, inclusive, divided by the sum of the emission unit's heat input while firing the applicable fuel during the period from May 1 through September 30, inclusive. [RCSA §22a-174-22e(d)(20)]
- iv. The Permittee shall calculate the non-ozone season emission rate, for each unit in GEU-1, as the sum of the emissions unit's NO_x emissions during the period from October 1 through April 30, inclusive, divided by the sum of the emissions unit's heat input during the period from October 1 through April 30, inclusive. [RCSA §22a-174-22e(d)(19)]

c. Record Keeping Requirements

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

2. Alternate NO_x RACT Compliance: Trading Agreement and Order No. 8365

a. Limitation or Restriction

- i. The Permittee may use emissions trading, subject to the provisions of TA&O No. 8365 until the earlier of: [TA&O No. 8365, para. B.1]
 - (A) May 31, 2023;
 - (B) The commissioner issues written notice to the Permittee stating that the Permittee is no longer allowed to use emissions trading due to the Permittees' violation of any provision of TA&O No. 8365; or
 - (C) The commissioner issues written notice to the Permittee notifying the Permittee that the commissioner has determined the use of emissions trading as a compliance option has been further restricted, modified or nullified by:
 - (1) the promulgation of an Act, Statute, or Regulations; or
 - (2) the issuance of a judgment or court order.
- ii. The Permittee shall obtain and use sufficient DERCs in such a manner as to comply with paragraphs B.6 and B.8 of TA&O No. 8365. All DERCs used during the Ozone Season for the emissions units described in Table 1 of TA&O No. 8365, shall have been generated during an Ozone Season. [TA&O No. 8365, para. B.2]

Section III: Applicable Requirements and Compliance Demonstration

- iii. Daily DERC Use. On the first day of each calendar month, the Permittee shall possess a quantity of DERCs that equals or exceeds the quantity of Actual DERCs Required in that month. Compliance with Paragraph B.6 of TA&O No. 8365 shall be determined as follows: [TA&O No. 8365, para. B.6]
- (A) Before the first day of each month, the Permittee shall estimate DERCs required for such calendar month for each emission unit identified in Table 1 of TA&O No. 8365 as follows:
- Estimated DERCs Required =
- $$\{(Estimated\ fuel\ use\ in\ MMBtu) \times ((estimated\ 24\text{-hr}\ average\ NOx\ emission\ rate\ lb/MMBtu) - (0.95 \times AEL))\} \div 2000\ lb/ton$$
- (B) No later than the twentieth day of each month, the Permittee shall calculate actual DERCs used in the preceding calendar month for each emission unit described in Table 1 of TA&O No. 8365 as follows:
- Actual DERCs Required =
- $$\Sigma\{(Daily\ fuel\ use\ in\ MMBtu) \times ((actual\ 24\text{-hr}\ average\ emission\ rate\ lb/MMBtu) - (0.95 \times AEL))\} \div 2000\ lb/ton$$
- For all days in the month where actual 24-hr average emissions rate > AEL
- iv. Ozone Season DERC Use. In addition to the requirements of Paragraph B.6 of TA&O No. 8365, on the first day of each Ozone Season, the Permittee shall possess a quantity of DERCs that equals or exceeds the quantity of Ozone Season Actual DERCs Required for that Ozone Season. Compliance with Paragraph B.7 of TA&O No. 8365 shall be determined as follows: [TA&O No. 8365, para. B.7]
- (A) Before the first day of each Ozone Season, the Permittee shall estimate DERCs required for that Ozone Season for each emission unit described in Table 1 of TA&O No. 8365 as follows:
- Estimated Ozone Season DERCs Required =
- $$\{(Estimated\ Ozone\ Season\ fuel\ use\ in\ MMBtu) \times ((Estimated\ average\ NOx\ Emission\ Rate\ lb/MMBtu) - (0.95 \times ozone\ season\ average\ AEL))\} \div 2000\ lb/ton$$
- (B) No later than 30 days after the end of each Ozone Season, the Permittee shall calculate Actual Ozone Season DERCs used during that Ozone Season for each emission unit as follows:
- Actual Ozone Season DERCs Required =
- $$\{(Actual\ Ozone\ Season\ fuel\ use\ in\ MMBtu) \times ((Ozone\ Season\ Average\ Actual\ NOx\ Emission\ Rate\ lb/MMBtu) - (0.95 \times ozone\ season\ average\ AEL))\} \div 2000\ lb/ton - \Sigma(DERCs\ Required\ for\ all\ months\ of\ the\ Ozone\ Season\ calculated\ pursuant\ to\ Paragraph\ B.6\ of\ TA\&O\ No.\ 8365)$$
- v. Non-Ozone Season DERC Use. In addition to the requirements of Paragraphs B.6 and B.7 of TA&O No. 8365, on the first day of each Non-Ozone Season, the Permittee shall possess a quantity of DERCs that equals or exceeds the quantity of Non- Ozone Season Actual DERCs Required for that Non-Ozone Season. Compliance with Paragraph B.8 of TA&O No. 8365 shall be determined as follows: [TA&O No. 8365, para. B.8]
- (A) Before the first day of each Non-Ozone Season, the Permittee shall estimate DERCs required for that Non- Ozone Season for each emission unit described in Table 1 of TA&O No. 8365 based on an emission limit of 0.15 lb/MMBtu as follows:
- Estimated Non-Ozone Season DERCs Required =

Section III: Applicable Requirements and Compliance Demonstration

$\{(\text{Estimated Non-Ozone Season fuel use in MMBtu}) \times ((\text{Estimated average NOx Emission Rate lb/MMBtu}) - (0.95 \times 0.15 \text{ lb/MMBtu}))\} \div 2000 \text{ lb/ton}$

- (B) No later than 30 days after the end of each Non-Ozone Season, the Permittee shall calculate Actual Non-Ozone Season DERCs used during that Non-Ozone Season for each emission unit as follows:

Actual Non-Ozone Season DERCs Required =

$\{(\text{Actual Non-Ozone Season fuel use in MMBtu}) \times ((\text{Non-Ozone Season Average Actual NOx Emission Rate lb/MMBtu}) - (0.95 \times 0.15 \text{ lb/MMBtu}))\} \div 2000 \text{ lbs/ton} - \Sigma(\text{DERCs Required for all months of the Non-Ozone Season calculated pursuant to Paragraph B.6 of TA\&O No. 8365})$

- vi. Ozone Season DERC Generation. No later than 30 days after the end of the Ozone Season, the Permittee shall calculate actual DERCs generated during the Ozone Season from each emission unit described in Table 1 of TA&O No. 8365 as follows: [TA&O No. 8365, para. B.9]

Actual Ozone Season DERCs Generated =

$\{\text{Ozone Season fuel use (MMBtu)} \times [(\text{Ozone Season average AEL}) - \text{Ozone Season average emission rate (lb/MMBtu)}]\} \div 2000 \text{ lb/ton}$

Where Ozone Season fuel use and Ozone Season Average Emission rate shall exclude missing data substituted in accordance with any missing data substitution procedures, including those allowed under RCSA §22a-174-22c and 40 CFR Part 75.

- vii. Non-Ozone Season DERC Generation. No later than 30 days after the end of the Non-Ozone Season, the Permittee shall calculate actual DERCs generated during the Non-Ozone Season from each emission unit described in Table 1 of TA&O No. 8365 as follows: [TA&O No. 8365, para. B.10]

Actual Non-Ozone Season DERCs Generated =

$\{\text{Non-Ozone Season fuel use (MMBtu)} \times [(0.15 \text{ lb/MMBtu}) - \text{Non-Ozone Season average emission rate (lb/MMBtu)}]\} \div 2000 \text{ lb/ton}$

Where:

Non-Ozone Season Average Emission Rate < 0.15 lb/MMBtu; and

Where Non-Ozone Season fuel use and Non-Ozone Season Average Emission rate shall exclude missing data substituted in accordance with any missing data substitution procedures, including those allowed under RCSA §22a-174-22c and 40 CFR Part 75.

- vii. The Permittee shall retire ten percent of all DERCs (tons) generated by the emission units identified in Table 1 of TA&O No. 8365, prior to use, and shall deduct them from any calculations of DERCs available and possessed by the Permittee to assure a benefit to the environment.

[TA&O No. 8365, para. B.11]

- ix. On or before January 31 of each calendar year, the Permittee shall deduct a quantity of DERCs from the current balance of DERCs possessed by the Permittee such that the total is equal to the sum of (Actual DERCs Required determined pursuant to Paragraphs B.6 and B.7 of TA&O No. 8365 for the preceding calendar year) – 0.9*(Actual DERCs Generated determined pursuant to Paragraph B.9 of TA&O No. 8365 in the preceding calendar year) for all emissions units. [TA&O No. 8365, para. B.12]

Section III: Applicable Requirements and Compliance Demonstration

- x. Not more than 90 days after the completion of the Non-Ozone Season, the Permittee shall deduct a quantity of DERCS from the current balance of DERCS possessed by the Permittee such that the total is equal to 0 or the total of (Actual Non-Ozone Season DERCS Required for the most recently completed Non-Ozone Season) – 0.9*(Actual Non-Ozone Season DERCS Generated in the most recently completed Non-Ozone Season) for all emissions units described in Table 1 of TA&O No. 8365, whichever is greater. [TA&O No. 8365, para. B.13]
- xi. Vintage Restriction. For the purposes of compliance with RCSA §22a-174-22e and the provisions of TA&O No. 8365, DERCS shall only remain valid for five calendar years from the year of the generation of such DERCS. DERCS older than five calendar years from their creation are not valid for use for compliance with RCSA §22a-174-22e and the provisions of TA&O No. 8365. Ozone Season DERCS generated by an Affected Unit during 2013 shall remain valid until December 31, 2018. [TA&O No. 8365, para. B.3]
- xii. Ozone Season Fuel Use Restriction. Notwithstanding the provisions of Paragraph B.2 of TA&O No. 8365, when operating the emission units during the Ozone Season, the Permittee shall operate those units while firing or co-firing the lowest NOx emitting fuel type or combination of fuel types that the units are authorized to burn in accordance with Departmental permit, registration, or applicable regulation. [TA&O No. 8365, para. B.4]
- xiii. Notwithstanding Paragraph B.4 of TA&O No. 8365, during the Ozone Season, the Permittee may operate the emission units described above on fuels that result in higher emissions of NOx, if either:
 - (A) the availability of fuel oil that complies with Paragraph B.4 of TA&O No. 8365 is inadequate to meet the needs of residential, commercial and industrial users in this state and that such inadequate supply constitutes an emergency; or
 - (B) the supply of gaseous fuels to the emission units is interrupted due to inadequate supply or in accordance with an interruptible supply agreement between the Permittee and the gaseous fuel supplier; or
 - (C) the unit is operating in order to conduct testing required by any governmental agency or auditing/testing required to demonstrate the ability to satisfy commitments made to ISO-NE in the Forward Capacity and/or Locational Forward Reserve Markets.

b. *Monitoring Requirements*

Maintenance and Tune-Up. Not more than one year from the date of issuance of TA&O No. 8365, the Permittee shall perform maintenance and inspection of each emissions unit described in Table 1 of TA&O No. 8365. Such maintenance and inspection shall include, but not be limited to, the following:
[TA&O No. 8365, para. B.14]

- i. Inspect the combustion system, and clean or replace any components of the combustion system as necessary, in accordance with manufacturer's specification or current good engineering practice;
- ii. Inspect the system controlling the air-to-fuel ratio, and ensure that it is calibrated and functioning in accordance with the manufacturer's specifications or current good engineering practice; and
- iii. Measure the operating parameters of the emission unit used to determine that the emission unit is operating in accordance with manufacturer's specification or current good engineering practice prior to and after any adjustments are made during maintenance, tune-up, or inspection activity.

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c. Record Keeping Requirements

- i. The Permittee shall make and keep records including, but not limited to, the following:
[TA&O No. 8365, para. B.14.d]
 - (A) Demonstration that any maintenance, tune-up, and/or inspection activity performed on the emission units described in Table 1 of TA&O No. 8365 in accordance with Paragraph B.14 of TA&O No. 8365 has been performed in accordance with the manufacturer's specifications or current good engineering practice;
 - (B) The date and a description of any maintenance, tune-up, and/or inspection activity performed on the emission units described in Table 1 of TA&O No. 8365 in accordance with Paragraph B.14 of TA&O No. 8365;
 - (C) The name, title and affiliation of the person conducting any maintenance, tune-up, and/or inspection activity performed on the emission units described in Table 1 of TA&O No. 8365 in accordance with Paragraph B.14 of TA&O No. 8365; and
 - (D) The operating parameters of the emission unit used to determine that the emission unit is operating in accordance with manufacturer's specification or current good engineering practice prior to and after any adjustments are made during maintenance, tune-up, or inspection activity performed in accordance with Paragraph B.14 of TA&O No. 8365.
- ii. By the close of each calendar day, the Permittee shall record the actual 24-hour average NOx emission rate for any emission unit equipped with an approved CEM, 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 fuel used on the preceding day in an emission unit described in TA&O No. 8365. [TA&O No. 8365, para. B.15.a]
- iii. On or before the first day of each calendar month, the Permittee shall record the number of DERCs and corresponding serial numbers and vintages for all DERCs in its possession on the first calendar day of that calendar month. [TA&O No. 8365, para. B.15.b]
- iv. On or before the first day of each calendar month, the Permittee shall record the number of DERCs and corresponding serial numbers, vintages, purchase/sales dates, and seller/buyer for all DERCs purchased or sold during the proceeding calendar month.
[TA&O No. 8365, para. B.15.c]
- v. On or before the first day of each calendar month, the Permittee shall record the Estimated DERCs Required for that calendar month determined in accordance with Paragraph B.6 of TA&O No. 8365. [TA&O No. 8365, para. B.15.d]
- vi. On or before the twentieth calendar day of each calendar month, the Permittee shall record the Actual DERCs Required for the preceding calendar month determined in accordance with Paragraph B.6 of TA&O No. 8365. [TA&O No. 8365, para. B.15.e]
- vii. On or before January 31 of each calendar year, the Permittee shall record the Ozone Season Average NOx emission rate for all emissions units described in Table 1 of TA&O No. 8365, the Actual DERCs Generated for the preceding ozone season determined in accordance with Paragraph B.9 of TA&O No. 8365 and the DERCs retired for environmental benefit in accordance with Paragraph B.11 of TA&O No. 8365. [TA&O No. 8365, para. B.15.f]
- viii. On or before January 31 of each calendar year, the Permittee shall record the quantity of DERCs possessed on the first day of the Ozone Season and the quantity of DERCs deducted in accordance with Paragraphs B.6 and B.7 of TA&O No. 8365. Such records shall include

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the serial number and vintage of each DERC deducted from the Permittees' current balance pursuant to Paragraphs B.6 and B.7 of TA&O No. 8365. [TA&O No. 8365, para. B.15.g]

- ix. Not more than 90 days after the completion of each Non-Ozone Season, the Permittee shall record the Non-Ozone Season Average NOx emission rate for all emissions units described in Table 1 of TA&O No. 8365, the quantity of DERCs generated during the Non-Ozone Season in accordance with Paragraph B.10 of TA&O No. 8365, and the quantity of DERCs generated during the Non-Ozone Season and retired for environmental benefit in accordance with Paragraph B.11 of TA&O No. 8365. [TA&O No. 8365, para. B.15.h]
- x. Not more than 90 days after the completion of each Non-Ozone Season, the Permittee shall record the quantity of DERCs possessed on the first day of the Non-Ozone Season, and the quantity of DERCs deducted in accordance with Paragraph B.13 of TA&O No. 8365. Such records shall include the serial number and vintage of each DERC deducted from the Permittees' current balance pursuant to Paragraphs B.6 and B.8 of TA&O No. 8365. [TA&O No. 8365, para. B.15.i]
- xi. For each month of the Ozone Season, the Permittee shall maintain records attesting to the fact that any DERCs deducted from its balance in accordance with Paragraph B.12 of TA&O No. 8365 satisfy the requirements of Paragraph B.2. of TA&O No. 8365. Generator certification of this fact shall be sufficient. [TA&O No. 8365, para. B.15.j]
- xii. On each day during the Ozone Season that the Permittee operates in accordance with Paragraph B.5 of TA&O No. 8365, the Permittee shall make and keep records of all emission unit operation in accordance with Paragraph B.5 of TA&O No. 8365, including copies of any written correspondence from the Permittees' fuel supplier detailing the duration and circumstances of the inadequate fuel oil supply or interruption of gaseous fuel supply to the emission units. [TA&O No. 8365, para. B.15.k]
- xiii. The Permittee shall retain records and supporting documentation required by TA&O No. 8365 for a minimum of five years, commencing on the date such records were created. Respondents shall provide the records specified above to the commissioner within 30 days of receipt of a written request from the commissioner. All records shall be maintained in accordance with RCSA §§22a-174-4 and 22a-174-22e. [TA&O No. 8365, para. B.16]

d. Reporting Requirements

No later than March 1 of every year after issuance of TA&O No. 8365, the Permittee shall submit to the commissioner a written report containing copies of all of the records required pursuant to Paragraphs B.15.a through B.15.g, B.15.j and B.15.k of TA&O No. 8365. Not later than July 30 of each calendar year, the Permittee shall submit a written report containing copies of all records required pursuant to Paragraphs B.15.h and B.15.i of TA&O No. 8365. The commissioner may prescribe the forms to be used for the submission of these reports. The Permittee shall submit these reports on such forms, if prescribed by the commissioner. [TA&O No. 8365, para. B.17]

3. Case-by-Case NOx RACT Requirements - Consent Order No. 8377 Mod 1

a. Limitation or Restriction

- i. The Permittee shall install NOx emissions controls on EU-1 by January 1, 2020 and EU-2 by January 1, 2021. Following the installation and tuning of the NOx emissions control system on the boilers in GEU-1, the Permittee shall operate the boilers in compliance with the applicable Phase 2 emissions limits specified in RCSA §22a-174-22e(d)(2)(C). [CO No. 8377 Mod 1, para. C.4]
- ii. Optimization of NOx Emission Controls.

(A) After initial start-up following the installation of NOx emissions controls, the commissioner

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will allow the Permittee to operate EU-1 for a period of 360 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 Mod 1, para. C.5]

- (B) After initial start-up following the installation of NOx emissions controls, the commissioner will allow the Permittee to operate EU-2 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 Mod 1, para. C.5]
- iii. Baseline Emissions Analysis. If the commissioner requires that any boiler in GEU-1 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 Mod 1, para. C.6]
- iv. If the Permittee exceeds the RCSA §22a-174-22e(d)(2)(C) emissions limits during the NOx RACT Phase 1 period, the Permittee shall retire DERCs in accordance with TA&O No. 8365, with the additional stipulation that the Phase 2 emissions limits specified in RCSA §22a-174-22e(d)(2)(C) will be used for DERC retirement calculations. [CO No. 8377 Mod 1, para. C.7]
- v. Notwithstanding Sections III.3.a.i through iv. of this Title V permit, during the Phase 1 period when the Independent Systems Operator of New England (ISO-NE) declares an actual deficiency of operating reserves requiring implementation of Actions 4, 5, 6, 7, 8 or 9 of Operating Procedure No. 4 – Actions During a Capacity Deficiency (OP-4) or an emergency under Operating Procedure No. 7 – Actions in an Emergency (OP-7) and ISO-NE dispatches the boilers in GEU-1, the Permittee may, for the dispatch of the boilers in GEU-1, comply with CO No. 8377 Mod 1 by retiring DERC's in accordance with TA&O No. 8365, with the additional stipulations that the Permittee use the Phase 2 emissions limits specified in RCSA §22a-174-22e(d)(2)(C) in the DERC retirement calculations and retire twice the number of DERC's as required under TA&O No. 8365. The Permittee shall operate available NOx emissions controls during such operations except during periods of startup and shutdown. [CO No. 8377 Mod 1, para. C.8]
- vi. 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 Mod 1, para. C.9]
- vii. The Permittee shall retire prior to use all DERCs generated on and after January 1, 2020 by each boiler in GEU-1 pursuant to TA&O No. 8365 and shall deduct such DERCs from any calculations of DERCs available and possessed by the Permittee in lieu of retiring ten (10) percent of all DERC's generated by each boiler in GEU-1 as required by Paragraph B.11 of TA&O No. 8365.
[CO No. 8377 Mod 1, para. C.13]
- 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 Mod 1, para. C.10.b]
- ii. The Permittee shall provide the records required by Section III.A.3.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 Mod 1, para. C.10.e]
- iii. No later than March 1 of every year, the Permittee shall submit to the commissioner a written report

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containing copies of all records required by Section III.A.3.b.i. of this Title V permit.

[CO No. 8377 Mod 1, para. C.10.f]

4. CAIR: NO_x Ozone Season Trading

GEU-1 are CAIR NO_x Ozone season units and therefore are subject to RSCA §22a-174-22c. The units shall comply with all applicable requirements stated in RSCA §22a-174-22c and the standard requirements of the CAIR permit application.

5. Particulate Matter (PM)

a. Limitation or Restriction

i. PM emissions shall be less than or equal to:

(A) 0.14 lb/MMBtu when operating on No. 6 oil [RSCA §22a-174-18(e)(2)(A)]

(B) 0.12 lb/MMBtu when operating on No. 2 oil [RSCA §22a-174-18(e)(2)(B)]

(C) 0.10 lb/MMBtu when operating on natural gas (EU-1 Only) [RSCA §22a-174-18(e)(2)(C)]

b. Monitoring Requirements

Record keeping specified in Section III.A.5.c. of this Title V permit shall be sufficient to meet other Monitoring and Testing Requirements pursuant to RSCA §22a-174-33. [RSCA §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.5.a. of this Title V permit. [RSCA §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. [RSCA §22a-174-33(j)(1)(X)]

6. Compliance Assurance Monitoring (CAM) Plan for EU-1 Only. [40 CFR Part 64] Hammon Research Cottrell Electrostatic Precipitator (ESP) Power Monitoring

a. CAM Plan Justification

The justification for using the proposed CAM approach is based upon the principle that adequate power must be applied to the ESP in order to develop the electrically charged field that drives the collection of particulate matter (PM) as it passes through the various fields. As power gets up to moderate to high levels, the relationship between power and performance becomes relatively "flat". This break point for EU-1 is 27 kW secondary power.

b. Operational Restrictions

i. The total combined power input (in kilowatts) to all fields of the ESP system, for any hour when the emissions unit is in operation at 60 MW (Gross) or more, shall be no less than 27 secondary kilowatts.

ii. During periods when the boiler is at reduced load 0-70%, power deviations will not be noted.

iii. A CAM excursion will occur if the total combined power is found to be less than 27 secondary kilowatts and the emissions unit is operational at 60 MW (gross) or more. A CAM excursion for the COMS will occur if opacity levels exceed the limitations in Section III.A.7.a.i.(B) of this Title V permit. Under these conditions the Permittee shall:

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- (A) Note that there is a problem,
- (B) Take necessary corrective actions to restore normal operation, and
- (C) Submit required reports pursuant to 40 CFR §64.9; and
- (D) Submit any 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.

c. Monitoring and Record Keeping Requirements

- i. The Permittee shall monitor and record the following on an hourly basis, except for opacity, during any operation of the boiler/ESP:
 - (A) The secondary kilowatts for each TR set in the ESP system;
 - (B) The total power in secondary kilowatts to the ESP system for each hour (add together the power for all the TR sets operating at the time of the reading);
 - (C) Load in MW (Gross)
- ii. The Permittee shall continuously monitor the opacity of the stack exhaust with a continuous opacity monitoring system (COMS). Opacity data shall be monitored and recorded continuously with the COMS.
- iii. Quality Assurance and Quality Control (QA/QC):

In addition, the Permittee shall conduct the following monitoring and record keeping activities:

- (A) Daily inspections and monitoring of the ESP system to assure proper operation of the system include, testing alarms, making visual inspections of the critical components such as the rappers and particulate removal equipment to assure proper operation.
- (B) Hourly transformer-rectifier electrical readings will be recorded when the system is operating. The operator will check the recorded data, and compare the data with past data under similar operating conditions, looking for changes that signal developing problems in the ESP.
- (C) A weekly inspection of the rapper system, seal air system, and air filter condition will be conducted to assure these components are operating correctly, and the ESP is operating as designed.
- (D) Outage Inspections – The following inspections will be conducted during each outage to assess the operation of the ESP in time. The particulate deposits on the discharge and collecting electrodes will be measured for comparison with past and future inspections. Rapper rod insulators, support bushing insulators, lower stabilizer insulators, gas distribution plates, the hopper trough, ash clinkers, access doors, shell seams, and alignment between collecting plates and discharge electrodes will be inspected to assure that each component is in good condition and operating correctly. All abnormalities or equipment failures will be recorded whether recorded during the outage or not. These records will be useful in identifying possible patterns of repetitive component failures and will be the basis for future outage inspections.
- (E) A semi-annual inspection of the ESP and auxiliaries will be conducted to assess the general overall condition. The inspection will include a visual assessment of the condition of the pipes, guards, wires and plates. Pressure switches and flow switches will be checked for calibration. Alarms associated with rappers, transformer-rectifier controls and other equipment with alarm outputs will be simulated and tested for proper operation. Electrical safety interlocks (Transformer-Rectifier Shutdown) used in the system will be tested for proper operation.

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- (F) An annual inspection of the ESP will be conducted to assess the general overall condition. The inspection will include visual assessment of the condition of the pipes, guards, wires and plates. In addition, a Megger meter will be used on the wiring system to check for faults, at which time all readings and results will be recorded.
- (G) In the event the semi-annual and/or annual ESP inspections cannot be conducted on the scheduled date due to plant operations, the permittee shall conduct these inspections with 30 calendar days after the date the unit is released for shutdown by ISO-NE.

7. Opacity

a. Limitation or Restriction

- i. GEU-1 shall comply with Consent Order No. 1887 at all times:
 - (A) Data from the opacity CEMS must be available for no less than 95% of the operating time of the unit being monitored. [Consent Order No. 1887, Section A.4]
 - (B) Opacity shall be less than or equal to:
 - (1) 20% during any six-minute block average
[RCSA §22a-174-18(b)(2)(A); Consent Order No. 1887, Section A.6.a]
 - (2) 40% during any one-minute block average
[RCSA §22a-174-18(b)(2)(b); Consent Order No. 1887, Section A.6.b]
 - (C) Pursuant to RCSA §22a-174-18(j), the Permittee shall not be subject to the emissions standards found in Section III.A.7.a.i.(B) of this Title V permit during a period of startup, shutdown or malfunction, commissioner approved stack testing, or intentional soot blowing, fuel switching or sudden load changing done in accordance with good engineering practices provided that:
 - (1) The Permittee is required by permit, order or regulation to install, operate and maintain opacity CEMS equipment at such stationary source, and the Permittee is in compliance with such permit, order or regulation with regard to such opacity CEMS equipment;
[RCSA §22a-174-18(j)(1)(A); Consent Order No. 1887, Section A.7.a]
 - (2) The Permittee operates and maintains such installed opacity CEMS equipment in compliance with the requirements of 40 CFR Part 60, Appendices B and F.
[Consent Order No. 1887, Section A.7.b]
 - (3) The period of exception from the visible emissions standards of RCSA §22a-174-18(b)(2) does not exceed one-half of one percent (0.5%) of the total operating hours of such stationary source during any calendar quarter; and
[RCSA §22a-174-18(j)(1)(B); Consent Order No. 1887, Section A.7.c]
 - (4) The Permittee does not cause or allow visible emissions in excess of 60% opacity during any six-minute block average of the period of exception from the visible emissions standards of RCSA §22a-174-18(b)(2).
[RCSA §22a-174-18(j)(1)(C); Consent Order No. 1887, Section A.7.d]

b. Monitoring Requirements

The Permittee shall operate two opacity continuous emissions monitoring systems (“CEMS”) to monitor and record the opacity of visible emissions. [Consent Order No. 1887, Section A.3]

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c. Record Keeping Requirements

The Permittee shall make and keep records of the dates and times of all opacity exceedances including the operating conditions at the time of the exceedance using the CEMS. [RCSA §22a-174-33(j)(1)(K)(ii)]

d. Reporting Requirements

- i. Each calendar quarter, the Permittee shall submit the following information to the commissioner:
 - (A) Quarterly reports summarizing the data recorded by the opacity CEMS and the operating time of the opacity CEMS versus the operating time of EU-1 and EU-2.
[Consent Order No. 1887, Section A.5]
 - (B) 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 Consent Order No. 1887. Such report shall include, at least, the following: [Consent Order No. 1887, Section B.6]
 - (1) A list of approved corrective actions completed during the quarter in accordance with Paragraph B.4 of Consent Order No. 1887.
 - (2) 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).
 - (C) The data obtained through the opacity CEMS equipment during the preceding calendar quarter that is required to determine compliance with an emission limitation or standard;
[RCSA §22a-174-4(d)(4)(A)]
 - (D) A summary of such data in Section III.A.7.d.i.(C) of this Title V permit;
[RCSA §22a-174-4(d)(4)(B)]
 - (E) A copy of the quality assurance audit conducted for that calendar quarter; and
[RCSA §22a-174-4(d)(4)(C)]
 - (F) A summary of all corrective actions taken in response to a failed CEMS equipment audit.
[RCSA §22a-174-4(d)(4)(D)]
- ii. Submissions made to comply with RCSA §22a-174-4(d)(4) shall be made no later than 30 days following the end of each calendar quarter. [RCSA §22a-174-4(d)(5)]

8. SO₂: RCSA §22a-174-19a

a. Limitation or Restriction

- i. The Permittee shall: [RCSA §22a-174-19a(e)]
 - (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.

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b. Monitoring Requirements

The Permittee shall maintain and operate CEMS to monitor SO₂ emissions from this source. [RCSA §22a-174-19a(i)(2)(A)]

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)]

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)]

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

a. Limitation or Restriction

- i. The Permittee shall comply with the applicable requirements found in 40 CFR §63.10000.
- ii. The Permittee shall comply with the applicable fuel use requirements during periods of startup or shutdown found in 40 CFR §63.10011(f).
- iii. The Permittee shall conduct tune-ups on GEU-1 pursuant to 40 CFR §63.10021(e).
[40 CFR §63.9991(a)(1); 40 CFR Part 63 Subpart UUUUU, Table 3, Item 1]

b. Monitoring Requirements

The Permittee shall comply with the applicable monitoring requirements found in 40 CFR §63.10020(e).

c. Record Keeping Requirements

The Permittee shall keep all applicable records in accordance with 40 CFR §63.10032.

d. Reporting Requirements

- i. The Permittee shall submit all applicable notifications, reports and records pursuant to 40 CFR §63.10030.
- ii. The Permittee shall submit all applicable compliance reports pursuant to 40 CFR §63.10031(c).

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10. Baseline Annual Emissions Analysis

a. Limitation or Restriction

- i. The representative actual annual emissions of PM_{2.5}, PM₁₀, SO₂, NO_x, VOC, CO, and Pb shall not exceed 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 each unit of GEU-1, based on the following startup dates:

(A) Unit 5 (EU-1): February 6, 2020 [Combustion Modification and Urea Injection]

(B) Unit 6 (EU-2):

(1) Combustion Modification Equipment: February, 16, 2022

(2) Urea Injection: TBD – Not currently installed

b. Monitoring and Testing Requirements

- i. The Permittee shall conduct emissions testing on each unit of GEU-1 for PM_{2.5}, PM₁₀, and ammonia with and without the urea injection in operation (if applicable), for natural gas and No. 6 Oil. Emissions testing shall be conducted for each fuel within 240 operating hours on such fuel. Such testing timeframe shall begin with the initial startup of the urea injection control system.

[RCSA §22a-174-33(j)(1)(K)(ii)]

- ii. Emissions testing for CO shall be required for EU-2 (Unit 6) within 240 operating hours of the initial startup of the combustion modification equipment. [RCSA §22a-174-33(j)(1)(K)(ii)]

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 GEU-1. 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. [RCSA §22a-174-33(j)(1)(K)]

c. 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. [RCSA §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 each unit of GEU-1. 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 [40 CFR §51.165(a)(1)(xii)(E)]

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B. GROUPED EMISSIONS UNIT 2 (GEU-2) – Two dual fuel, fuel oil and natural gas, fired Foster Wheeler Auxiliary Steam Boilers, Permit Nos. 107-0012 and 107-0013; NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD. The boilers are operated under the *gas 1* subcategory with an oxygen trim system to maintain the air-to-fuel ratio. NSPS for Industrial, Commercial, and Institutional Steam Generating Units 40 CFR Part 60 Subpart Dc

1. Allowable Fuel Use

a. Limitation or Restriction

All fuel firing rates, hourly limits are per individual boiler and all annual limits are combined limits for EU-3 and EU-4. [P107-0012 & P107-0013]

i. Maximum Firing Rate:

(A) 586 gal/hr (Oil) [P107-0012 & P107-0013]

(B) 88,350 ft³/hr (Gas) [P107-0012 & P107-0013]

ii. Maximum Heat Input (MMBtu/hr):

(A) 85 (Oil) [P107-0012 & P107-0013]

(B) 91 (Gas) [P107-0012 & P107-0013]

iii. Maximum Fuel Oil Sulfur Content (% by weight, dry basis): 0.0015

[RCSA §22a-174-19b(d)]

iv. Maximum Annual Fuel Consumption over any consecutive 12 month period:

(A) 550,000,000 ft³ (Gas) [P107-0012 & P107-0013]

(B) 1,815,000 gal (Oil) [P107-0012 & P107-0013]

(C) Fuel consumption for GEU-2 shall be in accordance with the following equation:

[P107-0012 & P107-0013]

$$[(5.15E-08 * \text{Fuel}_{\text{gas}}) + (1.45E-05 * \text{Fuel}_{\text{oil}})] \leq 28.3 \text{ TPY of NOx}$$

Where: Fuel_{gas} = cubic feet of gas combusted in a consecutive 12 month period

Fuel_{oil} = gallons of oil combusted in a consecutive 12 month period

5.15E-08 = gas conversion constant based on 1030 BTU/ft³,
0.1 lbs NOx/MMBtu, and 2000 lbs/ton

1.45E-05 = oil conversion constant based on 145,000 BTU/gallon,
0.2 lbs NOx/MMBtu, and 2000 lbs/ton

b. Monitoring Requirements

The Permittee shall use a non-resettable fuel metering device to continuously monitor fuel use for each boiler in GEU-2. [P107-0012 & P107-0013; RCSA §22a-174-33(j)(1)(K)(ii)]

c. Record Keeping Requirements

i. The Permittee shall record monthly and annual operating hours and fuel consumption for each fuel combusted. Annual fuel consumption shall be based on any consecutive 12 month time period and shall be determined by adding the current month's fuel usage to that of the previous 11 months. These calculations shall be made on a monthly basis and made available for inspection by the Bureau upon request. [P107-0012 & P107-0013]

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- ii. Each oil fuel shipment for this equipment shall include a shipping receipt from the fuel supplier and a certification from the fuel supplier certifying the type of fuel in the shipment and the weight percent of sulfur in the fuel. The shipping receipt and/or certification shall include the name of the oil supplier, the sulfur content of the oil and the method used to determine the sulfur content of the oil. Each shipping receipt and certification shall be kept on site and available for inspection by the Bureau upon request. [P107-0012 & P107-0013]

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 natural gas emission limits for each boiler (lb/hr):
 - (A) TSP: 0.455 [P107-0012 & P107-0013]
 - (B) NO_x: 9.1 [P107-0012 & P107-0013]
 - (C) SO_x: 0.055 [P107-0012 & P107-0013]
 - (D) VOC: 0.51 [P107-0012 & P107-0013]
 - (E) CO: 3.095 [P107-0012 & P107-0013]
- ii. The Permittee shall not exceed the following natural gas emission limits for each boiler (lb/MMBtu):
 - (A) TSP: 0.005 [P107-0012 & P107-0013]
 - (B) NO_x: 0.10 [P107-0012 & P107-0013]
 - (1) Until May 31, 2023, NO_x emissions shall not exceed the following:
 - (a) 0.20 (Daily Block Average) [RCSA§22a-174-22e(d)(3)(A)]
 - (2) On and after June 1, 2023, NO_x emissions shall not exceed the following:
 - (a) 0.05 (Daily Block Average) [RCSA§22a-174-22e(d)(3)(C)]
 - (C) SO_x: 0.0006 [P107-0012 & P107-0013]
 - (D) VOC: 0.0056 [P107-0012 & P107-0013]
 - (E) CO: 0.034 [P107-0012 & P107-0013]
- iii. The Permittee shall not exceed the following oil emission limits for each boiler (lb/hr):
 - (A) TSP: 1.190 [P107-0012 & P107-0013]
 - (B) PM₁₀: 0.595 [P107-0012 & P107-0013]
 - (C) NO_x: 17.0 [P107-0012 & P107-0013]
 - (D) SO_x: 4.675 [P107-0012 & P107-0013]
 - (E) VOC: 0.085 [P107-0012 & P107-0013]
 - (F) CO: 2.890 [P107-0012 & P107-0013]
 - (G) Lead: 7.03E-04 [P107-0012 & P107-0013]

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- iv. The Permittee shall not exceed the following oil emission limits for each boiler (lb/MMBtu):
 - (A) TSP: 0.014 [P107-0012 & P107-0013]
 - (B) PM₁₀: 0.007 [P107-0012 & P107-0013]
 - (C) NO_x: 0.20 [P107-0012 & P107-0013]
 - (1) Until May 31, 2023, NO_x emissions shall not exceed the following:
 - (a) 0.20 (Daily Block Average) [RCSA§22a-174-22e(d)(3)(A)]
 - (2) On and after June 1, 2023, NO_x emissions shall not exceed the following:
 - (a) 0.10 (Daily Block Average) [RCSA§22a-174-22e(d)(3)(C)]
 - (D) SO_x: 0.055 [P107-0012 & P107-0013]
 - (E) VOC: 0.001 [P107-0012 & P107-0013]
 - (F) CO: 0.034 [P107-0012 & P107-0013]
 - (G) Lead: 8.27E-06 [P107-0012 & P107-0013]
- v. The Permittee shall not exceed the following sulfuric acid emission limits for each boiler:
 - (A) 0.085 lb/hr [P107-0012 & P107-0013]
 - (B) 0.001 lb/MMBtu [P107-0012 & P107-0013]
 - (C) 451.15 ug/m³ (ASC) [P107-0012 & P107-0013]
- vi. The Permittee shall not exceed the following annual emissions limits for EU-3 and EU-4 combined (tpy):
 - (A) TSP: 3.69 [P107-0012 & P107-0013]
 - (B) PM₁₀: 2.83 [P107-0012 & P107-0013]
 - (C) NO_x: 56.6 [P107-0012 & P107-0013]
 - (D) SO_x: 14.9 [P107-0012 & P107-0013]
 - (E) VOC: 3.17 [P107-0012 & P107-0013]
 - (F) CO: 19.24 [P107-0012 & P107-0013]
 - (G) Lead: 0.005 [P107-0012 & P107-0013]
 - (H) H₂SO₄: 0.263 [P107-0012 & P107-0013]

b. Monitoring and Testing Requirements

- i. The Permittee shall conduct NO_x emission testing of GEU-2 in accordance with RCSA §22a-174-22e(l)(1).
- ii. For all other pollutants, the record keeping specified in Section III.B.2.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 comply with the applicable record keeping requirements specified in RCSA §22a-174-22e(j) for NO_x emissions.

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- ii. The Permittee shall calculate and record the monthly and consecutive 12 month TSP, PM₁₀, SO_x, NO_x, VOC, CO, Pb, and H₂SO₄ emissions in units of tons for each unit of GEU-2 and combined. 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.

[RSCA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

- i. The Permittee shall comply with the applicable reporting requirements specified in RSCA §22a-174-22e(k) for NO_x emissions.
- 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. [RSCA §22a-174-33(j)(1)(X)]

3. Opacity

a. Limitation or Restriction

- i. Visible emissions shall not exceed 20% opacity during any six-minute block average, except during startup, shutdown, or malfunction, as measured by 40 CFR Part 60, Appendix A, Reference Method 9 [P107-0012 & 107-0013; RSCA §22a-174-18(b)(1)(A); 40 CFR §60.43c(c)]

b. Monitoring and Testing Requirements

The Permittee shall conduct opacity testing on a recurring basis as required in 40 CFR §60.47c.

c. Record Keeping Requirements

- i. The Permittee shall make and keep all applicable records pursuant to 40 CFR §60.48c, including:
 - (A) Dates and time intervals of all opacity observations periods; [40 CFR §60.48c(c)(1)(i)]
 - (B) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and [40 CFR §60.48c(c)(1)(ii)]
 - (C) Copies of all visible emission observer opacity field data sheets. [40 CFR §60.48c(c)(1)(iii)]
- ii. The Permittee shall keep records of the operating conditions at the time of any exceedance of the limitation in Section III.B.3.a.i. of this Title V permit. [RSCA §22a-174-33(j)(1)(K)(ii)]

d. Reporting Requirements

- i. The Permittee shall submit all recurring performance test data pursuant to 40 CFR §60.48c(b).
- ii. The Permittee shall submit excess emission reports pursuant to 40 CFR §60.48c(c).

4. 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

The Permittee shall comply with the tune-up requirements for GEU-2 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)]

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c. *Record Keeping Requirements*

The Permittee shall keep all applicable records in accordance with 40 CFR §63.7555(a) and (h).

d. *Reporting Requirements*

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

C. **GROUPED EMISSIONS UNIT 3 (GEU-3) – Two 2.75 MW diesel fired generators**

Registration Nos. 107-0021-R & 107-0022-R; TA&O No. 8366A; Consent Order 8377 Mod 1; National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) 40 CFR Part 63 Subpart ZZZZ: Non-Emergency, Existing CI, > 500 bhp; Collateral Conditions in P107-0012

1. **Allowable Fuel Use and Operating Requirements**

a. *Limitation or Restriction*

i. Distillate Fuel Oil

(A) Total Combined fuel oil over any consecutive 12-month period: 80,000.0 gallons
[Collateral Condition in P107-0012]

(B) Maximum Fuel Sulfur Content (% by weight, dry basis): 0.0015
[40 CFR §63.6604; 40 CFR §80.510(b); RCSA §22a-174-19b(d)(2)]

ii. Tune-Up Requirements

(A) The Permittee shall conduct an inspection and tune-up of GEU-3 at a minimum of once per calendar year. Each subsequent annual tune-up shall be performed not earlier than 180 days after the previous tune-up. The inspection and tune-up of GEU-3 shall be conducted according to the manufacturer's recommended procedures, or, if the manufacturer's recommendations are not longer available, according to best available practices. [RCSA §22a-174-22e(i)(1)]

b. *Monitoring Requirements*

The Permittee shall use a non-resettable fuel metering device to continuously monitor fuel use for each unit in GEU-3. [Collateral Condition in P107-0012; RCSA §22a-174-33(j)(1)(K)(ii)]

c. *Record Keeping Requirements*

- i. The Permittee shall keep records of monthly and consecutive 12 month operating hours and fuel consumption. The consecutive 12 month fuel consumption shall be determined by adding the current month's fuel usage to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month. [Collateral Condition in P107-0012]
- ii. Each oil fuel shipment for this equipment shall include a shipping receipt from the fuel supplier and a certification from the fuel supplier certifying the type of fuel in the shipment and the weight percent of sulfur in the fuel. The shipping receipt and/or certification shall include the name of the oil supplier, the sulfur content of the oil and the method used to determine the sulfur content of the oil. Each shipping receipt and certification shall be kept on site and available for inspection by the Bureau upon request. [Collateral Condition in P107-0012]

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- iii. The Permittee shall make and keep the following records of each tune up for each unit in GEU-3:
[RCSA §22a-174-22e(j)(2)(E)]
- (A) The date on which the emissions unit is tuned-up; the name, title and affiliation of the person performing the tune-up, and a description of work performed, and
[RCSA §22a-174-22e(j)(2)(E)(i)]
- (B) The procedures used to inspect and perform adjustments. [RCSA §22a-174-22e(j)(2)(E)(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)]

2. Pollutant Emissions

a. Limitation or Restriction

Note the lb/hr and lb/MMBtu limits apply to each emissions unit, the annual limits are combined limits for EU-5 and EU-6. [Collateral Condition in P107-0012]

- i. The Permittee shall not exceed the following emission limits for each engine (lb/hr):
- (A) TSP: 6.699 [Collateral Condition in P107-0012]
(B) PM₁₀: 5.443 [Collateral Condition in P107-0012]
(C) NO_x: 75.69 [Collateral Condition in P107-0012]
(D) SO_x: 1.595 [Collateral Condition in P107-0012]
(E) VOC: 6.409 [Collateral Condition in P107-0012]
(F) CO: 20.387 [Collateral Condition in P107-0012]
(G) H₂SO₄: 0.029 [Collateral Condition in P107-0012]
- ii. The Permittee shall not exceed the following emission limits for each engine (lb/MMBtu):
- (A) TSP: 0.231 [Collateral Condition in P107-0012]
(B) PM₁₀: 0.188 [Collateral Condition in P107-0012]
(C) NO_x: 2.610 [Collateral Condition in P107-0012]
- (1) Until May 31, 2023, NO_x emissions shall not exceed the following:
[RCSA §22a-174-22e(d)(6)(A)]
- (a) 8.0 g/bk hp-hr (Daily Block Average)
- (2) On and After June 1, 2023, NO_x emissions shall not exceed the following except as specified in Section III.C.3 of this Title V Permit: [RCSA §22a-174-22e(d)(6)(B)]
- (a) 2.3 (lean burn) (Daily Block Average)
- (D) SO_x: 0.055 [Collateral Condition in P107-0012]
(E) VOC: 0.221 [Collateral Condition in P107-0012]
(F) CO: 0.703 [Collateral Condition in P107-0012]
(G) H₂SO₄: 0.001 [Collateral Condition in P107-0012]

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- iii. The Permittee shall not exceed the following annual emission limits for both engines combined (tpy):
 - (A) TSP: 1.340 [Collateral Condition in P107-0012]
 - (B) PM₁₀: 1.089 [Collateral Condition in P107-0012]
 - (C) NO_x: 15.138 [Collateral Condition in P107-0012]
 - (D) SO_x: 0.319 [Collateral Condition in P107-0012]
 - (E) VOC: 1.282 [Collateral Condition in P107-0012]
 - (F) CO: 4.077 [Collateral Condition in P107-0012]
 - (G) H₂SO₄: 0.0058 [Collateral Condition in P107-0012]
- v. The Permittee shall not exceed 387.12 ug/m³ of H₂SO₄ for each engine.
[Collateral Condition in P107-0012]

b. Monitoring and Testing Requirements

- i. The Permittee shall conduct NO_x emission testing of GEU-3 in accordance with RCSA §22a-174-22e(l)(1).
- ii. For all other pollutants, the record keeping specified in Section III.C.2.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 the data and work performed for repairs, replacement of parts and other maintenance. [RCSA §22a-174-22e(j)(2)(B)]
- ii. The Permittee shall make and keep records of all testing required by RCSA §22a-174-22e(l), 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)]
- iii. The Permittee shall calculate and record the monthly and consecutive 12 month TSP, PM₁₀, SO_x, NO_x, VOC, CO, and H₂SO₄ emissions in units of tons for each unit of GEU-3 and combined. 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. [RCSA §22a-174-33(j)(1)(K)]

d. Reporting Requirements

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

3. Alternate NO_x RACT Compliance: TA&O No. 8366A and Consent Order 8377 Mod 1

a. Limitation or Restriction

- i. The Permittee may only use emissions trading, subject to the provisions of TA&O No. 8366A, until the date of the expiration of TA&O No. 8366A. The date of expiration of TA&O No. 8366A shall be the earlier of: [TA&O No. 8366A, para. B.1]
 - (A) May 31, 2023;

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- (B) The date upon which the Permittee demonstrates to the commissioner's satisfaction that actual NOx emissions from the emission units, at all times, do not exceed the corresponding AEL;
 - (C) The date specified in any written notice from the commissioner stating that the Permittee is no longer allowed to use emissions trading due to the Permittees' violation of any provision of TA&O No. 8366A; or
 - (D) The date specified in any written notice from the commissioner, notifying the Permittee that the commissioner has determined the use of emissions trading as a compliance option has been further restricted, modified or nullified by:
 - (1) the promulgation of an Act, Statute, or Regulation; or
 - (2) the issuance of a judgment or court order.
- ii. The Permittee shall obtain and use sufficient DERCs in such a manner as to comply with Paragraphs B.7 through B.9 of TA&O No. 8366A. All DERCs used during the Ozone Season for each emissions unit described in Table 3 of TA&O No. 8366A, shall have been generated during an Ozone Season. [TA&O No. 8366A, para. B.2]
 - iii. Vintage Restriction. For the purposes of compliance with RCSA §22a-174-22e and the provisions of TA&O No. 8366A, DERCs shall only remain valid for five calendar years from the year of the generation of such DERCs. DERCs older than five calendar years from their creation are not valid for use for compliance with RCSA §22a-174-22e and the provisions of TA&O No. 8366A. Ozone Season DERCs generated by an Affected Unit during 2013 shall remain valid until December 31, 2018. [TA&O No. 8366A, para. B.3]
 - iv. The Permittee shall not cause or allow actual NOx emissions from the operation of the emission units described in Table 3 of TA&O No. 8366A to exceed the corresponding FLERs. Compliance with the corresponding FLER specified in Table 3 shall be determined based on the results of emissions testing performed in accordance with RCSA §22a-174-22e(l) or based on NOx emissions monitored and recorded by a continuous emissions monitoring system that was approved by the Commissioner and that complies with RCSA §22a-174-4. [TA&O No. 8366A, para. B.4]
 - v. Ozone Season Fuel Use Restriction. Notwithstanding the provisions of Paragraph B.2 TA&O No. 8366A, when operating the emission units described in Table 3 of TA&O No. 8366A during the Ozone Season, the Permittee shall operate those units while firing or co-firing the lowest NOx emitting fuel type or combination of fuel types that the units are physically able to burn and that the Permittee are authorized to burn in accordance with Departmental permit, registration, or applicable regulation. [TA&O No. 8366A, para. B.5]
 - vi. Notwithstanding Paragraph B.5 of TA&O No. 8366A, during the Ozone Season, the Permittee may operate the emission units described above on fuels that result in higher emissions of NOx, if either: [TA&O No. 8366A, para. B.6]
 - (A) the availability of fuel oil that complies with Paragraph B.5 of TA&O No. 8366A is inadequate to meet the needs of residential, commercial and industrial users in this state and that such inadequate supply constitutes an emergency; or
 - (B) the supply of gaseous fuels to the emission units is interrupted due to inadequate supply or in accordance with an interruptible supply agreement between the Permittee and the gaseous fuel supplier; or
 - (C) the reliance on the lowest NOx emitting fuel type or combination of fuel types would prevent a timely response to dispatch directive issued by the Independent System Operator New England (ISO-NE) to provide electricity pursuant to obligations in the Locational Forward

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Reserve Market; or

- (D) the reliance on the lowest NO_x emitting fuel type or combination of fuel types would prevent a timely response to “Real-time” activation by ISO-NE as operating or replacement reserve in accordance with the units’ designation as a “Fast Start Generator”; or
 - (E) the unit is operating in order to conduct testing required by any governmental agency or auditing/ testing required to demonstrate the ability to satisfy commitments made to ISO-NE.
- vii. DERC Use. On the first day of each calendar month, the Permittee shall possess a quantity of DERCs that equals or exceeds the quantity of Actual DERCs Required in that month. Compliance with Paragraph B.7 of TA&O No. 8366A shall be determined as follows:

[TA&O No. 8366A, para. B.7]

- (A) Before the first day of each month, the Permittee shall estimate DERCs required for such calendar month for the emission units described in Table 3 of TA&O No. 8366A as follows

Estimated DERCs Required =

$$\{(\text{Estimated fuel use in MMBtu}) \times ((\text{FLER lb/MMBtu}) - (0.95 \times \text{AEL}))\} \div 2000 \text{ lb/ton}$$

Where

- AEL = Allowable Emission limit, as defined in Paragraph A.4 of TA&O No. 8366A
- Discount (0.95) = 5% design margin applied to the AEL.

- (B) No later than the twentieth day of each month, the Permittee shall calculate actual DERCs used in the preceding calendar month for the emission units described in Table 3 of TA&O No. 8366A as follows:

Actual DERCs Required =

$$\{(\text{Monthly fuel use in MMBtu}) \times ((\text{FLER lb/MMBtu}) - (0.95 \times \text{AEL}))\} \div 2000 \text{ lb/ton}$$

- viii. On or before January 31, of each calendar year, the Permittee shall deduct a quantity of DERCs from the current balance of DERCs possessed by the Permittee such that the total is equal to the sum of Actual DERCs required pursuant to Paragraph B.7 of TA&O No. 8366A for the preceding calendar year, rounded up to the nearest whole ton. [TA&O No. 8366A, para. B.10]
- ix. Not more than 90 days after the completion of the Non-Ozone Season, the Permittee shall deduct a quantity of DERCs from the current balance of DERCs possessed by the Permittee such that the total is equal to Actual Non-Ozone Season DERCs Required for the most recently completed Non-Ozone Season. [TA&O No. 8366A, para. B.11]
- x. FLER Violation. Violation of an established FLER shall subject the Permittee to make restitution by matching the quantity of emissions (“true up”) caused by the exceedance plus a 100% premium. The true up in tons of DERCs shall be equal to the FLER exceedance in lb/MMBtu, multiplied by the total heat input during the period of noncompliance divided by 2000 lb/ton. If the period of noncompliance is not known, the time period from the completion of the last/previous Department witnessed emission test through the date that FLER compliance is achieved as approved by the commissioner shall be used. Notwithstanding this requirement, exceedance of any FLER contained in Table 3 is a violation in Paragraph B.4 of TA&O No. 8366A subject to enforcement action in accordance with the Department of Energy & Environmental Protection’s Enforcement Response Policy, in effect at the time of such violation. [TA&O No. 8366A, para. B.17]
- ix. CO No. 8377 Mod 1 case-by-case NO_x RACT determination expires on May 1, 2028, at which time the Permittee shall operate GEU-3 in compliance with the applicable emissions limits and other

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requirements of RCSA §22a-174-22e or cease operation. [CO No. 8377 Mod 1, para. C.14]

b. *Monitoring and Testing Requirements*

- i. Emissions Testing. The Permittee shall perform emissions testing in accordance with RCSA §22a-174-22e(l) for each emission unit described in Table 3 of TA&O No. 8366A that is not equipped with a continuous emissions monitoring system that was approved by the commissioner and that complies with RCSA §22a-174-4. [TA&O No. 8366A, para. B.19]
- ii. Maintenance and Tune-up. Not more than one year from the date of issuance of TA&O No. 8366A, the Permittee shall perform maintenance and inspection of the emission units listed in Table 3 of TA&O No. 8366A. Such maintenance and inspection shall include, but not be limited to, the following: [TA&O No. 8366A, para. B.12.a-c]
 - (A) Inspect the combustion system, and clean or replace any components of the combustion system as necessary, in accordance with manufacturer's specification or current good engineering practice;
 - (B) Inspect the system controlling the air-to-fuel ratio, and ensure that it is calibrated and functioning in accordance with the manufacturer's specifications or current good engineering practice; and
 - (C) Measure the operating parameters of the emission unit used to determine that the emission unit is operating in accordance with manufacturer's specification or current good engineering practice prior to and after any adjustments are made during maintenance, tune-up, or inspection activity.

c. *Record Keeping Requirements*

- i. The Permittee shall make and keep records including, but not limited to the following:
[TA&O No. 8366A, para. B.12.d]
 - (A) Demonstration that any maintenance, tune-up, and/or inspection activity performed on the emission unit described in Table 3 in accordance with Paragraph B.11 of TA&O No. 8366A has been performed in accordance with the manufacturer's specifications or current good engineering practice;
 - (B) The date and a description of any maintenance, tune-up, and/or inspection activity performed on the emission unit described in Table 3 in accordance with Paragraph B.11 of TA&O No. 8366A;
 - (C) The name, title and affiliation of the person conducting any maintenance, tune-up, and/or inspection activity performed on the emission unit described in Table 3 in accordance with Paragraph B.11 of TA&O No. 8366A; and
 - (D) The operating parameters of the emission unit used to determine that the emission unit is operating in accordance with manufacturer's specification or current good engineering practice prior to and after any adjustments are made during maintenance, tune-up, or inspection activity performed in accordance with Paragraph B.11 of TA&O No. 8366A.
- ii. By the close of each calendar day, the Permittee shall record 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 fuel used the preceding day in an emission unit described in TA&O No. 8366A.
[TA&O No. 8366A, para. B.13.a]
- iii. On or before the first day of each calendar month, the Permittee shall record the number of DERCs and corresponding serial numbers and vintages for all DERCs in its possession on

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the first calendar day of that calendar month. [TA&O No. 8366A, para. B.13.b]

- i. On or before the first day of each calendar month, the Permittee shall record the number of DERCs and corresponding serial numbers, vintages, purchase/sales dates, and seller/buyer for all DERCs purchased or sold during the preceding calendar month.
[TA&O No. 8366A, para. B.13.c]
- v. On or before the first day of each calendar month, the Permittee shall record the Estimated DERCs Required for that calendar month determined in accordance with Paragraph B.7 of TA&O No. 8366A. [TA&O No. 8366A, para. B.13.d]
- vi. On or before the twentieth calendar day of each calendar month, the Permittee shall record the Actual DERCs Required for the preceding calendar month determined in accordance with Paragraph B.7 of TA&O No. 8366A. [TA&O No. 8366A, para. B.13.e]
- vii. On or before January 31 of each calendar year, the Permittee shall record the quantity of DERCs possessed on the first day of the Ozone Season and the quantity of DERCs deducted in accordance with Paragraphs B.7 of TA&O No. 8366A. Such records shall include the serial number and vintage of each DERC deducted from the Permittees' current balance pursuant to Paragraphs B.7 of TA&O No. 8366A.
[TA&O No. 8366A, para. B.13.f]
- viii. For each month of the Ozone Season, the Permittee shall maintain records attesting to the fact that any DERCs deducted from its balance in accordance with Paragraphs B.7 of TA&O No. 8366A satisfy the requirements of Paragraph B.2 of TA&O No. 8366A. Generator certification of this fact shall be sufficient. [TA&O No. 8366A, para. B.13.h]
- x. On each day during the Ozone Season that the Permittee operate in accordance with Paragraph B.6 of TA&O No. 8366A, the Permittee shall make and keep records of all emission unit operation in accordance with Paragraph B.6 of TA&O No. 8366A, including copies of any written correspondence from the Permittees' fuel supplier detailing the duration and circumstances of the inadequate fuel oil supply or interruption of gaseous fuel supply to the emission units. [TA&O No. 8366A, para. B.13.i]
- xi. 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 NOx emissions for GEU-3. The Permittee shall calculate NOx emissions using the emissions rate determined during the latest emissions test performed in accordance with RCSA §22a-174-22e(f). [CO No. 8377 Mod 1, para. C.10.a]

d. Reporting Requirements

- i. No later than March 1 of every year after issuance of TA&O No. 8366A, the Permittee shall submit to the commissioner a written report containing copies of all of the records required pursuant to Paragraphs B.13.a – B.13.f, B.13.h and B.13.i of TA&O No. 8366A. Not later than July 30 of each calendar year, the Permittee shall submit a written report containing copies of all records required pursuant to Paragraph B.13.g of TA&O No. 8366A. The commissioner may prescribe the forms to be used for the submission of these reports. The Permittee shall submit these reports on such forms, if prescribed by the commissioner. [TA&O No. 8366A, para. B.15]
- ii. The Permittee shall retain records and supporting documentation required by TA&O No. 8366A for a minimum of five years, commencing on the date such records were created. The Permittee shall provide the records specified by TA&O No. 8366A to the commissioner within 30 days of receipt of a written request from the commissioner. All records shall be maintained in accordance with RCSA §§22a-174-4 and 22a-174-22e. [TA&O No. 8366A, para. B.14]
- iii. The Permittee shall provide the records required by Sections III.C.2.c.xi of this Title V permit to the commissioner within thirty (30) days of receipt of a written request from the

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commissioner. [CO No. 8377 Mod 1, para C.10.e]

- iv. 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.C.2.c.xi of this Title V permit.

[CO No. 8377 Mod 1, para. C.10.f]

4. National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engine (RICE) 40 CFR Part 63 Subpart ZZZZ: Non-Emergency, Existing CI, > 500 bhp

a. Limitation or Restriction

- i. The Permittee shall be in compliance with the applicable emission limitations, operating limitations, and other requirements at all times. [40 CFR §63.6605(a)]
- ii. The Permittee shall operate and maintain GEU-3, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR §63.6605(b)]
- iii. The Permittee shall maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and [40 CFR §63.6600(d), Table 2b, Item 2.a]
- iv. The Permittee shall maintain the exhaust temperature so that the catalyst inlet temperature is greater than or equal to 450⁰F and less than or equal to 1350⁰F. [40 CFR §63.6600(d), Table 2b, Item 2.b]
- v. Reduce CO emissions by 70% or more across oxidation catalyst.
[40 CFR §63.6600(d), Table 2c, Item 5.b]
- vi. The Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, to exceed 30 minutes, after which the non-startup emission limitations apply.
[40 CFR §63.6600(d), Table 2c; 40 CFR §63.6625(h)]
- vii. Maximum fuel sulfur content: 15 ppm [40 CFR §63.6604(a); 40 CFR §80.510(b)]

b. Monitoring Requirements

- i. The Permittee shall conduct subsequent CO performance testing every 8,760 hours or 5 years, whichever comes first. [40 CFR §63.6615, Table 3, Item 5]
- ii. The Permittee shall conduct subsequent CO performance testing in accordance the applicable requirements pursuant to 40 CFR §63.6620.
- iii. The Permittee shall comply with the applicable monitoring requirements in accordance with 40 CFR §§63.6625(b) and 63.6635.

c. Record Keeping Requirements

The Permittee shall comply with the applicable record keeping requirements in accordance with 40 CFR §§63.6645(a) and 63.6655(a) and (b).

d. Reporting Requirements

The Permittee shall comply with the applicable reporting requirements in accordance with 40 CFR §63.6650.

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D. EMISSIONS UNIT 7 (EU-7) – Cummins diesel fired emergency fire pump

[RCSA §22a-174-3b(e); RCSA §22a-174-22e; National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) 40 CFR Part 63 Subpart ZZZZ: Emergency, Existing CI, ≤ 500 bhp]

1. RCSA §22a-174-3b(e); 22a-174-19b; and 22a-174-22e

a. Limitation or Restriction

- i. Operation shall not exceed 300 hours during any twelve month rolling aggregate. [RCSA §22a-174-3b(e)(2)(C); [STATE ONLY REQUIREMENT]
- ii. Maximum fuel sulfur content shall be less than 15 ppm. [RCSA §22a-174-3b(e)(2)(D) [STATE ONLY REQUIREMENT]; RCSA §22a-174-19b(d)(2)]
- iii. The Permittee shall not operate EU-7 for routine, scheduled testing or maintenance on any day for which the commissioner has forecast that the ozone levels will be “moderate to unhealthy for sensitive groups” or greater. [RCSA §22a-174-22e(d)(14)]

b. Monitoring Requirements

- i. Record keeping specified in Section III.B.1.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 the hours of operation for each month and each twelve month rolling aggregate. [RCSA §22a-174-3b(e)(4); STATE ONLY REQUIREMENT]
- ii. The Permittee shall keep records of the fuel certification for each delivery fuel 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. 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.

[RCSA §22a-174-3b(h)(1); STATE ONLY REQUIREMENT]

- iii. The Permittee shall maintain records of the sulfur content of the fuel combusted and the quantity purchased for combustion. A written certification or a written contract with a fuel supplier is sufficient if the certification or contract identifies: [RCSA §22a-174-19b(g)(3)(A) – (D)]

(A) The name of the fuel seller;

(B) The type of fuel purchased;

(C) The sulfur content of the fuel purchased; and

(D) The method used to determine the sulfur content of the fuel purchased.

d. Reporting Requirements

The Permittee shall provide any required records pursuant to Section III.D.1.c of this Title V permit to the commissioner upon request.

[RCSA §22a-174-3b(i) [STATE ONLY REQUIREMENT]; RCSA §22a-174-19b(4)(A)]

2. 40 CFR Part 63 Subpart ZZZZ

a. Limitation or Restriction

- i. The Permittee shall be in compliance with the applicable requirements of 40 CFR Part 63 Subpart

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ZZZZ at all times. [40 CFR §63.6605(a)]

- ii. At all times the Permittee must operate and maintain the affected source, 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 you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used 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 §63.6605(b)]
- iii. The Permittee shall comply with the requirements pursuant to 40 CFR §63.6602:
 - (A) Change oil and filter every 500 hours of operation or annually, whichever comes first.
[40 CFR §63.6602, Table 2c, Item 1.a]
 - (B) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.
[40 CFR §63.6602, Table 2c, Item 1.b]
 - (C) Inspect hoses and belts every 500 hours of operation or annually, whichever comes first.
[40 CFR §63.6602, Table 2c, Item 1.c]
- iv. Maximum fuel sulfur content: 15 ppm [40 CFR §63.6604(a); 40 CFR §80.510(b)]
- v. Operation of the engine for readiness testing and maintenance checks shall not exceed 100 hours per year. [40 CFR §63.6640(f)(2)(i)]
- vi. The Permittee shall operate and maintain EU-7 according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
[40 CFR §§63.6625(e)(2) and 63.6640, Table 6, Item 9]
- vii. The Permittee shall install a non-resettable hour meter. [40 CFR §63.6625(f)]
- viii. The Permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable in 40 CFR Part 60 Subpart ZZZZ, Table 2c apply to all other than startup. [40 CFR §63.6625(h)]
- ix. The Permittee shall operate EU-7 according to the applicable requirements found in 40 CFR §63.6640(f) to be considered an emergency engine.

Note: Allowable operation pursuant to RCSEA §22a-174-3b is more restrictive concerning the designation of EU-7 as an emergency engine.

b. Monitoring Requirements

- i. The Permittee shall monitor the hours of operation during readiness testing, maintenance checks, non-emergency use and periods of startup for each month and each 12 month rolling aggregate.
[40 CFR §63.6625(f)]

c. Record Keeping Requirements

- ii. The Permittee shall keep records of the maintenance conducted on EU-7 in accordance with 40 CFR §63.6655(e).

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- iii. The Permittee shall make and keep records of all hours of operation including and designating hours of readiness testing, maintenance checks, and periods of startup for each month and each 12 month rolling aggregate. [40 CFR §63.6655(f)]

d. Reporting Requirements

The Permittee shall comply with the applicable reporting requirements in accordance with 40 CFR §63.6650.

E. FEDERAL ACID RAIN PERMIT REQUIREMENTS: EU-1 and EU-2

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

- a. Affected Unit 1: Combustion Engineering, Type R Dual fuel fired 905 MMBtu/hr, 82 MW electric utility steam boiler

		2022	2023	2024	2025	2026
EU-1 (Unit 5)	SO ₂ Allowances under Tables 2, 3, or 4 of 40 CFR Part 73	1,208	1,208	1,208	1,208	1,208
	NO _x Limit	Not an Affected Unit under 40 CFR Part 76				

- b. Affected Unit 2: Combustion Engineering, Type RRP No.6 oil fired 4,658 MMBtu/hr, 402 MW electric utility steam boiler

		2022	2023	2024	2025	2026
EU-2 (Unit 6)	SO ₂ Allowances under Tables 2, 3, or 4 of 40 CFR Part 73	5,675	5,675	5,675	5,675	5,675
	NO _x Limit	Not an Affected Unit under 40 CFR Part 76				

2. Phase II Acid Rain Permit Application

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.

F. 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

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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.
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 and §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

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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).

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.** The Permittee shall comply with the requirements for Control of Carbon Dioxide Emissions as set forth in RCSA §22a-174-31.

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.