



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Central Regional Office • 8 New Bond Street, Worcester MA 01606 • 508-792-7650

Maura T. Healey
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Secretary

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November 6, 2024

Mr. John Conroy
Bellingham Power Generation, LLC
155 Maple Street
Bellingham, MA 02019

RE: Bellingham
Application #: X232337
**DRAFT OPERATING PERMIT
RENEWAL**

Dear Mr. Conroy:

The Department of Environmental Protection ("Department") has determined that the Operating Permit application for Bellingham Power Generation, LLC ("Facility"), located at 155 Maple Street in Bellingham, Massachusetts, is administratively and technically complete and hereby issues the enclosed Draft Operating Permit for the subject facility.

This Draft Operating Permit is being issued in accordance with 310 CMR 7.00 - APPENDIX C of the Air Pollution Control Regulations ("the Regulations"), as adopted pursuant to M.G.L. c. 111, §§ 142 A through E inclusive.

The Facility has had several modifications since the initial Operating Permit was issued in 2005. A summary of these changes includes, but is not limited to:

- Reduce the minimum operating level from 50% load to 40% load;
- Add turbine inlet fogging to the Facility description;
- Increase the turbine maximum rated heat capacity from 4,367 to 4,541 million British thermal units per hour, with the addition of upgraded software in the firing control system (MXL upgrade);
- Add the operating scenarios of Protective Load Switching/Protective Action and Idle Mode Switching with alternative emission limits;
- Remove the requirements for optimization testing and annual emission compliance testing;
- Incorporate the details of the custom CEMS monitoring schedule;
- Minor changes in the language of several requirements.

This information is available in alternate format. Please contact MassDEP at 617-292-5500.
TTY# MassRelay Service 1-800-439-2370
MassDEP Website: www.mass.gov/dep

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The software upgrades increase the gas turbine efficiency, in effect reducing CO₂ emissions per produced megawatt hour (MWh). There has been no change of previous short term emission limits, stated in pounds per million British thermal units (Btu) and pounds per hour, or the previous annual limits on emissions. The increased heat capacity of the turbines results in low “Actual to Projected Actual” increases in emissions, under 1 ton per year for all air contaminants except NO_x, which shows an increase of 2.47 tons per year.

Public notice and the Draft Operating Permit will be published on the EEA ePLACE Public Access Portal at <https://eeaonline.eea.state.ma.us/EEA/PublicApp/> by the Department in accordance with the requirements of 310 CMR 7.00: Appendix C by November 6, 2024. As such, the public comment period shall end on December 6, 2024. During that period, a public hearing may be requested pursuant to 310 CMR 7.00: Appendix C(6)(f). You shall be notified under a separate letter if a public hearing has been requested.

Please review the entire Draft Operating Permit carefully. It lists the applicable Federal and State Air Pollution Control Requirements and what is required of the facility in order for it to be considered in compliance with such applicable requirements. It also includes requirements that were promulgated or approved by the United States Environmental Protection Agency through rule making at the time of issuance but have future effective compliance dates.

Should you have any questions concerning this Draft Operating Permit, please contact Kathryn Puza, your Permitting Point of Contact, at 857-286-1664, kathryn.puza@mass.gov, or CERO.Air@mass.gov.

Very truly yours,



Thomas A. Hannah
Regional Air Permit Chief
Bureau of Air and Waste

ENCLOSURE

cc: MassDEP Boston – Yi Tian
MassDEP Worcester – Randa Kallin, Joshua Watkins, Brooke Morgan
Bellingham Board of Health
Bellingham Fire Department
Bellingham Power Generation, LLC – Michael Volpe, Marc Sullivan, Peter Homnick



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VERSION DATE 8/17/2023

AIR QUALITY **DRAFT** OPERATING PERMIT

Issued by the Massachusetts Department of Environmental Protection ("Department" or "MassDEP") pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C.

ISSUED TO ["the Permittee"]: Bellingham Power Generation, LLC	INFORMATION RELIED UPON: Original OP Transmittal No. W039085 OP Renewal Application Transmittal No. X232337 nmCPA Transmittal No. X274046 Acid Rain Permit No. 55211
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FACILITY LOCATION: 155 Maple Street, Bellingham, MA 02019	FACILITY IDENTIFYING NUMBERS: AQ ID: 1201509 SMS Site (FMF FAC) NO.: 297575 SMS RI (FMF RO) NO.: 297576
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NATURE OF BUSINESS: Electrical Power Generation	Standard Industrial Classification (SIC): 4911 North American Industrial Classification System (NAICS): 221112
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RESPONSIBLE OFFICIAL: Name: Michael Volpe Title: Plant Manager	FACILITY CONTACT PERSON: Name: John Conroy Title: Operations Manager Phone: 508-966-5607 Email: john.conroy@vistracorp.com
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This Operating Permit shall expire on **DRAFT** .

For the Department of Environmental Protection

Permit Chief, Bureau of Air and Waste

DRAFT

Date

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SPECIAL CONDITIONS FOR OPERATING PERMIT

1. PERMITTED ACTIVITIES

In accordance with the provisions of 310 CMR 7.00: Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt, and insignificant activities as described in 310 CMR 7.00: Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6 and to other terms and conditions as specified in this Permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this Permit.

A. DESCRIPTION OF FACILITY AND OPERATIONS

The Permittee is named Bellingham Power Generation, LLC, formerly known as ANP Bellingham Energy Company, LLC, (hereby known as the “Facility”) with a place of business located at 155 Maple Street, Bellingham, Massachusetts (“MA”) operating an electric generating facility. The Facility consists of two parallel power trains, each including an ABB GT-24 gas turbine rated at approximately 180 megawatts (“MW”) output capacity (210 MW with steam augmentation), an unfired exhaust heat recovery steam generator (“HRSG”), a steam turbine, an electric generator, air-cooled condenser, and auxiliary equipment. The two parallel power trains are identified as Emission Unit (“EU”) 1 and EU 2, respectively.

Major auxiliary equipment associated with the Facility includes a control room, carbon monoxide (“CO”) oxidation catalysts, selective catalytic reduction (“SCR”) catalysts for nitrogen oxides (“NO_x”) control, inlet air fogging systems, ammonia storage tanks, lube oil process vessels, a continuous emissions monitoring system (“CEMS”), two small emergency diesel generators (EU 3-1 and EU 3-2), one diesel fire pump (EU 4), a natural gas raw water heater, and a natural gas dew point heater.

The turbine generators have a combined total heat input capacity of approximately 3,630 million British thermal units per hour (“MMBtu/hr”) at the higher heating value (“HHV”) and at an average ambient temperature of 59 degrees Fahrenheit (“°F”) with no steam augmentation. Maximum total heat input during steam augmentation and the MXL upgrade is approximately 4,541 MMBtu/hr (HHV at 0° F ambient). The hot exhaust gases exiting the turbines pass through two unfired HRSG that recover the heat from these gases to produce steam. Steam produced in the HRSGs is fed into two steam turbines to generate a nominal output of 190 MW (170 MW during steam augmentation) of electrical power. The HRSG houses an 80% efficient CO catalyst at maximum continuous uncontrolled CO emissions (40% gas turbine load) followed by an ammonia injection grid and the SCR catalyst for control of NO_x.

The Facility is designed to operate based on requirements of electrical demand, determined by New England’s Independent System Operator (“ISO-NE”). Each turbine generator will utilize natural gas as the only fuel, there is no backup fuel. The emissions from each turbine are emitted to the ambient air through individual steel stacks, the tops of which are 180 feet above ground level and have an inside diameter of 18 feet, providing a maximum exit velocity of 63 feet per second at a temperature of 176° F under the maximum exhaust flow condition.

The combustion of natural gas and the control process results in emissions of nitrogen oxides (“NO_x”), sulfur dioxide (“SO₂”), CO, carbon dioxide (“CO₂”), volatile organic compounds (“VOC”), particulate matter (“PM”), sulfuric acid (H₂SO₄), and ammonia (“NH₃”). The use of air pollution control equipment and good combustion practices minimizes these pollutants. Typically, PM is generated from hydrocarbons that are not fully combusted. PM may also result from ammonium salts forced by the reaction of sulfuric

acid mist (“SAM”) and ammonia slip from the catalyst system. The SO₂ emission rate for natural gas is based on the current permitted value for sulfur content for the natural gas at 0.8 grains per 100 cubic foot (grains/100 CF).

The combustion of natural gas also emits trace amounts of hazardous air pollutants (“HAP”) such as formaldehyde. The Facility is a non-major area source of HAPs because its potential to emit is less than the major source thresholds of 10 tons per year (“TPY”) for a single HAP and less than 25 TPY for all HAPs combined.

Exempt activities include a vapor degreaser, designated as EU16, which utilizes a water-based degreasing agent that does not contain reactive volatile organic compounds (VOCs) and as such, is not subject to 310 CMR 7.18(8).

B. PERMITTING HISTORY

On July 30, 1999, MassDEP issued to ANP Bellingham Energy Company, LLC (“Permittee”), a Conditional Approval to construct a combined cycle power facility of approximately 580 MW nominal output in Bellingham, MA. The Conditional Approval combined and included:

- 310 CMR 7.02 Comprehensive Plan Approval;
- 310 CMR 7.00: APPENDIX A: Emission Offsets and Non-Attainment Review Approval; and
- 40 CFR 52 Prevention of Significant Deterioration (PSD) Approval.

As a condition of that Approval, the Permittee was required to submit final plans and specifications and obtain written approval to commence operations.

On April 10, 2002, MassDEP issued the “Approval to Commence Operations”, Transmittal No. 118970 to the Permittee to commence operation of the Facility at the proposed site location subject to the conditions and provisions stated therein.

On October 7, 2005, MassDEP issued the Final Operating Permit, Transmittal No. W03985 to the Permittee. Startup and Shutdown definitions and emissions limits were included in this Operating Permit.

On March 1, 2010, the Permittee submitted to MassDEP an Air Operating Permit Renewal application for Transmittal No. W039805.

On April 6, 2011, the Permittee submitted Limited Plan Application, Transmittal No. X236805, to MassDEP in order to modify Plan Approval Transmittal No. 118970. On June 17, 2011, the Department notified the Permittee that submittal of a Non-Major Comprehensive Air Pollution Plan Application (“NMCPA”) would be required to incorporate the Startup and Shutdown provisions and other requested changes into the Final Plan Approval and PSD Approval for the Facility. On January 30, 2012, the Permittee submitted NMCPA forms under this same Transmittal No. X236805 to MassDEP.

On May 11, 2018, MassDEP issued NMCPA Transmittal No. X274046 to the Permittee. Startup and Shutdown limits as well as document changes to the operations including: MXL upgrade firing control software, were included in this NMCPA.

On July 20, 2018, the Permittee submitted to MassDEP a resubmittal Air Operating Permit Renewal application for Transmittal No. W039805.

On April 16, 2021, the Permittee submitted a Certificate of Amendment for the Certificate of Formation to change the name of the Facility from “ANP Bellingham Energy Company, LLC” to “Bellingham Power Generation, LLC”.

C. APPLICABLE AND NON-APPLICABLE REQUIREMENTS

1. *Federal Requirements*

The Permittee received combined 7.02/Appendix A approval and PSD approval (Transmittal# 118970) from MassDEP on April 10, 2002. The Permittee received a MassDEP Plan Approval X274046 superseding the previous transmittal #118970 on May 11, 2018.

EU1 and EU2 are subject to 40 CFR 60 subpart GG. The emission limits for NO_x and SO₂ will be demonstrated by meeting the more stringent emission limits under MassDEP Plan Approval #X274046 (dated 5/11/2018). The permittee is not subject to 40 CFR 60 subpart KKKK because construction commenced and there was no modification or reconstruction after the effective date of February 18, 2005.

The Permittee is subject to 40 CFR 63 Subpart ZZZZ requirements for reciprocating internal combustion engines (“RICE”) for its (2) 400 kW emergency diesel generators and (1) 1.8 MMBtu/hr emergency diesel fire pump that were both installed on January 1, 2001.

EU1 and EU2 power trains have a dedicated CEMS and a dedicated stack. Therefore, pursuant to 40 CFR Part 64.2(b)(1)(vi) each EU is exempt from developing 40 CFR Part 64 CAM requirements.

The Facility is subject to the Operating Permit and Compliance Program pursuant to 310 CMR 7.00: Appendix C(2) since it has the potential to emit greater than 50 tons per year of NO_x and 100 tons per year of CO. The Facility is also a “major station source” pursuant to the Prevention of Significant Deterioration regulations 40 CFR § 52.21 since it has the potential to emit more than 100 tons per year of a new source review regulated pollutant (carbon monoxide and nitrogen oxides).

Federal Acid Rain Program

The Permittee is subject to the requirements of Phase II of the Federal Acid Rain Program for EU1 and EU2 as defined by EPA in 40 CFR Part 72 and 40 CFR Part 75.

Pursuant to 40 CFR Part 72.71, 40 CFR Part 72.73, and 310 CMR 7.00: Appendix (C)(3)(n), MassDEP is the permitting authority for Phase II Acid Rain Permits. The Permittee was issued the initial Phase II Acid Rain Permit on October 25, 2000.

The Department is incorporating the requirements of the renewal Phase II Acid Rain Permit into this Operating Permit. The Phase II Acid Rain requirements will renew in this Operating Permit.

The Facility is not subject to 310 CMR 7.19 - U Reasonably Available Control Technology (RACT) for Sources of Oxides of Nitrogen (NO) since it meets the applicability of 310 CMR 7.19(1)(C)9. in Plan Approval Transmittal No. 118970, which ensures the Facility meets the Lowest Achievable Emission Rate (LAER).

2. State Only Requirements

Massachusetts CO₂ Budget Trading Program

The Permittee is subject to the requirements of the Massachusetts CO₂ Budget Trading Program for EU1 and EU2 as defined by MassDEP in 310 CMR 7.70(1)(d).

Pursuant to 310 CMR 7.70(3), the Permittee was issued a CO₂ Budget Program Emissions Control Plan (“ECP”) on December 9, 2008. In accordance with 310 CMR 7.70(8)(a), the owner or operator shall install, maintain, operate, and report emissions data from a CO₂ emissions monitoring system. **(State Only Requirement).**

Massachusetts Greenhouse Gas Reporting Program

The Permittee is subject to the requirements of Greenhouse Gas Reporting as defined by MassDEP in 310 CMR 7.71(3)(a). **(State Only Requirement).**

Pursuant to 310 CMR 7.71(2): *Definitions:*

“Greenhouse Gas” means any chemical or physical substance that is emitted into the air and that MassDEP may reasonably anticipate will cause or contribute to climate change including, but not limited to, CO₂, CH₄, N₂O, SF₆, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and any other gas for which 40 CFR Part 98 includes a method for calculating greenhouse gas emissions from any stationary emissions source.

Reducing CO₂ Emissions from Electricity Generating Facilities

The Permittee is subject to the requirements of the Reducing CO₂ Emissions from Electricity Generating Facilities regulation for EU1 and EU2 as defined by MassDEP in 310 CMR 7.74(3).

The Permittee shall comply with the CO₂ emissions limits contained in 310 CMR 7.74(5) for calendar year 2018 and each year thereafter. The Permittee may offset all emissions using allowances in the facility allowance registry account in accordance with 310 CMR 7.74(6)(b) or request deferred compliance due to an emergency in accordance with 310 CMR 7.74(6)(d). **(State Only Requirement).**

2. EMISSION UNIT IDENTIFICATION

The following emission units (Table 1) are subject to and regulated by this Operating Permit:

Table 1

EU	Description of EU	EU Design Capacity	Pollution Control Device (PCD)
1	ABB GT-24 Combustion Turbine	210 MW	Selective Catalytic Reduction (SCR) and Oxidation Catalyst
2	ABB GT-24 Combustion Turbine	210 MW	Selective Catalytic Reduction (SCR) and Oxidation Catalyst
3-1	Emergency Diesel Generator	400 kW 4.1 MMBtu/hr	None

EU	Description of EU	EU Design Capacity	Pollution Control Device (PCD)
3-2	Emergency Diesel Generator	400 kW 4.1 MMBtu/hr	None
4	Emergency Diesel Fire Pump	1.8 MMBtu/hr	None
5	Dew Point Heater – ETI / Flameco Model SB3/8-18	3.25 MMBtu/hr	None

Table 1 Key

EU = Emission Unit	PCD = Pollution Control Device
MW = Megawatts	SCR = Selective Catalytic Reduction
kW = kilowatts	MMBtu/hr = million British thermal units per hour

3. IDENTIFICATION OF EXEMPT ACTIVITIES

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C(5)(h):

Table 2

Description of Current Exempt Activities ¹	Reason
The list of current exempt activities is contained in the Operating Permit application and shall be updated by the Permittee to reflect changes at the facility over the Permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to the MassDEP’s Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant to 310 CMR 7.12.	310 CMR 7.00: Appendix C(5)(h)

4. APPLICABLE REQUIREMENTS

A. OPERATIONAL AND/OR PRODUCTION EMISSION LIMITS AND RESTRICTIONS

The Permittee is subject to the limits/restrictions as contained in Table 3A below:

Table 3A

Normal Operations										
EU	Fuel/ Raw Material	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards ^(1,2,3)				Applicable Regulation and/or Approval No.		
				100% Load ^{4,5}	75% Load ^{4,5}	40-50% Load ^{4,5}	Over 100% with Steam Injection ⁶			
1 & 2	Natural Gas	1. 0.8 grains per 100 cubic feet sulfur content in natural gas 2. Natural Gas shall be the sole source of fuel.	NO _x	<ul style="list-style-type: none"> • 14.7 lb/hr • 0.007 lb/MMBtu • 2.0 ppmvd at 15% O₂ 	<ul style="list-style-type: none"> • 11.8 lb/hr • 0.007 lb/MMBtu • 2.0 ppmvd at 15% O₂ 	<ul style="list-style-type: none"> • 9.0 lb/hr • 0.007 lb/MMBtu • 2.0 ppmvd at 15% O₂ 	<ul style="list-style-type: none"> • 27.0 lb/hr • 0.013 lb/MMBtu • 3.5 ppmvd at 15% O₂ 	Transmittal #X274046, 40 CFR 60 Subpart GG		
			CO	<ul style="list-style-type: none"> • 11.0 lb/hr • 0.006 lb/MMBtu • 3.0 ppmvd at 15% O₂ 	<ul style="list-style-type: none"> • 12.0 lb/hr • 0.008 lb/MMBtu • 4.0 ppmvd at 15% O₂ 	<ul style="list-style-type: none"> • 54.6 lb/hr • 0.045 lb/MMBtu • 20.0 ppmvd at 15% O₂ 	<ul style="list-style-type: none"> • 12.0 lb/hr • 0.006 lb/MMBtu • 3.0 ppmvd at 15% O₂ 	Transmittal #X274046		
			VOC ⁷	<ul style="list-style-type: none"> • 3.6 lb/hr • 0.002 lb/MMBtu • 1.4 ppmvd at 15% O₂ 	<ul style="list-style-type: none"> • 2.9 lb/hr • 0.002 lb/MMBtu • 1.4 ppmvd at 15% O₂ 	<ul style="list-style-type: none"> • 3.9 lb/hr • 0.003 lb/MMBtu • 2.5 ppmvd at 15% O₂ 	<ul style="list-style-type: none"> • 9.8 lb/hr • 0.006 lb/MMBtu • 3.5 ppmvd at 15% O₂ 	Transmittal #X274046		
			PM PM ₁₀ PM _{2.5}	<ul style="list-style-type: none"> • 23.9 lb/hr • 0.012 lb/MMBtu 	<ul style="list-style-type: none"> • 19.1 lb/hr • 0.012 lb/MMBtu 	<ul style="list-style-type: none"> • 14.6 lb/hr • 0.012 lb/MMBtu 	<ul style="list-style-type: none"> • 26.2 lb/hr • 0.012 lb/MMBtu 	Transmittal #X274046		
			SO ₂	<ul style="list-style-type: none"> • 4.6 lb/hr • 0.002 lb/MMBtu 	<ul style="list-style-type: none"> • 3.7 lb/hr • 0.002 lb/MMBtu 	<ul style="list-style-type: none"> • 2.8 lb/hr • 0.002 lb/MMBtu 	<ul style="list-style-type: none"> • 5.0 lb/hr • 0.002 lb/MMBtu 	Transmittal #X274046		
			NH ₃	<ul style="list-style-type: none"> • 5.4 lb/hr • 0.003 lb/MMBtu • 2.0 ppmvd at 15% O₂ 	<ul style="list-style-type: none"> • 4.3 lb/hr • 0.003 lb/MMBtu • 2.0 ppmvd at 15% O₂ 	<ul style="list-style-type: none"> • 3.3 lb/hr • 0.003 lb/MMBtu • 2.0 ppmvd at 15% O₂ 	<ul style="list-style-type: none"> • 5.9 lb/hr • 0.003 lb/MMBtu • 2.0 ppmvd at 15% O₂ 	Transmittal #X274046		
			Opacity	Opacity shall not exceed 10% at any time.						Transmittal #X274046
			CO ₂	The Permittee shall hold CO ₂ allowances in a compliance account in an amount not less than the CO ₂ Budget Emissions Limitation.						310 CMR 7.70(1)(e)3 (State Only Requirement)
CO ₂	The Permittee shall hold CO ₂ allowances in an allowance registry account in an amount equal to or greater than the sum of either: (1) The prior calendar year CO ₂ emissions, minus any emissions for which compliance is deferred in accordance with 310 CMR 7.74(6)(d); or (2) Twice the amount of CO ₂ emissions emitted during the year before the prior calendar year if compliance was deferred pursuant to 310 CMR 7.74(6)(d).						310 CMR 7.74(6)(e) (State Only Requirement)			

Normal Operations								
EU	Fuel/ Raw Material	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards ^(1,2,3)				Applicable Regulation and/or Approval No.
				100% Load ^{4,5}	75% Load ^{4,5}	40-50% Load ^{4,5}	Over 100% with Steam Injection ⁶	
1 & 2	Natural Gas	1. 0.8 grains per 100 cubic feet sulfur content in natural gas 2. Natural Gas shall be the sole source of fuel.	SO ₂	The Permittee shall hold SO ₂ allowances, as of the allowance transfer deadline, in the Permittee's compliance account not less than the total annual emissions of SO ₂ for the previous calendar year; and comply with the applicable Acid Rain emissions limitations for SO ₂ .				310 CMR 7.00: Appendix C(3)(n); 40 CFR 72.9; Acid Rain Permit #55211
			NO _x	N/A				310 CMR 7.00: Appendix C(3)(n); Acid Rain Permit #55211
3-1 & 3-2	Fuel Oil	1. Operate only during emergency situations or for routine maintenance and testing recommended. 2. Maintenance and testing are limited to 100 hours per calendar year; 3. ≤ 50 hours of non-emergency operation per calendar year.	N/A	Fuel Oil ≤ 0.0015% sulfur by weight				40 CFR 63 subpart ZZZZ, 63.6640(f) 310 CMR 7.03(10)
4	Fuel Oil			Fuel Oil ≤ 0.0015% sulfur by weight				40 CFR 63 subpart ZZZZ, 63.6640(f)
Facility-wide ⁹	All	NA	NO _x ¹⁰	151 TPY				Transmittal #X274046
			CO	437 TPY				Transmittal #X274046
			VOC ^{5,10}	49 TPY				Transmittal #X274046
			PM PM ₁₀ PM _{2.5}	209 TPY				Transmittal #X274046
			SO ₂	40 TPY				Transmittal #X274046
			NH ₃ ¹¹	47 TPY				Transmittal #X274046
			Sulfuric Acid	21 TPY				Transmittal #X274046
			Greenhouse Gas ¹²	N/A				310 CMR 7.71 (state-only requirement)

Table 3A Key:

EU = Emission Unit	NO _x = Nitrogen Oxides
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CO = Carbon Monoxide	SO ₂ = Sulfur Dioxide
PM = Total Particulate Matter	PM ₁₀ = Particulate Matter less than or equal to 10 microns in diameter
PM _{2.5} = Particulate Matter less than or equal to 2.5 microns in diameter	VOC = Volatile Organic Compound
O ₂ = Oxygen	NH ₃ = Ammonia
CO ₂ = Carbon Dioxide	lbs/hr = pounds per hour
ppmvd @ 15% O ₂ = parts per million by volume corrected to 15 percent oxygen	lbs/MMBtu = pounds per Million British thermal units
TPY = tons per consecutive 12-month period ²	≤ = less than or equal to
% = percent	°F = degrees Fahrenheit
CMR = Code of Massachusetts Regulations	CFR = Code of Federal Regulations

Table 3A Foot Notes:

1. Short-term emission limits specified in this table are per unit based upon one hour block average unless otherwise specified and apply at 40% load or greater.
2. Except where noted, hourly emission rates while burning natural gas are presented here based on 0°F ambient temperature.
3. The lb/MMBtu emission limits are worst case values based on HHV.
4. Percent load is calculated based on gas turbine output as follows: (Actual Power - Steam turbine power)/Baseload point at ambient.
5. Emission limits at intermediate loads are calculated based on linear interpolation of Table 3A, lb/MMBtu limits. Emission limits in lb/MMBtu are based on HHV.
6. Limit based on >100% load – with Steam Injection @ 90°F.
7. VOC expressed as CH₄ (methane).
8. Annual emissions (TPY) are facility-wide emissions in tons and are based on a rolling 12-month total.
9. Includes 3.0 tons from two emergency diesel generators, a waste oil burner, a natural gas raw water tank heater, natural gas dew-point heaters and one diesel fire pump. The combustion turbine total annual NO_x emissions of 148 TPY correspond to a rolling 12-month NO_x emission rate of 2.3 ppmvd @ 15% O₂.
10. Includes allowance for startup/shutdown and miscellaneous sources.
11. Includes breathing and working losses of the ammonia storage tanks.
12. Greenhouse Gas means any chemical or physical substance that is emitted into the air and that MassDEP may reasonably anticipate will cause or contribute to climate change including, but not limited to: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs), and any other gas for which 40 CFR Part 98 includes a method for calculating greenhouse gas emissions from any stationary emissions source.
13. To calculate the amount of a consecutive 12 month rolling period take the current calendar month amount and add it to the previous 11 calendar months total amount.

In accordance with Plan Approval Tr. X274046, the Permittee is subject to the Startup, Extended Startup, Shutdown, and Protective Action limits/restrictions as contained in Table 3B below:

Table 3B

Startup, Shutdown, and Protective Action Emission Limits¹						
EU	Pollutant	Startup²	Extended Startup²	Shutdown²	Protective Action³	Idle Mode Switching³
1 & 2	PM/PM ₁₀ /PM _{2.5}	0.012 lb/MMBtu				
	CO	800 lb/event	1,600 lb/event	335 lb/event	1,135 lb/event	430 lb/event
	NH ₃	70 lb/event	140 lb/event	40 lb/event	110 lb/event	15 lb/event
	NO _x	1,300 lb/event	2,600 lb/event	500 lb/event	1,800 lb/event	885 lb/event
	Opacity	In compliance with 310 CMR 7.06(1)(b), the Facility shall not emit contaminant(s), exclusive of uncombined water or smoke subject to 310 CMR 7.06(1)(a) of such opacity which, in the opinion of the Department, could be reasonably controlled through the application of modern technology of control and a good Standard Operating Procedure, and in no case, shall exceed 20% opacity for a period or aggregate period of time in excess of two minutes during any one hour provided that, at no time during the said two minutes shall the opacity exceed 40%.				
	Total Hours per Event	3	6	1	4	1

Table 3B Key:

EU = Emission Unit	NO _x = Nitrogen Oxides
CO = Carbon Monoxide	PM = Total Particulate Matter
PM ₁₀ = Particulate Matter less than or equal to 10 microns in diameter	PM _{2.5} = Particulate Matter less than or equal to 2.5 microns in diameter
lbs/event = pounds per event	CMR = Code of Massachusetts Regulations

Table 3B Notes:

1. The EU1 and EU2 emission limits in Table 3B are per unit and shall apply during startup, shutdown, and periods of protective action and idle mode switching.
2. An "event" with respect to startups and shutdowns is a "Startup", "Extended Startup", or "Shutdown". The definition and time period for each event is listed in Table 8 Items 1 and 2.
3. The definitions and time periods for a "Protective Action" event and "Idle Mode Switching" event are listed in Table 8 Items 3 and 4.

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to the monitoring/testing, record keeping, and reporting requirements as contained in Tables 4, 5, and 6 below and 310 CMR 7.00 Appendix C (9) and (10) and applicable requirements contained in Tables 3A and 3B:

Table 4

EU	Monitoring And Testing Requirements
1 & 2	<p>1. In accordance with Plan Approval No. X274046, the Permittee shall calibrate, test, and operate a Data Acquisition System(s) (DAS) and stack continuous emission monitors (CEMs) to measure and record the following:</p> <ul style="list-style-type: none"> a. Oxygen (O₂) b. Oxides of nitrogen (NO_x) c. Carbon monoxide (CO) d. Ammonia (NH₃)
	<p>2. In accordance with Plan Approval No. X274046, the Permittee shall ensure that all stack monitors and recording equipment comply with Department approved performance and location specifications. Notwithstanding the requirements of 40 CFR 60 subpart GG the equipment shall conform with the EPA monitoring specifications in 40 CFR Part 60.13 and 40 CFR Part 60 Appendices B and F, and all applicable portions of 40 CFR Parts 72 and 75 and 310 CMR 7.00 as applicable.</p>
	<p>3. In accordance with Plan Approval No. X274046, the Permittee shall use and maintain its CEM system as "direct-compliance" monitors to measure NO_x, CO, O₂ and Ammonia. "Direct-compliance" monitors generate data that legally documents the compliance status of a source. The Department shall utilize the data generated by the "direct-compliance" monitors; DEP recognized emission testing or other credible evidence for compliance and enforcement purposes.</p>
	<p>4. In accordance with Plan Approval No. X274046, the Permittee shall comply with all the applicable monitoring requirements contained in 40 CFR Parts 72 and 75 (Acid Rain Program), as modified by MassDEP's letter regarding custom monitoring dated September 6, 2005, and 310 CMR 7.00 as applicable.</p>
	<p>5. In accordance with 40 CFR 72.9, 40 CFR Part 75, and Acid Rain Permit #55211, the Permittee shall comply with all monitoring requirements for NO_x and SO₂ emissions.</p> <p>The requirements of 40 CFR Part 75 shall not affect the responsibility of the Permittee to monitor emissions of other pollutants from or other emissions characteristics of EU1 and EU2.</p>
	<p>6. In accordance with Plan Approval No. X274046, the Permittee shall conduct a relative accuracy test audit (RATA) for all CEMS in accordance with the procedures in 40 CFR 60 Appendices B and F and 40 CFR 75 Appendices A and B. The Permittee shall submit a proposed RATA protocol 30 days before testing unless there are no changes from a previously submitted RATA protocol. The Permittee shall submit a final RATA report within 60 days of completion of RATA.</p>
	<p>7. In accordance with Plan Approval No. X274046, the Permittee shall equip the CEMs with audible and visible alarms. The Permittee shall set the alarms to activate when emissions are within 5% of the pound per hour emission limits in Table 3A and 3B of this Operating Permit.</p>
	<p>8. In accordance with Plan Approval No. X274046, the Permittee shall operate each CEM at all times when the emission units are operating except for periods of CEM calibration checks, zero and span adjustments, preventive maintenance, and periods of malfunction.</p>
	<p>9. In accordance with Plan Approval No. X274046, the Permittee shall obtain and record emission data from each CEM for at least 95% of the emission unit operating hours per quarter, except for periods of CEM calibration checks, zero and span adjustments, preventive maintenance, and periods of malfunction.</p>
	<p>10. In accordance with Plan Approval No. X274046, the Permittee shall quantify periods of excess emissions, even if attributable to an emergency/malfunction, startup/shutdown, or equipment cleaning, shall be quantified and included in the determination of annual emissions and compliance with the annual emission limits as stated in Table 3A of this operating permit.</p>

EU	Monitoring And Testing Requirements
1 & 2	<p>11. In accordance with Plan Approval No. X274046, the Permittee shall determine continuous compliance with the VOC emission limits (short-term and annual) contained herein by monitoring CO emissions with the CO CEM:</p> <ul style="list-style-type: none"> a. Any period of excess emission of CO shall count as a period of excess emission of VOC, and the excess emission of VOC shall be accumulated towards the 49 tons per year annual emission limitation for VOC. b. If the gas turbine is operating below 50% load, the VOC emissions shall be considered as occurring at the rate determined in the initial stack test for startup. c. If the gas turbine is operating at 50% load or greater, and if CO emissions are below the CO emission limit at the given gas turbine operating conditions, the VOC emissions shall be considered as meeting the emission limits contained in this Operating Permit. d. If the gas turbine is operating at 50% load or greater, and if CO emissions are above the CO emission limit at the given gas turbine operating conditions, the VOC emissions shall be considered as occurring at a rate determined by the equation: $\text{VOC}_{\text{actual}} = \text{VOC}_{\text{limit}} (\text{CO}_{\text{actual}}/\text{CO}_{\text{limit}})$
	<p>12. In accordance with Plan Approval No. X274046, the Permittee shall comply with all provisions of 40 CFR 60, 40 CFR 72, 40 CFR 75, including 310 CMR 6.00 through 8.00, that are applicable to this Facility. The Permittee may petition the Administrator to be allowed to use an alternative monitoring schedule, which may permit certain features of the operation, data validation and data reduction of the continuous emission monitoring system (CEMS) to be operated at a variance with the established requirements of 40 CFR 60 and 75.</p>
	<p>13. In accordance with 40 CFR 75, the Permittee shall install and operate a continuous monitoring system to monitor the fuel consumption. The continuous monitoring system shall be accurate to within plus or minus 5%.</p>
	<p>14. The Permittee shall monitor and record the sulfur content in natural gas on a daily basis, or pursuant to any alternative fuel monitoring schedule issued for the Facility in accordance with 40 CFR Part 60, Subpart GG 60.334(h)(4). EPA approved a custom fuel schedule on February 22, 2001. The custom fuel schedule provides that:</p> <ul style="list-style-type: none"> a. Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel being utilized, and b. The fuel-sulfur sampling schedule culminating in semi-annual determinations shall be adhered to provided that no analysis results indicate failure to comply with 40 CFR 60 Subpart GG.
	<p>15. In accordance with Plan Approval No. X274046, the Permittee shall install and operate continuous monitors and alarm systems to monitor temperature at the inlet to the SCR and CO catalysts.</p>
	<p>16. In accordance with Plan Approval No. X274046, the Permittee shall not be subject to pre-construction monitoring as specified in 40 CFR Part 52.21(m).</p>
	<p>17. In accordance with Plan Approval No. X274046, the Permittee shall maintain a quality control/quality assurance (QA/QC) program for the long-term operation of the CEMs which conforms to 40 CFR Part 60, Appendix F, all applicable portions of 40 CFR Parts 72 and 75.</p>
	<p>18. In accordance with Plan Approval No. X274046, the Permittee shall determine compliance with the allowable opacity limits in accordance with EPA Method 9, as specified in 40 CFR 60, Appendix A and in accordance with 310 CMR 7.00 Appendix C(9)(b).</p>
	<p>19. In accordance with Plan Approval No. X274046, the Permittee shall conduct initial and RATA stratification testing in accordance with Method 20 for NO_x as well as O₂. The purpose of these tests shall be to document a representative CEM sampling location for NO_x in accordance with RATA testing as well as to satisfy Method 20 initial testing requirements.</p>
	<p>20. In accordance with 310 CMR 7.70(8) and ECP Approval #X223588, the Permittee shall comply with all monitoring and testing requirements for annual CO₂ emissions, net electrical output, and net steam output. (State Only Requirement).</p>

EU	Monitoring And Testing Requirements
3-1, 3-2, and 4	<p>21. In accordance with Table 2d, items 4a – 4c to 40 CFR 63 Subpart ZZZZ, the Permittee shall perform the following maintenance:</p> <ul style="list-style-type: none"> a. Track the hours of operation of the unit to ensure the change of oil every 500 hours of operation or annually, whichever comes first, or as an alternative, the Permittee may utilize an oil analysis program as allowed in 40 CFR 63.6625(i). If elected, the oil analysis must be performed every 500 hours of operation or within 1 year +30 days of the previous change, whichever comes first. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis or before continuing; b. Inspect air cleaner every 1,000 hours of operation or within 1 year +30 days of the previous inspection, whichever comes first; and c. Inspect all hoses and belts every 500 hours of operation or within 1 year +30 days of the previous inspection, whichever comes first and replace as necessary. <p>22. In accordance with 310 CMR 7.05(1)(a)3. and 7.00 Appendix C(9)(b), monitor the sulfur content of each new shipment of fuel oil received. Compliance with % sulfur-in-fuel requirements can be demonstrated through testing (testing certification) or by maintaining a shipping receipt from the fuel supplier (shipping receipt certification).</p> <p>The testing certification or shipping receipt certification of % sulfur-in-fuel shall document that sulfur testing has been done in accordance with the applicable ASTM test methods (D129-95, D1266-91, D1552-95, D2622-92, and D4294-90 for sulfur), or any other method approved by MassDEP and EPA.</p> <p>23. In accordance with 40 CFR 63.6640(f), the Permittee may operate an emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.</p>
Facility-wide	<p>24. In accordance with Plan Approval No. X274046, the Permittee shall monitor operations such that information may be compiled for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12.</p> <p>25. In accordance with 310 CMR 7.71(1) and Appendix C (9), the Permittee shall establish and maintain data systems or record keeping practices (e.g., fuel use records, SF₆ usage documentation, Continuous Emissions Monitoring System) for greenhouse gas emissions to ensure compliance with the reporting provisions of M.G.L. c. 21N, the Climate Protection and Green Economy Act, St. 2008, c. 298, § 6. (State Only Requirement).</p> <p>26. In accordance with 310 CMR 7.72(8)(a) and (b) the Permittee shall record, no less than annually, the amount of SF₆ added to each piece of active GIS equipment that was placed under the Permittee's ownership, lease, operation, or control on or after January 1, 2015. (State Only Requirement).</p> <p>27. In accordance with Plan Approval No. X274046, if and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13.</p>

Table 4 Key:

EU = Emission Unit	NO _x = Nitrogen Oxides
CO = Carbon Monoxide	SO ₂ = Sulfur Dioxide
PM = Total Particulate Matter	PM ₁₀ = Particulate Matter less than or equal to 10 microns in diameter
PM _{2.5} = Particulate Matter less than or equal to 2.5 microns in diameter	VOC = Volatile Organic Compounds
CO ₂ = Carbon Dioxide	lbs/hr = pounds per hour
TPM = tons per month	ppmvd @ 3% O ₂ = parts per million by volume, corrected to 3 percent oxygen
NH ₃ = Ammonia	SCR = Selective Catalytic Reduction
lbs/MMBtu = pounds per Million British thermal units	RATA = Relative Accuracy Test Audit
% = percent	CMR = Code of Massachusetts Regulations
CFR = Code of Federal Regulations	

Table 5

EU	Record Keeping Requirements
1 & 2	<p>1. In accordance with Plan Approval No. X274046, the Permittee shall keep the following records on site for the life of the Facility, and shall make the records listed in Table 4 available to the MassDEP on request:</p> <ul style="list-style-type: none"> a. Output from all continuous emission monitors for flue gas emissions including Oxygen (O₂), Oxides of Nitrogen (NO_x), Carbon Monoxide (CO), and Ammonia (NH₃), b. Continuous fuel consumption, c. Continuous SCR and CO control system inlet temperatures, and d. Continuous EU1 and EU2 inlet and ambient temperatures.
	<p>2. In accordance with 310 CMR 7.70(1), (2), (8) and ECP Approval No. X223588, the Permittee shall keep on site at the source all records required under 310 CMR 7.70(1), 310 CMR 7.70(2), and 310 CMR 7.70(8), or unless otherwise stated by MassDEP, for a period of 10 years. (State Only Requirement).</p>
	<p>3. In accordance with 310 CMR 7.74(8) the Permittee shall keep on site at the source records required under 310 CMR 7.74, for a period of 3 years, unless otherwise required by MassDEP. (State Only Requirement).</p>
	<p>4. In accordance with 40 CFR 72.9, 40 CFR Part 75, and Acid Rain Permit No. 55211, the Permittee shall keep onsite at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by EPA or MassDEP;</p> <ul style="list-style-type: none"> a. Certificate of representation for the designated representative for the source and all supporting documents; b. All emissions monitoring information, to the extent that a 3-year retention period applies under 40 CFR 75, the records shall be kept on site for a period of 3 years instead of 5 years; c. Copies of all reports, compliance certifications, other submissions, and all records made or required by the Acid Rain Program.
	<p>5. In accordance with Plan Approval No. X274046, the Permittee shall keep records of the sulfur content in natural gas on a daily basis, or pursuant to any alternative fuel monitoring schedule issued for the Facility in accordance with 40 CFR Part 60, Subpart GG 60.334(h)(4). EPA approved a custom fuel schedule on February 22, 2001. The custom fuel schedule provides that:</p> <ul style="list-style-type: none"> a. Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel being utilized, and b. The fuel-sulfur sampling schedule culminating in semi-annual determinations shall be adhered to provided that no analysis results indicate failure to comply with 40 CFR 60 Subpart GG.

EU	Record Keeping Requirements	
3-1, 3-2, & 4	<p>6. In accordance with 310 CMR 7.03(10), on or after June 1, 1990, but prior to March 23, 2006, construction, substantial reconstruction, or alteration of any emergency or standby engine shall comply with 310 CMR 7.03(10)(a) through (c). Reporting and record keeping requirements for 310 CMR 7.03(10), as required by 310 CMR 7.03(5) and (6), shall be in accordance with 310 CMR 7.02(8)(i)3. through 4.</p>	
	<p>7. In accordance with 310 CMR 7.00 Appendix C(10)(b), record the certification from the fuel supplier for each shipment of fuel oil to be used which shall include the following information:</p> <ul style="list-style-type: none"> a. The name of the oil supplier; b. Percent sulfur content (by weight); and c. The location where the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility or whether the sample was drawn from oil in storage at the oil supplier’s or oil refiner’s facility or other location. As an alternative, the Permittee may elect to analyze the oil immediately after the fuel storage tank is filled and before any oil is combusted for each new shipment according to methods approved by the MassDEP. These records shall be maintained on-site. 	
	<p>8. In accordance with 40 CFR 63.6625(i), if the Permittee elects to utilize the analysis program described in 40 CFR 63.6625(i), the permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis and oil changes for the engine.</p>	
	<p>9. In accordance with 40 CFR 63.6655, the Permittee shall:</p> <ul style="list-style-type: none"> a. Keep record of the hours of operation of the engine recorded through the non-resettable hour meter and any maintenance conducted on the engine; b. Document how many hours are spent for emergency operation including what classified the operation as emergency; and c. How many hours are spent for non-emergency operation. 	
	<p>10. In accordance with 40 CFR 63.10(b)(1) and 40 CFR 63.6660, the Permittee shall maintain all records required by Subpart ZZZZ in a form suitable and readily available or review for no less than 5 years following the date of each occurrence, measurement, and maintenance, corrective, action, report, or record. Records must be in hard copy or electronic format.</p>	
	Facility-wide	<p>11. In accordance with Plan Approval No. X274046, the Permittee shall comply with all applicable record keeping requirements contained in 40 CFR Parts 60, 72, 73, 75 and 77.</p>
		<p>12. In accordance with Plan Approval No. X274046, the Permittee shall maintain adequate records on-site to demonstrate compliance status with all operational, production, and emission limits contained in Tables 3A and 3B above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve-month period (current month plus prior eleven months). These records shall be compiled no later than the 15th day following each month. An electronic version of a MassDEP approved record keeping form, in Microsoft Excel format, may be downloaded at: https://www.mass.gov/guides/massdep-facility-wide-emission-restrictions-caps-reporting#-application-&-notification-forms.</p>
		<p>13. In accordance with Plan Approval No. X274046, the Permittee shall maintain records of monitoring and testing as required by Table 4.</p>
		<p>14. In accordance with Plan Approval No. X274046, the Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU(s) and PCDs approved herein on-site.</p>
		<p>15. In accordance with the Plan Approval No. X274046, the Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), PCD(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.</p>
<p>16. In accordance with Plan Approval No. X274046, the Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and PCD(s) and monitoring equipment. At a minimum, the records shall include the date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.</p>		

EU	Record Keeping Requirements
Facility-wide	17. In accordance with Plan Approval No. X274046, the Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	18. In accordance with Plan Approval No. X274046, the Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.
	19. In accordance with Plan Approval No. X274046, the Permittee shall make records required by the Plan Approval available to MassDEP and USEPA personnel upon request.
	20. In accordance with 310 CMR 7.72(8)(c) the Permittee shall retain on-site documents sufficient to demonstrate compliance with 310 CMR 7.72 for a period of 5 years from the creation of the document for any active piece of GIS equipment placed under the Permittee’s ownership, lease, operation, or control on or after January 1, 2015. (State Only Requirement).
	21. In accordance with 310 CMR 7.71 (5) (b) and (c), the Permittee shall keep on site at the facility documents of the methodology and data used to quantify emissions for a period of 5 years from the date the document is created. The Permittee shall make these documents available to MassDEP upon request. (State Only Requirement).
	22. In accordance with 310 CMR 7.12(3)(c), Copies of Source Registration and other information supplied to the Department, to comply with 310 CMR 7.12 shall be retained by the facility owner/operator for five years from the date of submittal.

Table 5 Key

EU = Emission Unit	PCD = Pollution Control Device
CEMS = Continuous Emission Monitoring System	SF ₆ = Sulfur Hexafluoride
CO ₂ = Carbon dioxide	MMBtu = million British thermal units
lb/MMBtu = pounds per million British thermal units	MWh = megawatt hours
% = percent	GIS = Gas Insulated Switchgear
ECP = Emission Control Plan	SOMP = Standard Operating and Maintenance Procedure
MassDEP = Massachusetts Department of Environmental Protection	USEPA = United States Environmental Protection Agency
CMR = Code of Massachusetts Regulations	CFR = Code of Federal Regulations

Table 6

EU	Reporting Requirements
1 & 2	<p>1. In accordance with Plan Approval X274046, the Permittee shall submit a quarterly report via MassDEP’s Compliance Reporting System (https://eeaonline.eea.state.ma.us/EEA/ComplianceReport/) under Continuous Emission Monitoring (CEM) System Excess Emissions Report (CEMRPT). The report shall be postmarked or electronically delivered within thirty days (30) following the end of the quarter and shall contain at least the following information:</p> <ul style="list-style-type: none"> a. The quarterly report from the facility CEMs shall identify any periods of excess emissions in a format acceptable to the Department. b. For each period of excess emissions or excursions from allowable operating conditions, the Permittee shall list the duration, cause, the response taken, and the number of excess emissions. Periods of excess emissions shall include periods of start-up, shutdowns, malfunction, emergency, equipment cleaning, and upsets or failures associated with the emission control system or CEMs. (“Malfunction” means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown are not malfunctions. “Emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the Permittee, including acts of God, which would require immediate corrective action to restore normal operation, and that causes the Project to exceed a technology-based limitation in this Plan Approval, due to unavoidable increases in emissions attributable to the emergency. An emergency does not include noncompliance caused by improperly designed equipment, lack of maintenance, careless or improper operations, operator error, or decision to keep operating despite knowledge of these things.) c. A tabulation of periods of operation, including the time of the beginning and ending of startup, shutdown, and protective actions and idle mode switching. d. A twelve-month rolling history of emission exceedances for each pollutant monitored by the CEMS.
	<p>2. In accordance with Plan Approval No. X274046, the Permittee shall provide the name, location, and appropriate contact information [phone number] of the Acid Rain Program Designated Representative (DR) to the Department and shall provide said name to any other person who so requests it. The Permittee shall keep the information pertinent to contacting the DR current at all times.</p>
	<p>3. In accordance with 310 CMR 7.74(7)(a) the Permittee shall submit to MassDEP by March 1st, 2019, and each March 1st thereafter, a Compliance Certification Report. (State Only Requirement).</p>
	<p>4. The Permittee shall comply with all applicable reporting requirements in 40 CFR 60, 72, 73, 75 and 77; and 310 CMR 7.70 and 7.74.</p>
	<p>5. In accordance with 40 CFR 72.9, 40 CFR Part 75, and Acid Rain Permit No. 55211, the Permittee shall submit to the appropriate MassDEP Regional Office and EPA any notification of testing or any testing protocol.</p>
	<p>6. In accordance with 40 CFR 72.9, 40 CFR Part 75, and Acid Rain Permit No. 55211, the Permittee shall submit a Quarterly SO₂ report to EPA within 30 days following the end of each calendar quarter.</p>
	<p>7. In accordance with 40 CFR 72.9, 40 CFR Part 75, and Acid Rain Permit No. 55211, the Permittee shall submit a Quarterly NO_x report to EPA within 30 days following the end of each calendar quarter.</p>
	<p>8. In accordance with 40 CFR Part 77 and Acid Rain Permit No. 55211, the Permittee shall submit a proposed offset plan in any calendar year where EU1 and 2 has/have excess emissions. In addition, the Permittee shall pay any penalties specified in 40 CFR Part 77 and comply with the terms of an approved offset plan.</p>

EU	Reporting Requirements
1 & 2	9. In accordance with 310 CMR 7.70(8)(d), the Permittee shall submit to the appropriate MassDEP Regional Office and EPA any notification of testing or any testing protocol in compliance with the requirements of 40 CFR 75.61. (State Only Requirement).
	10. In accordance with 310 CMR 7.70(8)(e)3. and ECP Approval #X223588, the Permittee shall submit a Monitoring System certification to the appropriate MassDEP Regional Office within 45 days after completing all CO ₂ monitoring system initial certification or recertification tests required under 310 CMR 7.70(8)(b). (State Only Requirement).
	11. In accordance with 310 CMR 7.70(4)(a)1. and ECP Approval No. X223588, the Permittee shall submit a Triennial Compliance Certification Report for each control period electronically in the RGGI CO ₂ Allowance Tracking System (COATS) to MassDEP by March 1st of the calendar year following the control period. (State Only Requirement).
	12. In accordance with 310 CMR 7.70(8)(h)6.c and ECP Approval No. X223588, the Permittee shall submit an Annual Net Output Report for each calendar year electronically to MassDEP’s agent in a format prescribed by MassDEP by March 1 st of the preceding calendar year. (State only Requirement).
	13. In accordance with 310 CMR 7.70(8)(e)4.b and ECP Approval No. X223588, the Permittee shall submit a Quarterly CO ₂ Emissions Report electronically to EPA within 30 days following the end of the calendar quarter covered by the report. (State Only Requirement).
Facility-wide	14. In accordance with 40 CFR 75 a copy of the QA RATA or Appendix E/LME test results must be submitted to the DEP Regional office within 45 days of completion of tests. In lieu of submitting the full test reports to DEP Regional office, the data assessment summary reports required by 40 CFR 60 Appendix F Procedure 1 Section 7 must be submitted to DEP Regional offices within 45 days of completion of tests. The electronic results must be submitted in the quarterly electronic data report (EDR).
	15. In accordance with Plan Approval Tr. X274046, the Permittee shall submit any records or reports that are required to be submitted to MassDEP in digitized format in a format usable to MassDEP.
	16. In accordance with 310 CMR 7.12, the Permittee shall submit a Source Registration/Emission Statement Form to MassDEP using MassDEP’s Online Filing System (https://edep.dep.mass.gov/edep/DEPlogin.aspx) on an annual basis.
	17. In accordance with 310 CMR 7.13(1) and 7.13(2), if determined by MassDEP that stack testing is necessary to ascertain compliance with the Department’s regulations or design approval provisos, the Permittee shall cause such stack testing to be summarized and submitted to MassDEP as prescribed in the agreed to pretest protocol.
	18. In accordance with 310 CMR 7.00: Appendix C(10)(c)., the Permittee shall report a summary of all monitoring data and related supporting information to MassDEP at least every six months (January 30 and July 30 of each calendar year).
	19. In accordance with General Condition 10 of this Permit, the Permittee shall submit the Annual Compliance report to MassDEP and EPA by January 30 of each year.
	20. In accordance with Plan Approval No. X274046, the Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a “Responsible Official” as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).
21. In accordance with Plan Approval No. X274046, the Permittee shall notify the Central Regional Office of MassDEP, BAW Permit Chief by cellphone: 781-540-6177 or email: Thomas.Hannah@mass.gov (or current Permit Chief, as applicable) and CERO.Air@mass.gov, as soon as possible, but no later than three (3) business days after discovery of an exceedance(s) of Table 3A and/or Table 3B requirements. A written report shall be submitted via MassDEP’s Compliance Reporting System (https://eeaonline.eea.state.ma.us/EEA/ComplianceReport/) under Exceedance Report (EXCDNC) within ten (10) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).	

EU	Reporting Requirements
Facility-wide	22. In accordance with Plan Approval No. X274046, the Permittee shall notify MassDEP immediately by telephone: 781-540-6177, or e-mail: Thomas.Hannah@mass.gov (or current Permit Chief) and CERO.Air@mass.gov and within three (3) working days, in writing, of any upset or malfunction to the ammonia handling or delivery systems that resulted in a release or threat of release of ammonia to the ambient air. In addition, the Permittee shall comply with all notification procedures required under M.G.L. c. 21 E for any release or threat of release of ammonia.
	23. In accordance with 310 CMR 7.00, Appendix C(10)(a), the Permittee, upon MassDEP’s request shall transmit any record relevant to the Operating Permit within 30 days of the request by MassDEP or within a longer time period if approved in writing by MassDEP. The record shall be transmitted on paper, on computer disk, or electronically at the discretion of MassDEP.
	24. In accordance with 310 CMR 7.72(4)(c) the Permittee shall submit a Gas-Insulated Switchgear Leak Rate Exceedance Reporting Form by April 15 th of the following year for any active piece of GIS equipment placed under the Permittee’s ownership, lease, operation, or control on or after January 1, 2015, that does not meet the 1.0% maximum annual leak rate. (State Only Requirement).
	25. In accordance with 310 CMR 7.71(5), the Permittee shall electronically submit and certify by April 15 th of each year a greenhouse gas emissions report to MassDEP. (State Only Requirement).

Table 6 Key

EU = Emission Unit	PCD = Pollution Control Device
CO = Carbon monoxide	SO ₂ = Sulfur dioxide
NOx = Nitrogen oxides	SF ₆ = Sulfur hexafluoride
CEMS = Continuous Emission Monitoring System	GIS = Gas Insulated Switchgear
PCD = Pollution Control Device	ECP = Emission Control Plan
% = Percent	RGGI = Regional Greenhouse Gas Initiative
USEPA = United States Environmental Protection Agency	MassDEP = Massachusetts Department of Environmental Protection
CFR = Code of Federal Regulations	CMR = Code of Massachusetts Regulations

C. GENERAL APPLICABLE REQUIREMENTS

The Permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et seq. and 310 CMR 8.00 et. seq., when subject.

D. REQUIREMENTS NOT CURRENTLY APPLICABLE

The Permittee is currently not subject to the following requirements:

Table 7

Regulation	Reason
310 CMR 7.08	The Facility does not use incinerators.
310 CMR 7.16: Reduction of Single Occupant Commuter Vehicle Use	The Facility employs less than 250 workers, does not meet the criteria for Reduction of Single Occupant Commute Vehicle Use.
310 CMR 7.18	The Facility does not exceed threshold and does not use Volatile Organic Compounds (VOCs) in its process operation. The Facility operates a vapor degreaser, designated as EU16, which utilizes a water-based degreasing agent that does not contain VOCs.

Regulation	Reason
42 U.S.C. 7401, §112(r)(7) Risk Management Program; 310 CMR 7.24	Facility does not store or process applicable chemicals above thresholds.
40 CFR Part 64. Compliance Assurance Monitoring (CAM)	EU1 and EU2 power trains have a dedicated CEMS and a dedicated stack. Therefore, pursuant to 40 CFR Part 64.2(b)(1)(vi) each EU is exempt from 40 CFR Part 64 CAM requirements.

5. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to and shall comply with the following special terms and conditions that are not contained in Table 3, 4, 5, and 6:

Table 8.

EU	Special Terms and Conditions
1 & 2	<p>1. In accordance with Plan Approval Tr. X274046, A “Startup” is a Gas Turbine startup event initiated by flame on. The maximum duration of time to achieve emissions compliance representative of steady-state operation (with emission rates not to exceed those listed in Table 3A) at or above nominal 50% relative power shall not exceed 180 minutes, except that the Startup period may be extended for no more than an additional 180 minutes (“Extended Startup”) if the additional time is minimized in accordance with prudent operational and maintenance practices. Should the Startup be extended, the Permittee shall report the extension and the reason for it in accordance with the reporting requirements in Table 5 of this Plan Approval. The Permittee shall comply with the emission limits in Table 3B of this Plan Approval during Startup.</p> <p>2. In accordance with Tr. X274046, a “Shutdown” is defined as a Gas Turbine event that begins at 50% relative power decreasing and concludes at the time the Gas Turbine flame is off. The maximum duration of time from emissions compliance representative of steady-state operation (at emission rates not to exceed those listed in 3A) at 50% nominal relative power to “no flame” shall not exceed 60 minutes. The Permittee shall comply with emission limits in Table 3B of this Plan Approval during Shutdown.</p> <p>3. In accordance with Tr. X274046, a “Protective Action” (PA) is defined as an event causing a reduction in Gas Turbine load, whether automatically or manually initiated, used to prevent damage or harm to equipment or personnel. During a PA, the unit will have 240 minutes to achieve emissions compliance representative or steady-state operation with emission rates not to exceed those listed in Table 3A. A PA operation shall not exceed 240 minutes. The Permittee shall comply with the emission limits in Table 3B of this Plan Approval during a PA event.</p> <p>4. In accordance with Plan Approval Tr. X274046, “Idle Mode Switching” is operation at idle mode (no flame off) in response to an ISO NE requirement to briefly disconnect some or all electric equipment for a short period of time to perform a switching activity associated with the maintenance and reliability of the restart of the Gas Turbines. The Permittee shall not allow a period of Idle Mode Switching to exceed 180 minutes and shall allow no more than five (5) Idle Mode Switching events per rolling 12-month period. The Permittee shall report the Idle Mode Switching and the reasons for it in accordance with the reporting requirements in Table 5 of this Plan Approval. The Permittee shall comply with the emission limits in Table 3B of this Plan Approval during Idle Mode Switching. The maximum number of minutes allowed during the operation of the unit in Idle Mode, “Breaker Open to Breaker Close”, will not exceed 60 minutes.</p> <p>5. In accordance with Plan Approval Tr. X274046, during periods of re-commissioning (such as tuning of the Gas Turbine per manufacturer recommendations), start-up limits, shutdown limits, hourly emissions limits and GT min load requirements may exceed normal operating permit limits contained within. Excess emissions will be recorded in DAHS as “re-commissioning”.</p> <p>6. In accordance with Plan Approval Tr. X274046, the Permittee shall maintain on-site for the CEMS an adequate supply of spare parts to maintain the on-line availability and data capture requirements.</p>

EU	Special Terms and Conditions
1 & 2	<p>7. In accordance with Plan Approval Tr. X274046, the Permittee shall properly train all personnel to operate the facility and control equipment in accordance with vendor specifications. All persons responsible for the operation of the ammonia handling and SCR control systems shall sign a statement affirming that they have read and understand the approved standard operating and standard maintenance procedures. This training shall be updated at least once annually.</p>
	<p>8. In accordance with Plan Approval Tr. X274046, the Permittee shall ensure that the NO_x SCR and CO catalyst for EU 1 and 2 are operational as soon as the flue gas temperature at the inlet to the SCR and CO catalyst is above the minimum flue gas temperature specified by the equipment manufacturers and other system parameters are satisfied for SCR and CO catalyst operation.</p>
	<p>9. In accordance with Plan Approval Transmittal No. X274046, Ammonia:</p> <ul style="list-style-type: none"> a. The Permittee shall maintain, in the Facility control room, a portable ammonia detector (or detector tube system) for use during a spill or atmospheric release. b. The Permittee shall calibrate the portable ammonia monitor(s) at least once per year (or at the frequency recommended by the ammonia detector manufacturer), and maintain records on site or maintain appropriate detector tube(s) within the manufacturer's expected shelf life. c. The aqueous ammonia storage tanks shall be equipped with high- and low-level audible alarm monitors. d. The high and low-level alarm system shall receive the periodic maintenance, testing and calibration recommended by the manufacturer of the alarm system. The ammonia tank shall be emptied, cleaned, and inspected by an appropriately trained individual at the interval recommended by the tank manufacturer or as governed by API guidance. e. The Permittee shall at all times keep enough of the ball-like plastic baffles within the containment area around the aqueous ammonia storage tanks to provide coverage of at least 91% of the surface area. The balls shall be free of ice and other restrictions that would inhibit their floatation. f. The permittee shall install high and low-level ammonia detectors equipped with an audible alarm in the control room, at the ammonia tanker unloading pit and near the storage tanks. The high and low alarm set points should be set such as to allow ample margin of error to prevent over-filling at the high level and to prevent loss of catalytic control of the exhaust gases at low ammonia supply levels. g. The Permittee shall store the standard operating and maintenance procedures for the ammonia handling system in a convenient location (e.g., control room/technical library) and make them readily available to all employees.
	<p>10. In accordance with Plan Approval No. X274046, the Permittee shall continue to emit products of combustion from each of the Emission Units through an existing exhaust stack that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. The exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as “shanty caps” and “eggbeaters.” The Permittee shall utilize the exhaust stack with the following parameters for Emission Units 1 & 2 (combined stack):</p> <ul style="list-style-type: none"> a. Stack height: 180 feet b. Stack Exit Diameter: 18 feet c. Stack Gas Exit Velocity Range (feet per second): Variable up to 63 feet per second d. Stack Gas Exit Temperature Range (°F): Variable up to 176°F
	<p>11. In accordance with 40 CFR Part 60 Subpart A and Subpart GG, the Permittee shall comply with all applicable requirements.</p>

EU	Special Terms and Conditions				
1 & 2	<p>12. <u>FEDERAL PHASE II ACID RAIN REQUIREMENTS</u></p> <p>1. In accordance with 40 CFR Part 73, Tables 2, 3, or 4 (as amended) and Acid Rain Permit #55211, the Permittee’s yearly allowance allocations are identified below:</p> <table border="1" style="margin-left: 40px;"> <thead> <tr> <th style="text-align: center;">Emission Unit</th> <th style="text-align: center;">2010 and beyond (annual SO₂ allocation)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1 & 2</td> <td style="text-align: center;">0</td> </tr> </tbody> </table> <p>2. Within 60 days of the end of each calendar year the designated representative shall submit to the Department an Annual Compliance Certification report pursuant to 40 CFR Part 72.9 Subpart I.</p>	Emission Unit	2010 and beyond (annual SO ₂ allocation)	1 & 2	0
Emission Unit	2010 and beyond (annual SO ₂ allocation)				
1 & 2	0				
3-1, 3-2, & 4	<p>13. In accordance with 40 CFR 63.6664, EU 3-1, 3-2 and 4 are subject to the requirements of 40 CFR 63.1-15, Subpart A, "General Provisions" as indicated in Table 8 to Subpart ZZZZ of 40 CFR 63. Compliance with all applicable provisions therein is required.</p> <p>14. In accordance with 40 CFR 63.6625(e), the Permittee shall operate and maintain the stationary RICE and after treatment control device (if any) according to the manufacturer's emission-related written instructions or develop their 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.</p> <p>15. In accordance with 40 CFR 63.6625(f), the Permittee shall install a non-resettable hour meter.</p> <p>16. In accordance with 40 CFR 63.6625(h), the Permittee shall minimize the engine’s time spent at idle speed during startup and shall also minimize the engine’s startup time so as to provide for safe loading of the engine, not to exceed 30 minutes.</p>				
Facility-wide	<p>17. <u>RESPONSE TO NON-COMPLIANCE</u> (State Only Requirement)</p> <p>1. In accordance with Plan Approval No. X274046, upon receiving information that the facility may be in non-compliance with the provisions of this permit regarding sound emission levels, located in Table 8A of this Plan Approval, the Permittee shall take the following immediate actions:</p> <ul style="list-style-type: none"> a) Notify the MassDEP BAW CERO Compliance and Enforcement Section by telephone or email; b) Verify whether non-compliance occurred and is continuing; c) Take all reasonable interim steps to eliminate or minimize sound emissions to return to compliance. <p>2. Should non-compliance with this permit or the Department’s regulations due to sound emissions from the facility affecting one or more residences occur despite the interim steps implemented above, the Permittee shall, unless otherwise ordered by the Department, submit within 30 days of receipt of information of non-compliance from the Department or other credible source, whichever is earlier, a sound reduction plan which sets out the additional monitoring and remedial actions it proposes to implement in order to verify a return to compliance and a schedule for the commencement and completion of each major component of the monitoring and remedial actions.</p>				

Table 8 Key

EU = Emission Unit	PCD = Pollution Control Device
SCR = Selective catalytic reduction	TR = Transmittal Number
% = Percent	NO _x = Nitrogen Oxides
CERO = Central Regional Office	BAW = Bureau of Air and Waste
MassDEP = Massachusetts Department of Environmental Protection	

Table 8A

Maximum Allowable Noise							
Reception Location ⁽¹⁾	Current Background Ambient (one-hour L_{A90}, dBA)		Maximum Allowable Plant Generated Noise (one-hour L_{A90})	Resultant Ambient Day/Night Sound Levels (One-hour L_{A90})⁽²⁾			
	Night	Day		Ambient dBA		Increase	
				Night ⁽³⁾	Day ⁽⁴⁾	Night	Day
	R-1	37		52	38	41	52
R-2	36	40	43	44	45	8	5
R-3	35	44	40	41	45	6	1
R-4A	36	40	43	44	45	8	5
R-4B	36	40	43	44	45	8	5
PL-1	36	42	52	52	52	16	10
PL-2	36	42	58	58	58	22	16
PL-3A	36	42	49	49	50	13	8
PL-4	36	42	45	46	47	10	5

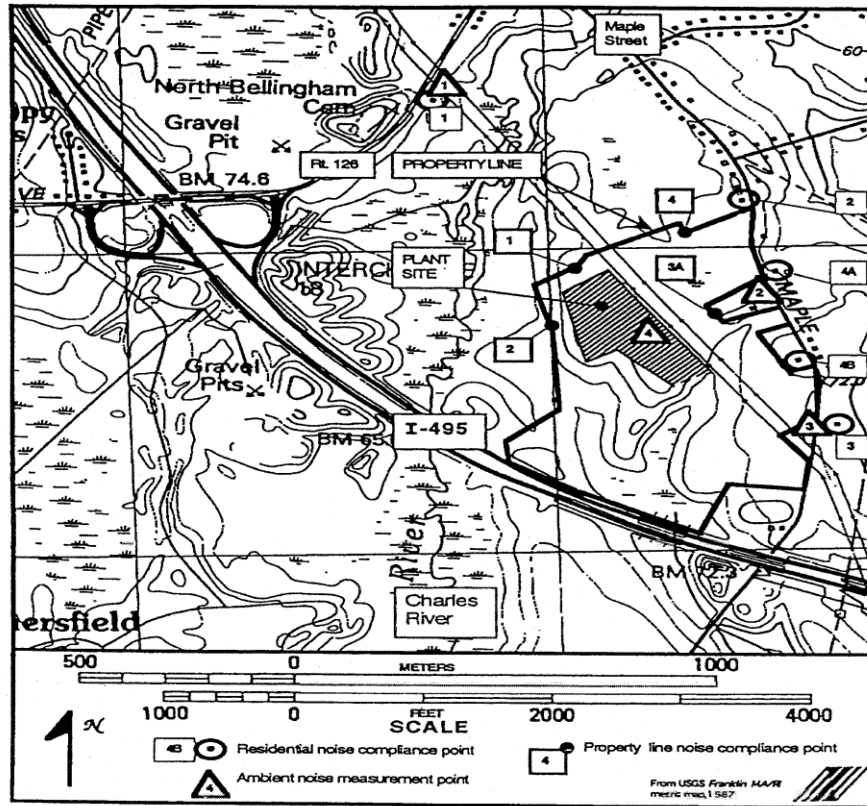
Table 8A Key:

dBA = A-weighted decibel	L _{A90} = A-weighted sound level exceeded for 90% of the measurement
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Table 8A Notes:

1. All noise-receptor locations are as presented in the Air Quality plan application and supplemental information unless otherwise noted. (1) PL-1 & PL-2 are located on the Corps of Engineers' property line; PL-3A is located on the Ma Glockner's Restaurant property line.
2. One-hour LA90 + the A weighted decibel noise level exceeded for 90% of the time over a one-hour period.
3. Night is defined as 2200 hours to 0700 hours.
4. Day is defined as 0700 hours to 2200 hours.
5. R-1 is the closest residence northwest of the plant site, along State route 126 just south of the transmission line crossing.
6. R-2 is R-2 123 Maple Street, the closest residence northeast of the site, on the west side of Maple Street.
7. R-3 is 186 Maple Street, the closest residence southeast of the site, on the east side of Maple Street.
8. R-4A is 146 Maple Street, the closest residence to the northern portion of the site, on the east side of Maple Street just north of Ma Glockner's restaurant.
9. R-4B is 169 Maple Street, the closest residence to the southern portion of the site, on the west side of Maple Street south of Ma Glockner's restaurant.
10. PL-1 is on the north property line of the site at its closest approach to the plant.
11. PL-2 is on the west property line of the site at its closest approach to the plant.
12. PL-3A is on the east property line of the plant where it abuts the Ma Glockner's restaurant property.
13. PL-4 is at the rear lot line of 123 Maple Street (R-2), the only abutting residential parcel that is (in part) residentially zoned.
14. Resultant sound levels presented in this table are from the ANP Bellingham Nighttime Noise Survey performed on October 21/22, 1999.

ANP Bellingham Energy Project Site and Environs Showing Noise Measurement and Compliance Points (Plant site and property lines are approximate.)



6. ALTERNATIVE OPERATING SCENARIOS

The Permittee did not request alternative operating scenarios in its Operating Permit application.

7. EMISSIONS TRADING

A. INTRA-FACILITY EMISSION TRADING

The Permittee did not request intra-facility emissions trading in its Operating Permit application.

B. INTER-FACILITY EMISSION TRADING

The Permittee did not request inter-facility emissions trading in its Operating Permit application.

8. COMPLIANCE SCHEDULE

The Permittee has indicated that the Facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5.

In addition, the Permittee shall comply with any applicable requirements that become effective during the Permit term.

GENERAL CONDITIONS FOR OPERATING PERMIT

9. FEES

The Permittee has paid the permit application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

10. COMPLIANCE CERTIFICATION

All documents submitted to the MassDEP shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The "Operating Permit Reporting Kit" contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification. The "Operating Permit Reporting Kit" is available to the Permittee via the MassDEP's web site, <https://www.mass.gov/guides/massdep-operating-permit-compliance-program#operating-permit-reporting-kit>

A. Annual Compliance Report and Certification

The Responsible Official shall certify, annually for the calendar year, that the facility is in compliance with the requirements of this Operating Permit. The report shall be submitted by January 30 to the MassDEP via MassDEP's Compliance Reporting System (<https://eeaonline.eea.state.ma.us/EEA/ComplianceReport/>) under Operating Permit Annual Certification (OPANN) and to U.S. Environmental Protection Agency - Region 1 through EPA's Compliance and Emissions Data Reporting Interface (<https://cdx.epa.gov/>). The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status and whether compliance was continuous or intermittent during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- 4) any additional information required by the MassDEP to determine the compliance status of the source.

B. Semi-Annual Monitoring Summary Report and Certification

The Responsible Official shall certify, semi-annually on the calendar year, that the Facility is in compliance with the requirements of this Permit. The report shall be submitted via MassDEP's Compliance Reporting System (<https://eeaonline.eea.state.ma.us/EEA/ComplianceReport/>) under Operating Permit Semi-Annual Emissions Summary (OPSEMI) by January 30 and July 30 to MassDEP. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
- 4) whether there were any deviations during the reporting period;
- 5) if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
- 6) whether deviations in the reporting period were previously reported;
- 7) if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
- 8) if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
- 9) any additional information required by the MassDEP to determine the compliance status of the source.

11. NONCOMPLIANCE

Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act, and is grounds for enforcement action, for Permit termination or revocation, or for denial of an Operating Permit renewal application by the MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00;

and civil penalties under M.G.L. c.111, §142A and 142B. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

12. PERMIT SHIELD

- A. This Facility has a permit shield provided that it operates in compliance with the terms and conditions of this Permit. Compliance with the terms and conditions of this Permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7, for the emission units as described in the Permittee's application and as identified in this Permit.

Where there is a conflict between the terms and conditions of this Permit and any earlier approval or Permit, the terms and conditions of this Permit control.

- B. The MassDEP has determined that the Permittee is not currently subject to the requirements listed in Section 4, Table 7.
- C. Nothing in this Permit shall alter or affect the following:
- 1) the liability of the source for any violation of applicable requirements prior to or at the time of Permit issuance.
 - 2) the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a); or
 - 3) the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Act.

13. ENFORCEMENT

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.04(9), 7.05(8), 7.18(1)(b), 7.70, 7.71, 7.72, 7.73, 7.74, 7.75, 7.76 and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A

All other terms and conditions contained in this Permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the MassDEP, EPA and citizens as defined under the Act.

A Permittee shall not claim as a defense 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 Permit.

14. PERMIT TERM

This Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date 5 years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the facility's emission units, control equipment or associated equipment covered by this Permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

15. PERMIT RENEWAL

Upon the MassDEP's receipt of a complete and timely application for renewal, this Facility may continue to operate subject to final action by the MassDEP on the renewal application.

In the event the MassDEP has not taken final action on the Operating Permit renewal application prior to this Permit's expiration date, this Permit shall remain in effect until the MassDEP takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in accordance with 310 CMR 7.00: Appendix C(13).

16. REOPENING FOR CAUSE

This Permit may be modified, revoked, reopened, and reissued, or terminated for cause by the MassDEP and/or EPA. The responsible official of the Facility may request that the MassDEP terminate the facility's Operating Permit for cause. The MassDEP will reopen and amend this Permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the Permittee for an Operating Permit revision, revocation and reissuance, or termination, or a notification of a planned change or anticipated noncompliance does not stay any Operating Permit condition.

17. DUTY TO PROVIDE INFORMATION

Upon the MassDEP's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to the MassDEP copies of records that the Permittee is required to retain by this Permit.

18. DUTY TO SUPPLEMENT

The Permittee, upon becoming aware that any relevant facts were omitted, or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected

information. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the Facility after the date a complete renewal application was submitted but prior to release of a draft permit.

The Permittee shall promptly, on discovery, report to the MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to the MassDEP.

19. TRANSFER OF OWNERSHIP OR OPERATION

This Permit is not transferable by the Permittee unless done in accordance with 310 CMR 7.00: Appendix C(8)(a). A change in ownership or operation control is considered an administrative permit amendment if no other change in the Permit is necessary and provided that a written agreement containing a specific date for transfer of Permit responsibility, coverage and liability between current and new Permittee, has been submitted to the MassDEP.

20. PROPERTY RIGHTS

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

21. INSPECTION AND ENTRY

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the MassDEP, and EPA to perform the following:

- A. Enter upon the Permittee's premises where an operating permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;
- B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- D. Sample or monitor at reasonable times any substances or parameters for the purpose of assuring compliance with the Operating Permit or applicable requirements as per 310 CMR 7.00 Appendix C(3)(g)(12).

22. PERMIT AVAILABILITY

The Permittee shall have available at the Facility, at all times, a copy of the materials listed under 310 CMR 7.00: Appendix C(10)(e) and shall provide a copy of the Operating Permit, including any amendments or attachments thereto, upon request by the MassDEP or EPA.

23. SEVERABILITY CLAUSE

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

24. RESERVED

25. PERMIT DEVIATION

Deviations are instances where any permit condition is violated. Reporting a permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6 of this Operating Permit shall supersede the following deviation reporting requirements, if applicable.

The Permittee shall report to the MassDEP's Regional Bureau of Air and Waste the following deviations from permit requirements, by telephone, or by electronic mail (e-mail), within three (3) days of discovery of such deviation:

- A. Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.
- B. Exceedances of parameter limits established by this Operating Permit or other approvals, where the parameter limit is identified by the Permit or approval as surrogate for an emission limit.
- C. Exceedances of Permit operational limitations directly correlated to excess emissions.
- D. Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, this Operating Permit, or other approvals.
- E. Failure to perform QA/QC measures as required by this Operating Permit or other approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the MassDEP Bureau of Air and Waste Air Operating Permit Reporting Kit, which is available to the Permittee via the MassDEP's web site, <https://www.mass.gov/guides/massdep-operating-permit-compliance-program#operating-permit-reporting-kit>.

This report shall include the deviation, including those attributable to upset conditions as defined in the Permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone, or electronic mail (e-mail) within 3 days of discovery, said deviations shall also be submitted in writing via MassDEP's Compliance Reporting System (<https://eeaonline.eea.state.ma.us/EEA/ComplianceReport/>) under Operating Permit Deviation Report

(OPDR) to the regional Bureau of Air and Waste within ten (10) days of discovery. For deviations, which do not require 3-day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

26. OPERATIONAL FLEXIBILITY

The Permittee is allowed to make changes at the Facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the Permit and in compliance with all applicable requirements provided the Permittee gives the EPA and the MassDEP written notice fifteen (15) days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the Facility's Permit. The permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

27. MODIFICATIONS

- A. Administrative Amendments - The Permittee may make changes at the Facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).
- B. Minor Modifications - The Permittee may make changes at the Facility which are considered minor modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).
- C. Significant Modifications - The Permittee may make changes at the Facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).
- D. No permit revision shall be required, under any approved economic incentives program, marketable permits program, emission trading program and other similar programs or processes, for changes that are provided in this Operating Permit. A revision to the Permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an Operating Permit revision under any other applicable requirement.

28. OZONE DEPLETING SUBSTANCES

This section contains air pollution control requirements that are applicable to this Facility, and the United States Environmental Protection Agency enforces these requirements.

- A. The Permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

- 1) All containers containing a class I or class II substance that is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR 82.106.
 - 2) The placement of the required warning statement must comply with the requirements of 40 CFR 82.108.
 - 3) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR 82.110.
 - 4) No person may modify, remove or interfere with the required warning statement except as described in 40 CFR 82.112.
- B. The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVAC) in Subpart B:
- 1) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices of 40 CFR 82.156.
 - 2) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment of 40 CFR 82.158.
 - 3) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - 4) Persons disposing of small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152) must comply with recordkeeping requirements of 40 CFR 82.166.
 - 5) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair equipment requirements of 40 CFR 82.156.
 - 6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- C. If the Permittee manufactures, transforms, imports or exports a class I or class II substance, the Permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, "Production and Consumption Controls".
- D. If the Permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the Permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners". The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.
- E. The Permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

29. GAS INSULATED SWITCHGEAR

Pursuant to 310 CMR 7.72(2) *Definitions*:

“Gas Insulated Switchgear or GIS” means all electrical power system equipment insulated with SF₆ gas. Gas-insulated switchgear or GIS includes switches, stand-alone gas-insulated equipment, and any combination of electrical disconnects, fuses, electrical transmission lines, transformers and/or circuit breakers used to isolate gas-insulated electrical power system equipment.

The Permittee shall comply with the following requirements under 310 CMR 7.72 for any GIS purchased after January 1st, 2015:

- Ensure that the GIS has a maximum annual SF₆ leak rate of 1%, as represented by the manufacturer;
- Maintain the GIS in accordance with maintenance procedures or industry best management practices that have the effect of reducing leakage of SF₆ (310 CMR 7.72(4)(b));
- If, beginning with the second time that a GIS owner adds SF₆ to a GIS unit, or group of commonly-owned, leased, operated, or controlled GIS, the GIS owner becomes aware that the annual average leakage rate for the new GIS equipment is greater than 1%, the GIS owner must inform MassDEP and describe actions that are expected to reduce the emission rate in the future (310 CMR 7.72(4)(c)); and
- Record, no less than annually, the amount of SF₆ added to each piece of active GIS equipment (310 CMR 7.72(8)(b)).

The Permittee shall comply with the following requirements under 310 CMR 7.72 for any GIS regardless of purchase date:

- Upon removal of any GIS containing SF₆ from the ownership, lease, operation, or control of a GIS owner, the GIS owner must provide for the secure storage, re-use, recycling, or destruction of the SF₆ (310 CMR 7.72(4)(d)).

This is a state only requirement.

APPEAL CONDITIONS FOR OPERATING PERMIT

This Permit is an action of the MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing within 21 days of issuance of this Permit. In addition, any person who participates in any public participation process required by the Federal Clean Air Act, 42 U.S.C. §7401, §502(b)(6) or under 310 CMR 7.00: Appendix C(6), with respect to the MassDEP's final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to Chapter 30A, and may obtain judicial review, pursuant to Chapter 30A, of a final decision therein.

If an adjudicatory hearing is requested, the Facility must continue to comply with all existing federal and state applicable requirements to which the Facility is currently subject, until a final decision is issued in the case, or the appeal is withdrawn. During this period, the application shield shall remain in effect, and the Facility shall not be in violation of the Act for operating without a Permit.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the Permit is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to The Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

The Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency) county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

The MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.