COMMONWEALTH OF MASSACHUSETTS
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DEPARTMENT OF ENVIRONMENTAL PROTECTION
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Final AIR QUALITY OPERATING PERMIT

(Minor Modification dated: 9/8/2010)

Issued by the Massachusetts Department of Environmental Protection ("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"]:
Braintree Electric Light Department
100 Potter Road
Braintree, Massachusetts 02184

INFORMATION RELIED UPON:
Application No. 4V06022 and 4M10017
Transmittal No. W034607 and X233217

FACILITY LOCATION:
Braintree Electric Light Department
100 Potter Road
Braintree, Massachusetts 02184

FACILITY IDENTIFYING NUMBERS:
AQ ID: 119 0491
ORIS NO.: 01660
FMF FAC NO.: 133487
FMF RO NO.: 52284

NATURE OF BUSINESS:
Electrical Power Generation

STANDARD INDUSTRIAL CODE (SIC):
4911

NORTH AMERICAN INDUSTRIAL CLASSIFICATION SYSTEM (NAICS):
221112

RESPONSIBLE OFFICIAL:
Name: Charles E. Coyne
Title: Production Division Manager

FACILITY CONTACT PERSON:
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This operating permit shall expire on 3/20/2014.
For the Department of Environmental Protection, Bureau of Waste Prevention

Replacement page dated 9/8/2010 — March 20, 2009

Permit Chief, Bureau of Waste Prevention — Date

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SPECIAL CONDITIONS FOR OPERATING PERMIT

A Legend to Abbreviated Terms found in the following Tables is located in Section 28 of the 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.

DESCRIPTION OF FACILITY AND OPERATIONS

Braintree Electric Light Department (BELD) is a municipal utility serving the Town of Braintree and owns and operates an electrical power generation facility located at 100 Potter Road in Braintree, Massachusetts. The facility is approved to operate the existing Potter II Station and the proposed Watson Station.

Potter II Station consists of a 96 Megawatt (MW) output combined cycle power plant consisting of a 76 MW output or 975.5 million British Thermal Units of energy input capacity per hour (MMBTU/hr) combustion turbine, noted as Emission Unit No. 3 (EU3, formerly identified as Emission Unit No. 92), three un-fired waste heat boilers, and one 20 MW output steam turbine. The thermal output for the combined cycle power plant is produced in the combustion turbine, since no combustion takes place in the three waste heat boilers and the steam turbine. The waste heat boilers are used to produce deaerated water, intermediate pressure steam, and high pressure steam. In addition, the facility operates a 2.25 MW output reciprocating internal combustion engine, noted as Emission Unit No. 2 (EU2, formerly identified as Emission Unit No. 93). Natural gas and distillate fuel oil having a sulfur content of 0.3 percent by weight or less are presently the only fuels of use at the facility. Upon commencement of operation of the proposed Watson Station, EU2 and EU3 will burn either Natural gas or Ultra Low Sulfur Distillate (ULSD) oil having a sulfur content of 0.0015 % by weight or less. EU2 and EU3 are also subject to Reasonably Available Control Technology for Sources of NO_x (NO_x RACT, 310 CMR 7.19). The facility is utilizing federally enforceable NO_x Emission Reduction Credits certified by the MassDEP in accordance with 310 CMR 7.00: Appendix B(3) to comply with NO_x RACT for the combustion turbine. EU2 must comply with the regulations at 310 CMR 7.19(8). A cold cleaning degreaser that is subject to requirements at 310 CMR 7.18(8), noted as Emission Unit No. 1 (EU1), is on site for parts washing.

The proposed 116 MW output Watson Station is approved to consist of two quick-start, simple-cycle Rolls-Royce Trent 60 combustion turbine generators and ancillary equipment. The two Watson Station turbines, Emission Unit No. 4 (EU4) and Emission Unit No. 5 (EU5) have a maximum energy input of approximately 545.1 MMBtu/hr (HHV) each and are approved to use either natural gas (unrestricted) or ultra low sulfur distillate (ULSD) oil (limited to 22.84 MM gallons per 12-MRP). The proposed turbines will utilize a wet low emitting (WLE) NO_x burner using water injection in addition to a Selective Catalytic Reduction (SCR) System to control nitrogen oxides (NO_x) emissions. The Watson Station turbines will use good combustion practices, equipment design, and oxidation catalysts to control Carbon Monoxide (CO) and Volatile Organic

Compound (VOC) emissions. BELD received a pre-construction Major Comprehensive Plan Application (CPA) Approval from the MassDEP (Approval No. 4P07014), on February 8, 2008 and was issued a Prevention of Significant Deterioration (PSD) Permit from the U.S. EPA (Permit No. 049-119-MA10), on April 4, 2008. BELD has submitted, as part of this Operating Permit Renewal Application, an Operating Permit Significant Modification Application (Application No. 4M08019) under transmittal No. W209225.

As part of this Operating Permit renewal/significant modification application, BELD proposed to install dedicated certified natural gas flow meters and a dedicated ULSD "day tank" with separate supply and return ULSD fuel flow meters for EU4 and EU5 in lieu of a single natural gas and a single ULSD meter to serve both turbines. This doubling of the PSD monitoring equipment will result in an increase in accuracy with respect to fuel use and heat input monitoring and conforms to the monitoring and recordkeeping requirement of PSD Permit No. 049-119-MA10.

Emission Unit No. 3 is an existing Budget Unit under the Nitrogen Oxides (NO_x) Allowance Trading Program (310 CMR 7.28). EU3 is presently operating under NO_x Allowance Trading Program Emission Control Plan (ECP) Final Approval No. 4B07017. Emission Unit No. 3 (EU3), Emission Unit No. 4 (EU4) and Emission Unit No. 5 (EU5) are Budget Units under the Massachusetts Clean Air Interstate Rule (310 CMR 7.32) and the Massachusetts CO_2 Budget Trading Program (310 CMR 7.70). An Application for a 310 CMR 7.32 ECP to include EU3, EU4 and EU5 has been submitted to the MassDEP and this Operating Permit will be modified to reflect upon issuance.

It has been determined that the facility has no emission units subject to 40 CFR Part 64 Compliance Assurance Monitoring (CAM). EU3 is excluded from CAM requirements pursuant to §64.2(b)(1)(vi) because it is equipped with a continuous compliance determination method as defined at §64.1. EU4 and EU5 are excluded from CAM requirements pursuant to §64.2(b)(1)(i) and (vi) because they are subject to monitoring requirements under 40 CFR Part 60 Subpart KKKK and are equipped with a continuous compliance determination method as defined at §64.1.

EU4 and EU5 will be designated as Phase II Acid Rain “new affected units” and have submitted an Acid Rain Permit Application to the MassDEP. Draft Acid Rain Permit No. 4B08064 will be noticed concurrently with this Draft Operating Permit and will be incorporated into the Final Operating Permit.

Operating Permit Section 4, Tables 3, 4, 5, and 6 list the facility emission limits along with monitoring, testing, record-keeping and reporting requirements. Operating Permit Section 4, Table 7 lists regulations that are not applicable to the facility at this time.

2. EMISSION UNIT IDENTIFICATION

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

Table 1

Emission Unit Number	DESCRIPTION OF EMISSION UNIT	EU DESIGN CAPACITY	POLLUTION CONTROL DEVICE
EU1	Parts Washer - Cold Cleaning Degreaser	Design features identified at 310 CMR 7.18(8)(a)	None
EU2	Fairbanks Morse Model 38TD 8-1/8 Reciprocating Internal Combustion Engine	heat input: 24.0 MMBtu/hr	None
EU3	Asea Brown Boveri Model 11D2 Combustion Turbine	heat input: 975.5 MMBtu/hr	Steam Injection
EU4	Rolls-Royce Model Trent 60 WLE Combustion Turbine	heat input: 545.1 MMBtu/hr	SCR, Water Injection, CO Oxidation Catalyst
EU5	Rolls-Royce Model Trent 60 WLE Combustion Turbine	heat input: 545.1 MMBtu/hr	SCR, Water Injection, CO Oxidation Catalyst

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

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. EMISSION LIMITS AND RESTRICTIONS

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

Table 3

EU#	FUEL	RESTRICTIONS	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER
EU1	Non-Halogenated Solvent	Solvent consumption rate: < 100 gallons per month	VOC	Design features and work practice standards identified at 310 CMR 7.18(8)(a) and (e)	310 CMR 7.03(8) 310 CMR 7.18(8)(a)
EU2 **(note 1)**	No. 2 Fuel Oil	< 1000 hours operating time during any consecutive 12 month period since January 1, 1990	NO_x	**(note 2)**	310 CMR 7.19(8)(d)1.
			CO		
		≥ 1000 hours operating time during any consecutive 12 month period since January 1, 1990	NO_x	≤ 9.0 grams/brake horsepower-hour **(note 2)**	310 CMR 7.19(8)(c)3.
		S in Fuel ≤ 0.3 % by weight **(note 4)**	SO_2	N/A	310 CMR 7.05(1) 4P07014
	ULSD	S in Fuel ≤ 0.0015 % by weight **(note 4)**			4P07014
	All Fuels		Smoke	< No. 1 of Chart, except ≥ No.1 to < No. 2 of Chart for ≤ 6 minutes during any one hour, no time to equal or exceed No. 2 of the Chart. **(note 3)**	310 CMR 7.06(1)(a)
			Opacity	≤ 20 percent, except >20 to ≤ 40 percent for ≤ 2 minutes during any one hour, at no time to exceed 40 percent.	310 CMR 7.06(1)(b)
EU3 **(note 1)**	Natural Gas (Primary)	NA	NO_x	42 ppmvd@ 15% O_2 (0.1547 lb/MMBtu) ALE_{NOx} **(note 5)**	310 CMR 7.19(7)(a)1. 310 CMR 7.19(14)(c) 310 CMR 7.19(2)(g) 310 CMR 7.00: Appendix B(3) MBR-94-COM-044
	No. 2 Fuel Oil (Secondary)			65 ppmvd@ 15% O_2 (0.2526 lb/MMBtu) ALE_{NOx} **(note 5)**	
			CO	≤ 50 ppmvd @ 15% O_2	

Table 3

EU#	FUEL	RESTRICTIONS	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER
EU3 **(note 1)**	All Fuels	NA	SO_2	≤ 1.2 lb/MMBTU **(note 6)**	310 CMR 7.22(1)
	No. 2 Fuel Oil	S in Fuel ≤ 0.3 % by weight **(note 4)**		NA	310 CMR 7.05(1) 4P07014
	ULSD	S in Fuel ≤ 0.0015 % by weight **(note 4)**			4P07014
			Visible Emissions	≤ 10 percent Opacity	MBR-89-COM-004
			NO_x	See "Special Terms and Conditions", Section 5(c)	4B07017
EU4, EU5 **(note 8)**	Natural Gas	NA	NO_x	5.0 lbs/hr	4P07014 and EPA PSD Permit No. 049-119-MA10
				2.5 ppmvd @ 15% O_2	
				0.0091 lb/MMBtu	4P07014
			CO	6.0 lbs/hr	
				0.011 lb/MMBtu	
				5.0 ppmvd @15% O_2	
			VOC	1.14 lbs/hr	
				0.0031 lb/MMBtu	
				2.5 ppmvd @ 15% O_2	
			S in Fuel	1.6 grains per 100 cubic feet	4P07014 and EPA PSD Permit No. 049-119-MA10
			SO_2	2.6 lbs/hr	4P07014
				0.0048 lb/MMBtu	
			PM	5.0 lbs/hr	
				0.02 lb/MMBtu	
			PM_{10} **(note 7)**	5.0 lbs/hr	4P07014 and EPA PSD Permit No. 049-119-MA10
				0.02 lb/MMBtu	
			$PM_{2.5}$	5.0 lbs/hr	4P07014
				0.02 lb/MMBtu	
			NH_3	3.7 lbs/hr	
				0.0067 lb/MMBtu	
				5.0 ppmvd @ 15% O_2	
	ULSD	NA	NO_x	10.3 lbs/hr	4P07014 and EPA PSD Permit No. 049-119-MA10
				5.0 ppmvd @ 15% O_2	

Table 3

EU#	FUEL	RESTRICTIONS	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER
EU4, EU5 **(note 8)**	ULSD	NA	NO_x	0.019 lb/MMBtu	4P07014
			CO	6.3 lbs/hr	
				0.012 lb/MMBtu	
				5.0 ppmvd @15% O_2	
			VOC	1.85 lbs/hr	
				0.0059 lb/MMBtu	
				4.5 ppmvd @ 15% O_2	
			S in Fuel	0.0015 % by wt.	4P07014 and EPA PSD Permit No. 049-119-MA10
			SO_2	0.8 lbs/hr	4P07014
				0.0015 lb/MMBtu	
			PM	15.0 lbs/hr	
				0.05 lb/MMBtu	
			PM_{10} **(note 7)**	15.0 lbs/hr	4P07014 and EPA PSD Permit No. 049-119-MA10
				0.05 lb/MMBtu	
			$PM_{2.5}$	15.0 lbs/hr	4P07014
				0.05 lb/MMBtu	
			NH_3	3.8 lbs/hr	
				0.0071 lb/MMBtu	
				5.0 ppmvd @ 15% O_2	
	ULSD	Limit combustion of ULSD in each turbine to ≤ 2,880 hours per 12-month rolling period	N/A	N/A	EPA PSD Permit No. 049-119-MA10
	All Fuels	N/A	Smoke	< No. 1 of Chart, except ≥ No.1 to < No. 2 of Chart for ≤ 6 minutes during any one hour, no time to equal or exceed No. 2 of the Chart. **(note 3)**	310 CMR 7.06(1)(a)
			Opacity	< 5 percent, except 5 to < 10 percent for ≤ 2 minutes during any one hour	4P07014
			NOx	See "Special Terms and Conditions", Section 5(n)	40 CFR Part 60, Subpart KKKK
			SO_2	See "Special Terms and Conditions", Section 5(n)	

Table 3

EU#	FUEL	RESTRICTIONS	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER
EU4, EU5	All Fuels	N/A	SO_2	See "Special Terms and Conditions", Section 5(m)	40 CFR Part 72 4B08064
			NO_x	See "Special Terms and Conditions", Section 5(o)	310 CMR 7.00 : Appendix A Appendix B(3) 4P07014
				See "Special Terms and Conditions", Section 5(q)	EPA PSD Permit No. 049-119-MA10
		Startup/Shutdown (SUSD) Operations		See "Special Terms and Conditions", Section 5(p)	
EU4 and EU5 combined	ULSD	$\leq$ 22.84 million gallons ULSD (0.0015% sulfur by weight) per 12-month rolling period	N/A	N/A	4P07014
	All Fuels	NA	NO_x	7.67 tpm **(note 9)** 58.8 tpy **(note 10)**	4P07014 and EPA PSD Permit No. 049-119-MA10
			CO	4.69 tpm **(note 9)** 53.5 tpy **(note 10)**	4P07014
			VOC	0.81 tpm **(note 9)** 7.6 tpy **(note 10)**	
			SO_2	1.95 tpm **(note 9)** 11.5 tpy **(note 10)**	
			PM	11.20 tpm **(note 9)** 72.9 tpy **(note 10)**	
			PM_{10} **(note 7)**	11.20 tpm **(note 9)** 72.9 tpy **(note 10)**	
			$PM_{2.5}$	11.20 tpm **(note 9)** 72.9 tpy **(note 10)**	
			NH_3	2.84 tpm **(note 9)** 32.5 tpy **(note 10)**	
			Any Single HAP	0.31 tpm **(note 9)** 3.4 tpy **(note 10)**	
			Combined HAP	0.81 tpm **(note 9)** 6.4 tpy **(note 10)**	

Table 3					
EU#	FUEL	RESTRICTIONS	POLLUTANT	EMISSION LIMIT/STANDARD	APPLICABLE REGULATION AND/OR APPROVAL NUMBER
EU3, EU4, EU5	All Fuels	NA	NO_x	See "Special Terms and Conditions", Section 5(k)	310 CMR 7.32
			CO_2	Hold CO_2 allowances available for compliance **(notes 11 and 12)**	Final Approval No. 4B08035 310 CMR 7.70(1)(e)3.a. "**State Only" Requirement**
				CO_2 allowance transfers	Final Approval No. 4B08035 310 CMR 7.70(7) "**State Only" Requirement**
Facility wide	All	Greenhouse Gas (GHG) Emissions **(Note 13)**	N/A	N/A	310 CMR 7.71 "**State Only" Requirement**

Table 3 Notes:

1 Compliance with emission limit(s)/standard(s) shall be based on a one-hour averaging time.

2 If EU2 has not operated 1000 hours or more during any consecutive 12 month period since January 1, 1990, the NO_x emission standard shall be $\leq$ 9.0 grams/brake horsepower-hour; or, set and maintain the ignition timing of the engine 4 degrees retarded relative to standard timing, provided the ignition timing shall not be retarded beyond the point that the:

a. CO emission concentration increases by 100 ppmvd corrected to 15% O_2, or

b. the turbocharger speed is increased beyond the maximum operating speed recommended by the engine manufacturer, or

c. the exhaust port temperature increases beyond the engine manufacturer's recommended maximum operating temperature.

Should EU2 operate 1000 hours or more during any consecutive 12 month period since January 1, 1990, then said unit shall become subject to and shall continue to comply with 310 CMR 7.19(8)(c)3.

In accordance with 310 CMR 7.19(8)(c)3. and 310 CMR 7.19(8)(d)1., compliance with the NO_x emission standard shall be based on a one hour averaging time.

3 Chart means the Ringelmann Scale for grading the density of smoke, as published by the United States Bureau of Mines and as referred to in the Bureau of Mines Circular No. 8333, or any smoke inspection guide approved by the MassDEP.

4 In accordance with Plan Approval No. 4P07014, upon the commencement of operation of the Watson Station (EU4 and/or EU5), any fuel oil burned in BELD's existing Potter II Station (EU2 and EU3) shall be ULSD oil having a sulfur content not to exceed 0.0015% by weight.

5 See "Special Terms and Conditions", Section 5(f). In accordance with Approval MBR-94-COM-044, BELD will demonstrate continuous compliance with the NO_x emission standards under 310 CMR 7.19(7)(a)1.a. and 310 CMR 7.19(7)(a)1.b. by utilizing NO_x Emission Reduction Credits (ERCs), as per 310 CMR 7.19(2)(g), which are certified by the MassDEP pursuant to 310 CMR 7.00: Appendix B(3) and as calculated according to "Special Terms and Conditions", Section 5(f).

6 Compliance with emission limit(s)/standard(s) shall be based on a calendar year averaging time. Compliance with 310 CMR 7.05(1)(a)2. for the sulfur limit of No. 2 Fuel Oil shall be deemed compliance with the SO_2 limit under the Massachusetts Acid Rain Law 310 CMR 7.22. The provisions of 310 CMR 7.22 are State-Only Requirements.

7 PM_{10} includes condensable particulate matter as determined by 40 CFR Part 51, Appendix M, Method 202 – Condensable Particulate Matter.

8 Emission limits are one-hour block averages and do not apply during start-up/shutdown, and fuel transfers with the exceptions being opacity and smoke.

9 tpm = tons per month

10 tpy = tons per 12-month rolling period (consecutive 12-month period)

11 Compliance with CO_2 allowances shall be based on the control period. The control period is a three-calendar-year time period, unless extended to four years upon occurrence of a stage two trigger event. Control period and stage two trigger event are defined at 310 CMR 7.70(1)(b).

12 Hold CO_2 allowances available for compliance deductions under 310 CMR 7.70(6)(e), as of the CO_2 allowance transfer deadline, in the source's compliance account in an amount not less than the total CO_2 emissions for the control period from all CO_2 budget units at the source, as determined in accordance with 310 CMR 7.70(6) and (8).

13 Greenhouse gas (GHG) means any chemical or physical substance that is emitted into the air and that the MassDEP may reasonably anticipate will cause or contribute to climate change including, but not limited to, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride.

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), as well as the applicable requirements contained in Table 3:

Table 4

EU#	MONITORING/TESTING REQUIREMENTS
EU1	1) Monitor solvent usage to ensure compliance with 310 CMR 7.03(8).
	2) Monitor operations to ensure compliance with 310 CMR 7.18(8)(a), 310 CMR 7.18(8)(e) and 310 CMR 7.18(8)(f)
	3) In accordance with 310 CMR 7.18(8)(h), perform compliance testing if and when required by the MassDEP. Testing shall be conducted in accordance with a method approved by the MassDEP and U.S. EPA.
EU2	4) In accordance with 310 CMR 7.19(8)(d)5., inspect and adjust the ignition timing of the engine at least once every 3 years to verify the ignition timing of the engine is maintained four (4) degrees retarded relative to standard timing, provided that the ignition timing shall not be retarded beyond the point that: (a) the CO emission concentration increases by 100 ppm by volume, dry basis, corrected to 15% O_2, or (b) the turbocharger speed is increased beyond the maximum operating speed recommended by the engine manufacturer, or (c) the exhaust port temperature increases beyond the engine manufacturer's recommended maximum operating temperature.
	5) In accordance with 310 CMR 7.19(8)(d)2., install and maintain an elapsed time meter to indicate, in cumulative hours, the elapsed engine operating time for the previous 12 month period. In accordance with 310 CMR 7.19(8)(d)3., determine the hours of operation for each engine for the previous 12 month period on a monthly basis.
	6) In accordance with 310 CMR 7.19(13)(d)3., monitor for the engine, type fuel(s) and quantity burned each day, heat content of each fuel, and the total heating value of the fuel consumed for each day.
	7) In accordance with 310 CMR 7.19(13)(a)9., if the stationary reciprocating internal combustion engine has operated 1000 hours or more during any consecutive 12 month period since January 1, 1990, compliance with the applicable NO_x emission limit/standard as stated in 310 CMR 7.19(8)(c)3. shall be demonstrated by performing an initial stack test as specified in 310 CMR 7.19(13)(c), 310 CMR 7.13, and 40 CFR Part 60, Appendix A.

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
EU2, EU3	8) Opacity shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9. This method shall also apply to any detached plumes.
	9) Pursuant to the MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., demonstrate compliance with the fuel oil sulfur content requirements in Table 3 of this operating permit, 4P07014, and at 310 CMR 7.05(1)(a)by obtaining and maintaining a shipping receipt, including analysis, from the fuel supplier for each shipment
	10) Pursuant to the MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., monitor unit operations, as necessary, to ensure continuous compliance with PM emission limits.
EU3	11) In accordance with Air Quality Operating Permit No. 4V06022 and 310 CMR 7.19(13)(b)12., daily actual NO_x emissions (AcE_{NOx}), in lbs NO_x per MMBtu heat input, shall be determined by the use of a Predictive Emissions Monitoring System (PEMS), in accordance with the U.S. EPA's May 31, 2006 approval under 40 CFR 75.66(d) and 40 CFR 75, Subpart E, and the MassDEP's Approval No. 4B07017.
	12) Conduct Emissions Compliance Testing (stack testing) annually prior to October 1, in accordance with Approval MBR-94-COM-044, 310 CMR 7.13, 310 CMR 7.19(13)(c), and 40 CFR Part 60, Appendix A for CO and NO_x.
	13) In accordance with 310 CMR 7.19(13)(d)3. and Approval MBR-94-COM-044, monitor on a daily basis: type(s) fuel burned, heat content of each fuel, total consumption of each fuel, total heating value of each fuel consumed, and actual hours of operation for each fuel burned. In accordance with Approval MBR-94-COM-044, utilize this information to calculate the allowable NO_x emission limitation (AlE_{NOX}), the actual NO_x emissions (AcE_{NOx}), the difference between actual and allowable NO_x emissions, and the quantity of Emission Reduction Credits (ERC_{NOx}), both ozone (May 1 through September 30) and non-ozone season (October 1 through April 30), required to comply with 310 CMR 7.19. In accordance with Approval MBR-94-COM-044, monitor that the amount of Emission Reduction Credits (ERCs) actually obtained includes five (5) percent more than the amount needed for compliance (See "Special Terms and Conditions", Section 5. (f)). Fuel heat content information may be provided by fuel suppliers.
	14) Compliance with the SO_2 emission rate under the Massachusetts Acid Rain Law 310 CMR 7.22 shall be demonstrated through combustion of Natural Gas, monitoring for and compliance with the allowable fuel oil sulfur limit under 310 CMR 7.05, and monitoring as required by 310 CMR 7.19(13)(d)3. and Approval MBR-94-COM-044.
	15) In accordance with 310 CMR 7.04(2)(a), no person shall cause, suffer, allow, or permit the burning of any grade oil or solid fuel in any fuel utilization facility having an energy input capacity rated by the MassDEP equal to or greater than 40 MMBTU per hour, unless such facility is equipped with a smoke density sensing instrument and recorder which are properly maintained in an accurate operating condition, operates continuously and is equipped with an audible alarm to signal the need for combustion equipment adjustment or repair when the smoke density is equal to or greater than No. 1 of the Chart. In accordance with Approval MBR-89-COM-004, the use of Continuous Opacity Monitoring Systems (COMS) equipped with audible alarms and recorders that signal the need for combustion equipment adjustment or repair when the Opacity is greater than 10 percent shall constitute compliance with this requirement. The Opacity COMS shall meet Performance Specification 1 of 40 CFR Part 60, Appendix B.
	16) In accordance with Plan Approval No. 4B07017 and 310 CMR 7.28(11)(a)(1), any person who owns, leases, operates or controls a budget unit that commences operation before January 1, 2002 shall install, operate and successfully complete all applicable certification testing requirements for monitoring heat input, NOx emission rate and NOx mass emissions pursuant to the requirements of 40 CFR Part 75 Subpart H by May 1, 2002.
	17) In accordance with Plan Approval No. 4B07017 existing units that have completed the certification test requirements under 310 CMR 7.28 must meet all ongoing Quality Assurance testing requirements specified in 40 CFR Part 75 and all Quality Assurance requirements specified in the May 31, 2006 EPA PEMS approval.

Table 4

EU#	MONITORING/TESTING REQUIREMENTS
EU3	18) In accordance with Plan Approval No. 4B07017, the NOx Emission Rate shall be monitored using a Predictive Emissions System (PEMS), as approved by EPA on May 31, 2006. The unit's Heat Input Rate and Net Electric Output shall be monitored as described in Table I and Table II of Final Approval No. 4B07017.
	19) In accordance with the May 31, 2006 EPA PEMS approval, the PEMS shall use the following input parameters: turbine output, natural gas flow to combustor, fuel oil flow to the combustor, ambient temperature, ambient atmospheric pressure, ambient relative humidity, inlet filter pressure drop, steam injection flow rate, and steam injection temperature. The PEMS input parameters must stay within the minimum and maximum values (inclusive) in the below table (referred to as "the PEMS operating envelope"), unless the PEMS is retrained (as described at "Special Terms and Conditions" Section 5. (h)), in which case, the new training values will supersede the values in the below table. If any PEMS input parameter value goes below the minimum or above the maximum table values by 5 percent or more, the PEMS shall be considered out-of-control, and the NOx MER shall be used (as described at "Special Terms and Conditions" Section 5. (g)), starting with the hour in which the sensor value goes outside of the PEMS operating envelope and ending with the hour in which the sensor value is back within the PEMS operating envelope.

PEMS Operating Envelope

PEMS Input Parameter	Minimum Value	Maximum Value
turbine output without HRSG (MW)	37.4	79.5
natural gas flow to combustor (hscf/hr)	5383.6	9015.6
fuel oil flow to the combustor (gal/hr)	4730.1	6712.1
ambient temperature (ºF)	-4.0	99.4
ambient atmospheric pressure (in. Hg)	29.38	31.21
ambient relative humidity (percent)	26.57	100
inlet filter pressure drop (in. H2O)	1.5	3.15
steam injection flow rate (lb/hr)	31,042.9	67,113.3
steam injection temperature (ºF)	358.39	463.53

Table 4

EU#: EU3

MONITORING/TESTING REQUIREMENTS

20) In accordance with the May 31, 2006 EPA PEMS approval, ongoing QA/QC tests of the PEMS shall be performed according to the following table:

PEMS Ongoing QA/QC Tests

Test	Performance Specification	Frequency
Daily QA/QC	PEMS output - PEMS output is within ± 0.002 lb NOx/mmBtu	Daily
3-run RAA	• Accuracy ≤ 10.0% or • For a low emitting source, results are acceptable if the mean value for the PEMS is within ± 0.020 lb/mmBtu of the reference mean value. **(note)**	During any month in ozone season in which the unit operates at least 56 hours, except for a month in which a full RATA or PEMS recertification is performed..
RATA	For semiannual RATA frequency: • RA > 7.5% and ≤ 10.0% or • For a low emitting source, results are acceptable if the mean value for the PEMS is within ± 0.020 lb/mmBtu of the reference mean value. **(note)** For annual RATA frequency: • RA ≤ 7.5% or • For a low emitting source, results are acceptable if the mean value for the PEMS is within ± 0.015 lb/mmBtu of the reference mean value. **(note)**	Semiannual or annual (depending on the RATA results) for routine QA. Recertification RATA is required when a RAA or a RATA is failed or when operating conditions change. ≥ 9 test runs are required at normal operating level for annual or semiannual QA. ≥ 30 test runs are required at each of 3 operating levels for recertification.
Sensor validation system (minimum data capture)	Check for production of at least 1 valid data point per 15 minutes	Before each RATA
Sensor validation system (failed sensor alert)	Alert operator of any failed sensors	Hourly
Bias adjustment factor (BAF)	If $d_{avg} \leq \|cc\|$, bias test is passed	After each RATA. Perform bias test at the normal operating level
PEMS training (Linear correlation and F-test)	$r \geq 0.8$, and $F_{critical} \geq F$	According to requirements (detailed herein)
Sensor validation system (alarm system set-up)	According to requirements (detailed herein)	After each PEMS training

(note) - The unit is a low emitting source if the mean reference value during the RATA or RAA is ≤ 0.200lb/MMBtu NO_x

21) In accordance with the May 31, 2006 EPA PEMS approval, the sensors for the PEMS' input parameters must be maintained in accordance with the manufacturer's recommendations. A sensor validation system is required to identify sensor failures hourly to the operator and to reconcile failed sensors by: comparing each sensor to several other sensors, determining, based on the comparison, if a sensor has failed, and calculating a reasonable substitute value for the parameter measured by the failed sensor. BELD must ensure that the sensor validation system validates sensor data in this way every minute of PEMS operation. To comply with §75.10(d)(1), hourly averages must be computed using at least one valid data point in each fifteen-minute quadrant of an hour in which the unit operates. All valid data recorded by the PEMS during the hour must be used to calculate the hourly averages.

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
EU3	22) In accordance with the May 31, 2006 EPA PEMS approval, a daily QA/QC test must be performed whenever the unit operates for any portion of the day. BELD shall input to the PEMS a set of turbine operating parameters used by the PEMS during a passed PEMS RATA or the most recent PEMS training. (Note: It is important that the same number of decimal places for the PEMS inputs be used here as was used in the passed PEMS RATA or most recent PEMS training.) The resulting PEMS NOx lb/mmBtu output divided by the bias adjustment factor (this resets the BAF to 1.000 as it was during the passed PEMS RATA or most recent PEMS training) shall be compared to the corresponding PEMS NOx lb/mmBtu output produced at the time of the passed PEMS RATA or most recent PEMS training (with no BAF applied). If the difference between the two PEMS NOx outputs is within ± 0.002 lb NOx/mmBtu, the daily QA/QC test is passed. If a daily QA/QC test is failed or not performed, the PEMS is out-of-control. Subpart D missing data procedures shall be followed starting with the hour of the failed test or, if the test was not performed, the hour after the test due date, and ending with the hour in which a daily QA/QC test is passed. No grace periods are allowed.
	23) In accordance with the May 31, 2006 EPA PEMS approval, ongoing semiannual or annual RATAs shall be performed at the normal operating level according to the procedures in Part 75, Appendix B, section 2.3.1 and shall be calculated on a lb/mmBtu basis. The reference method traverse point selection shall be consistent with Part 75, Appendix A, section 6.5.6. Notification of ongoing RATAs shall be provided according to §75.61(a)(5). Immediately prior to a RATA, the BAF shall be set to 1.000. Before each RATA, BELD shall ensure that the sensor validation system is set to provide at least one valid data point per 15 minute period, as discussed herein. After the RATA, BELD shall calculate and apply a bias adjustment factor at the normal operating level according to Part 75, Appendix A, section 7.6.
	24) In accordance with the May 31, 2006 EPA PEMS approval, Ozone season, monthly, 3-run (minimum) relative accuracy audits (RAAs), described herein, shall commence in May 2006. A RAA shall be performed in every calendar month of the ozone season (May through September) in which the unit operates for at least 56 hours, except for a month in which a full 9-run (minimum) RATA or PEMS recertification is performed.
	25) In accordance with the May 31, 2006 EPA PEMS approval, the RAAs shall be done on a lb NOx/mmBtu basis, and shall be performed using either EPA Reference Methods 7E and 3A in Part 60, Appendix A or a portable analyzer. To the extent practicable, each RAA shall be done at different operating conditions from the previous one. Follow the portable analyzer manufacturer's recommended maintenance procedures. The minimum time per RAA run shall be 20 minutes. The reference method traverse point selection shall be consistent with Part 75, Appendix A, section 6.5.6. Alternatively, a single measurement point located at least 1.0 meter from the stack or duct wall may be used without performing a stratification test. Results of the RAA shall be calculated using Equation 1-1 in Appendix F to Part 60. Bias-adjusted data from the PEMS (using the bias adjustment factor from the most-recent RATA) shall be used in the calculations. The results of the RAA are acceptable if the performance specifications in the "PEMS Ongoing QA/QC Tests" table are met. If the RAA is failed, follow the provisions herein. No grace periods are allowed.

Table 4

EU#	MONITORING/TESTING REQUIREMENTS
EU3	26) In accordance with the May 31, 2006 EPA PEMS approval, if a portable chemiluminescent NOx analyzer is used to perform the required RAAs, the procedures of Method 7E in Part 60, Appendix A-4 shall be followed. The analyzer performance specifications in Method 7E for calibration error, system bias, and calibration drift shall be met. If a portable electrochemical analyzer is used to perform the required RAAs, ASTM Method D6522-00, as modified below, shall be followed for the measurement of NOx (NO and N02), CO, and O2 concentrations. The following modifications to ASTM D6522-00 are required: (a) NOx analyzers must provide readings to 0.1 ppm to improve the likelihood of passing the performance specifications for sources with low NOx levels; (b) an alternative performance specification (e.g., ± 1 ppm difference from reference value) will be applied to take account of sources with low concentrations of NOx; and (c) the measurement system must be purged with ambient air between gas injections during the stability check, to reduce degradation of electrochemical cell performance. The modified measurement system performance specifications are shown in the following table.

ASTM Method 06522-00 Measurement System - Modified Performance Specifications

Performance Check	Gas	Acceptance Criteria
Zero Calibration Error	NO, NO2	≤ 3 percent of span gas value or ± 1.0 ppm difference, whichever is less restrictive
	O2	≤ 0.3 percent O2
Span Calibration Error	NO, NO2	≤ 5 percent of span gas value or ± 1.0 ppm difference, whichever is less restrictive
	O2	≤ 0.5 percent O2
Interference	NO, NO2, O2	≤ 5 percent of average stack NO concentration for each test run (using span gas checks)
Linearity	NO, O2	≤ 2.5 percent of span gas concentration or ± 1.0 ppm difference, whichever is less restrictive
	NO2	≤ 3.0 percent of span gas concentration or ± 1.0 ppm difference, whichever is less restrictive
Stability **(note)**	NO, NO2	≤ 2.0 percent of span gas concentration or ± 1.0 ppm max-min difference, whichever is less restrictive, for 30-minute period
	O2	≤ 1.0 percent of span gas concentration or ± 1.0 ppm max-min difference, whichever is less restrictive, for 15-minute period
Cell Temperature		± 5 ºF from initial temperature

(note) - When conducting this check for three cells in an analyzer, the system must be purged with ambient air between gas injections to minimize the possibility of problems with the electrochemical cells.

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
EU3	27) In accordance with the May 31, 2006 EPA PEMS approval, if a RAA or a RATA is failed due to a problem with the PEMS or if changes occur that result in a significant change in NOx emission rate relative to the previous PEMS training conditions (e.g., turbine aging, process modification, new process operating modes, or changes to emission controls), the following tests and procedures shall be performed for each applicable fuel to recertify the PEMS, in this order: (a) Ensure that the Sensor Validation System meets the requirements detailed herein. (b) Re-train the PEMS according to the manufacturer's recommendations. (c) Ensure that the PEMS alarm demonstration requirements herein are met. (d) Ensure that the daily QA/QC test requirements herein are met. (e) Perform a RATA, following the procedures in Part 75, Appendix A, section 6.5, except use three different operating levels (low, mid, and high) as defined in section 6.5.2.1 of Part 75, Appendix A. Use paired PEMS and reference method data to calculate the results on a lb NOx/mmBtu basis. Calculations shall be based on a minimum of 30 runs at each operating level. BELD shall apply to each operating level the RATA performance specifications contained in the "PEMS Ongoing QA/QC Tests" table herein. The RATA result for the normal operating level determines when the next RATA is due. (f) Conduct an F-test, and a correlation analysis (r-test) using Part 75, Subpart E equations at low, mid, and high operating levels. The r-test shall be performed using all data collected at the three operating levels combined. When the mean value of the reference method NOx data is less than 5 ppm, data from that operating level may be removed before applying the r-test. The F-test is to be applied to data at each operating level separately. If the standard deviation of the reference method NOx data at any operating level is less than either 3 percent of the span or 5 ppm, a reference method standard deviation of either 3 percent of span or 5 ppm may be used at that operating level when applying the F-test. (g) Perform a bias test (one-tailed t-test) at the normal operating level for each applicable fuel according to Part 75, Appendix A, section 7.6. If the bias test is failed, calculate and apply a fuel-specific bias adjustment factor (BAF) to the subsequent NOx emission rate data. (h) The tests and procedures required under this provision shall be completed by the earlier of 60 unit operating days (as defined in §72.2) or 180 calendar days after the failed RAA or failed RATA or after the change that caused a significant change in NOx emission rate. BELD shall use the appropriate Part 75 missing data procedures as detailed herein, starting from the hour of the failed RAA or RATA and ending with the hour of successful passage or completion of the tests and procedures, as required above.
	28) In accordance with Plan Approval No. 4B07017 and 310 CMR 7.28(11)(a)(4), all monitoring systems are subject to initial performance testing and periodic calibration, accuracy testing and quality assurance/quality control testing as specified in 40 CFR Part 75 Subpart H.
	29) In accordance with Plan Approval No. 4B07017 and 310 CMR 7.28(11)(a)(5), during a period when valid data is not being recorded by a monitoring system approved under 310 CMR 7.28, the missing or invalid data must be replaced with default data in accordance with the provisions of 40 CFR 75.70(f) and the May 31, 2006 EPA PEMS approval. The applicable missing data procedures are specified in 40 CFR Part 75 and the May 31, 2006 EPA PEMS approval for NOx emission rate (in lb/MMBtu), heat input, stack gas volumetric flow rate, oil density, GCV or fuel flow rate.
	30) In accordance with Plan Approval No. 4B07017 and 310 CMR 7.28(11)(a)(6), NOx emissions data must be reported to the NOx Emissions Tracking System (NETS) in accordance with 310 CMR 7.28(13).
	31) In accordance with Plan Approval No. 4B07017 and 310 CMR 7.28(11)(a)(7), budget units must report data pursuant to the requirements of 310 CMR 7.28(11) for every hour.
	32) In accordance with Plan Approval No. 4B07017 and 310 CMR 7.28(11)(b), any person who owns, leases, operates or controls a budget unit subject to 310 CMR 7.28 must comply with the notification requirements in 40 CFR 75.61, where applicable.

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
EU3	33) In accordance with 310 CMR 7.70(8)(a)1.b and **4B08035**, successfully complete all certification tests required under 310 CMR 7.70(8)(b) and meet all other requirements of 310 CMR 7.70(8) and 40 CFR Part 75 applicable to the monitoring systems under 310 CMR 7.70(8)(a)1.a. (State Only Requirement)
	34) In accordance with 310 CMR 7.70(8)(a)1.c and **4B08035**, record, report and quality-assure the data from the monitoring systems under 310 CMR 7.70(8)(a)1.a. (State Only Requirement)
	35) In accordance with 310 CMR 7.70(8)(a)2.a. and **4B08035**, each CO_2 budget unit that commenced commercial operation before July 1, 2008, must be in compliance with the requirements of 310 CMR 7.70(8) by January 1, 2009. (State Only Requirement)
	36) In accordance with 310 CMR 7.70(8)(a)3.a. and **4B08035**, for each CO_2 budget unit that does not meet the applicable compliance date set forth in 310 CMR 7.70(8)(a)2.a., 2.b., and 2.c. for any monitoring system under 310 CMR 7.70(8)(a)1.a., determine, record, and report parameters required to determine CO_2 mass emissions in accordance with 40 CFR 75.31(b)(2) or (c)(3), or section 2.4 of Appendix D of 40 CFR Part 75, for each such monitoring system, as applicable. (State Only Requirement)
	37) In accordance with 310 CMR 7.70(8)(b)4.b.(i) and **4B08035**, whenever there is a replacement, modification, or change in a certified continuous emissions monitoring system under 310 CMR 7.70(8)(a)1.a. the owner or operator shall recertify the monitoring system according to 40 CFR 75.20(b). (State Only Requirement)
	38) In accordance with 310 CMR 7.70(8)(b)4.c. and **4B08035**, the provisions of 310 CMR 7.70(8)(b)4.c.i through iv. apply to both initial certification and recertification of a monitoring system under 310 CMR 7.70(8)(a)1.a. (State Only Requirement)
	39) In accordance with 310 CMR 7.70(8)(c)1. and **4B08035**, whenever any monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable procedures in Subpart D or appendix D of 40 CFR Part 75. (State Only Requirement)
EU4, EU5	40) In accordance with Plan Approval No. 4P07014, the Permittee shall install, calibrate, test and operate a Data Acquisition and Handling System(s) (DAHS), and CEMS to measure and record the following emissions from each unit: a) Oxygen (O2) b) Oxides of Nitrogen (NOx) c) Carbon Monoxide (CO) d) Ammonia (NH3)
	41) In accordance with Plan Approval No. 4P07014, the Permittee shall use and maintain its CEMS servicing EU4 and EU5 as "direct-compliance" monitors to measure NOx, CO, NH3, and O2. "Direct-compliance" monitors generate data that legally documents the compliance status of a source.
	42) In accordance with Plan Approval No. 4P07014 and Operating Permit No. 4V06022, the Permittee shall evaluate each unit for the presence and concentration (% opacity) of visible emissions as described at 40 CFR 60, Appendix A, Reference Method 9. This evaluation shall take place while firing both ULSD and natural gas during the facility annual RATA.
	43) In accordance with PSD Permit No. 049-119-MA10, the Permittee shall install, operate and maintain two Continuous Emission Monitoring Systems (CEMS) to monitor the Oxygen (O_2) and Oxides of Nitrogen (NO_x) from each turbine. The CEMS shall satisfy the requirements of Performance Specification 2 (PS-2) and Performance Specification 3 (PS-3) of 40 CFR 60, Appendix B and Appendix F.
	44) In accordance with PSD Permit No. 049-119-MA10, the Permittee shall determine total 12-month rolling NOx emissions by using the totalizing function of the NOx CEMS.

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
EU4, EU5	45) In accordance with renewal/significant modification application No. 4V06022, the Permittee shall maintain and operate a dedicated certified natural gas flow meter per turbine. The Permittee shall determine hourly natural gas flow rate and heat input using the appropriate methodology from 40 CFR Part 75, Appendix D. This condition shall subsume, and ensure compliance with, the PSD Permit No. 049-119-MA10, Section III. Monitoring Requirement No.4.
	46) In accordance with the renewal/significant modification application No. 4V06022, the Permittee shall maintain and operate two (2) certified ULSD input and return flow meters flow meters per "day tank". The Permittee shall determine hourly ULSD flow rate and heat input using the appropriate methodology from 40 CFR Part 75, Appendix D. This condition shall subsume, and ensure compliance with the PSD Permit No. 049-119-MA10, Section III. Monitoring Requirement No.5.
	47) In accordance with PSD Permit No. 049-119-MA10, the Permittee shall install and maintain non-resettable elapsed operating hour meters or the equivalent software to accurately indicate the elapsed operating time of each turbine.
	48) In accordance with PSD Permit No. 049-119-MA10, the Permittee shall maintain documentation that the sulfur content of the ULSD meets the 15 ppm sulfur in fuel limit for each fuel delivery.
	49) In accordance with PSD Permit No. 049-119-MA10, the sulfur content shall be determined by ASTM D1072, Standard Test Method for Total Sulfur in Fuel Gases.
	50) In accordance with PSD Permit No. 049-119-MA10 and Plan Approval No. 4P07014, the Permittee shall install and operate two thermometers to measure the exhaust temperature at the inlet to the SCR and CO catalysts for each turbine.
	51) In accordance with Plan Approval No. 4P07014, the Permittee shall conduct a noise survey (during daytime and nighttime operations) in accordance with MassDEP procedures/guidelines within 180 days of the startup of both EU4 and EU5 to verify compliance with the allowable noise impacts specified in Tables 3a and 3b of Approval 4P07014. Receptor stations shall include the three nearest residences to the South and the Weymouth neighborhoods to the North and East. The Permittee shall conduct an additional sound level test twelve (12) to fourteen (14) months after conducting the initial noise survey, complying with the same requirements. (State Only Requirement)
	52) In accordance with Plan Approval No. 4P07014 and 40 CFR Part 60, Subpart KKKK, 60.4335(a), the Permittee shall install and operate a continuous monitoring system to monitor and record fuel consumption and the ratio of water to fuel being fired in the EU4 and EU5 turbines. The system shall be accurate to within 5 percent and shall be approved by the MassDEP. Alternately, as allowed by 40 CFR 60.4335(b), the installation, certification, maintenance and operation of a CEMS and fuel flow meter (s) may be used to demonstrate compliance with the requirements at § 60.4335.
	53) In accordance with Plan Approval No. 4P07014, the Permittee shall monitor and record the Sulfur and Nitrogen content in natural gas and ULSD on a daily basis, or pursuant to any alternative fuel monitoring schedule issued for the facility, in accordance with 40 CFR Part 60, Subpart KKKK, § 60.4370. If approved by US EPA, BELD shall obtain natural gas sulfur content data via Spectra and ULSD sulfur content data from Citgo.
	54) In accordance with Plan Approval No. 4P07014, the Permittee shall ensure continuous monitoring and compliance with PM, PM-10 and PM-2.5 limits utilizing the parametric monitoring methodology developed during the initial compliance test.
	55) In accordance with Plan Approval No. 4P07014, the Permittee shall ensure that all emission monitors and recording equipment servicing EU4 and EU5 comply with MassDEP approved performance and location specifications, and conform with the EPA monitoring specifications at 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.

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
EU4, EU5	56) In accordance with Plan Approval No. 4P07014, the Permittee shall equip the CEMS with audible and visible alarms to activate whenever emissions from EU4 or EU5 exceed the applicable limits established in this Permit.
	57) In accordance with Plan Approval No. 4P07014, the Permittee shall obtain and record emission data from each CEMS servicing EU4 and EU5 for at least 75% of the emission unit's operating hours per day, except for periods of CEMS calibration checks, zero and span adjustments, and maintenance, for at least 75% of the emission unit operating hours per month, and for at least 95% of the emission unit's operating hours per quarter. The NH3 CEM shall obtain valid data for at least 90% of the emission unit's operating hours per quarter.
	58) In accordance with Plan Approval No. 4P07014 and PSD Permit No. 049-119-MA10, a quality control/quality assurance (QA/QC) program plan must be developed for the long-term operation of the CEMS servicing EU4 and EU5 which conforms to 40 CFR Part 60, Appendix F, all applicable portions of 40 CFR Parts 72 and 75, 310 CMR 7.32 (Clean Air Interstate Rule) and 310 CMR 7.70 (Massachusetts CO2 Budget Trading Program). The Permittee shall not modify or depart from the QA/QC program except with the advance written approval of EPA (for NOx and O2 CEMS) and the MassDEP.
	59) In accordance with Plan Approval No. 4P07014, the Permittee shall operate each CEMS servicing EU4 and EU5 at all times except for periods of CEMS calibration checks, zero and span adjustments, preventive maintenance, and periods of unavoidable malfunction.
	60) In accordance with Plan Approval No. 4P07014, upon certification, the NH3 CEM shall be used as a direct compliance level monitor. The NH3 CEM shall comply with the CEM linearity check and Relative Accuracy Test Audit (RATA) frequencies and grace periods specified in 40 CFR 75 in conducting linearities and RATAs. The relative accuracy of the NH3 CEM systems shall be within the greater of +/- 15% or +/- 0.75 ppmvd @15% O2 of the reference method or +/- 0.001 lb/MMBtu or lb/hr = +/- 0.001 lb/MMBtu x WA_MMBtu/hr, where WA_MMBtu/hr = the weighted average MMBtu/hr determined by the DAHS over the hours during which the RATA was performed.
	61) In accordance with Plan Approval No. 4P07014, in the event that a given NH3 CEM RATA does not meet the relative accuracy specified in this Table, the following shall apply: a. BELD shall investigate the possible reasons for a RATA failure and whether repairs or adjustments are necessary for the NH3 CEM or its sampling location/path. If such NH3 CEM repairs or adjustments are necessary prior to a successful RATA, or if sampling location/path adjustments are required, then the NH3 CEM data shall be considered invalid from the time of the failed RATA until a successful RATA occurs. b. If no repairs or adjustments to the NH3 CEM are necessary between the time of a failed RATA and a successful RATA, and no sampling location/path adjustments are needed, then the NH3 CEM data shall be considered valid during the period between the failed RATA and successful RATA.
	62) In accordance with Plan Approval No. 4P07014, in the event data from a NH3 CEM is not available, corrective action shall be implemented as quickly as practical to bring the NH3 CEM back to service. During the time when the NH3 CEM is not available, BELD may submit a parametric monitoring methodology to the MassDEP for approval to provide assurance that the NOx levels, operating loads, and ammonia injection rates being maintained are consistent with prior ammonia-compliant operation.
	63) In accordance with Plan Approval No. 4P07014 and PSD Permit No. 049-119-MA10, the Permittee shall ensure that EU4 and EU5 (including stack and exhaust ducts) shall be constructed to accommodate the emissions (compliance) testing requirements contained herein. All emissions testing shall be conducted in accordance with the MassDEP's "Guidelines for Source Emissions Testing" and in accordance with the Environmental Protection Agency reference test methods as specified in 40 CFR Part 60, Appendix A, 40 CFR Part 60 Subpart KKKK, 40 CFR Parts 72 and 75, or by another method which has been correlated to the above method to the satisfaction of the MassDEP.

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
EU4, EU5	64) In accordance with PSD Permit No. 049-119-MA10, the Permittee shall complete the turbine emissions tests within 180 days after initial start up of the turbines. a) NOx testing shall be conducted in accordance with EPA Methods 1-4 and 7E (federal PSD requirement) b) PM-10 testing shall be conducted 40 CFR 51, Appendix M, Method 201 or 201A and Test Method 202 (federal PSD requirement) c) Volumetric flow rate and velocity shall be conducted by Method 2, 2F, or 2G (federal PSD requirement)
	65) In accordance with PSD Permit No. 049-119-MA10, performance tests using EPA methods shall be conducted in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A.
	66) In accordance with Plan Approval No. 4P07014, the Permittee shall conduct compliance testing within 180 days after initial start up to demonstrate compliance. MassDEP personnel shall witness all compliance testing at a mutually agreeable time and date. The Permittee shall conduct initial compliance tests to demonstrate compliance with the emission limits (lb/hr, lb/MMBtu, ppmvd as applicable, and opacity) as specified in 4P07014 for the pollutants listed below. Testing for these pollutants for the combustion turbines as specified will be conducted at four (4) representative steady state loads (but not less than 50 percent of rated base load), except for PM, PM-10 and PM-2.5, which will conducted at 100 percent of rated base load only. Testing will be conducted during both Natural Gas firing and ULSD firing for each pollutant. • Nitrogen Oxides (NOx) • Carbon Monoxide (CO) • Volatile Organic Compounds (VOC) • Particulate Matter (PM, PM-10, PM-2.5) and Opacity • Ammonia (NH3)
	67) In accordance with Plan Approval No. 4P07014, emissions testing for VOC, PM, PM-10 and PM-2.5 shall include testing during start-up and shutdown so that emission rates for these pollutants can be inferred at future transitional loads by correlation with measured CO levels.
	68) In accordance with Plan Approval No. 4P07014, the Permittee shall ensure that EU4 and EU5 comply with all the applicable monitoring and testing requirements contained in 40 CFR Parts 72 and 75 (Acid Rain Program), 40 CFR 60 (New Source Performance Standards), 310 CMR 7.32 (Clean Air Interstate Rule) and 310 CMR 7.70 (Massachusetts CO2 Budget Trading Program).
	69) In accordance with Plan Approval No. 4P07014 and 310 CMR 7.04(4)(a), the Permittee shall have the units inspected and maintained in accordance with the manufacturer's recommendations and tested for efficient operation at least once in each calendar year. The results of said inspection, maintenance and testing and the date upon which it was performed shall be recorded and posted conspicuously on or near the equipment.
	70) In accordance with 310 CMR 7.70(8)(a)2.b. and **4B08035**, a CO_2 budget unit that commences commercial operation on or after July 1, 2008 must be in compliance with the requirements of 310 CMR 7.70(8) by the later of the following dates (State Only Requirement): i. January 1, 2009; or, ii. The earlier of: (i) 90 unit operating days after the date on which the unit commences commercial operation; or, (ii) 180 calendar days after the date on which the unit commences commercial operation.
EU3, EU4, EU5	71) In accordance with 310 CMR 7.70(8)(a)1.a. and **4B08035**, install all monitoring systems necessary to monitor CO_2 mass emissions in accordance with 40 CFR Part 75, except equation G-1in Appendix G shall not be used to determine CO_2 emissions under 310 CMR 7.70(8). (State Only Requirement)

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
EU3, EU4, EU5	72) In accordance with 310 CMR 7.70(8)(h)1. and **4B08035**, submit to the Department or its agent net electrical output. (State Only Requirement)
	73) In accordance with 310 CMR 7.70(8)(h)4.a. and **4B08035**, the billing meter shall record the electric output. (State Only Requirement)
	74) In accordance with 310 CMR 7.70(8)(h)5.c. and **4B08035**, when a component of output measurement equipment fails to pass an accuracy test, all data shall be replaced by either zero or an output value that is approved as part of the monitoring plan required under 310 CMR 7.70(8)(h)3.until the component passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test. (State Only Requirement)
Facility-Wide	75) In accordance with Plan Approval No. 4P07014, the Permittee shall conduct a noise survey to demonstrate compliance with Table 4 of Approval 4P07014 within 180 days of completion of BELD's project to upgrade transmission cables necessary to operate EU1, EU3, EU4 and EU5 at full load concurrently.(State Only Requirement)
	76) Pursuant to the MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., monitor sulfur content of each new shipment of fuel oil received. Compliance with the sulfur content of the fuel oil can be demonstrated through fuel oil analysis. The analysis of sulfur content of the fuel oil shall be in accordance with the applicable American Society for Testing Materials (ASTM) test methods or any other method approved by the MassDEP and EPA. Fuel oil sulfur information may be provided by fuel oil suppliers.
	77) In accordance with 310 CMR 7.13(1), any person owning, leasing, operating or controlling a facility for which the MassDEP has determined that stack testing is necessary to ascertain compliance with the MassDEP 's regulations or design approval provisos shall cause such stack testing: (a) to be conducted by a person knowledgeable in stack testing, (b) to be conducted in accordance with procedures contained in a test protocol which has been approved by the MassDEP, and (c) to be conducted in the presence of a representative of the MassDEP when such is deemed necessary.
	78) 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.
	79) In accordance with 310 CMR 7.71(1) and Appendix C(9) establish and maintain data systems or record keeping practices (e.g. fuel use records, SF_6 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)

Table 5	
EU#	RECORD KEEPING REQUIREMENTS
EU1	1) In accordance with 310 CMR 7.03(6), a record keeping system shall be established and continued in sufficient detail to document the date of construction, substantial reconstruction or alteration and that the respective emission rates, operational limitations, equipment specifications and other requirements pursuant to 310 CMR 7.03 are met. All records shall be maintained up-to-date such that year-to-date information is readily available for MassDEP examination.
	2) In accordance with 310 CMR 7.18(8)(g), any person subject to 310 CMR 7.18(8)(a) shall prepare and maintain daily records sufficient to demonstrate compliance consistent with an instantaneous averaging time as stated in 310 CMR 7.18(2)(a). Records kept to demonstrate compliance shall be kept on site for five years and shall be made available to representatives of the MassDEP and EPA in accordance with the requirements of an approved compliance plan upon request. Such records shall include, but are not limited to: a. identity, quantity, formulation and density of solvent(s) used; b. quantity, formulation and density of all waste solvent(s) generated; c. actual operational and performance characteristics of the degreaser and any appurtenant emissions capture and control equipment, if applicable; and d. any other requirements specified by the MassDEP.
EU2	3) In accordance with 310 CMR 7.19(8)(d)5, maintain records for the ignition timing of the engine at least once every 3 years to verify the ignition timing of the engine is maintained four (4) degrees retarded relative to standard timing.
	4) In accordance with 310 CMR 7.19(8)(d)3, maintain monthly records of the determination of hours of operation for the engine for each 12 month period as measured by the elapsed time meter.
	5) In accordance with 310 CMR 7.19(13)(d)3., maintain records of the type(s) of fuel burned each day, the quantity of fuel burned each day, heat content of fuel, and total heating value of fuel consumed for each day.
EU2, EU3	6) In accordance with 310 CMR 7.00: Appendix C(9)(d), maintain records of opacity determined in accordance with EPA Test Method 9, as specified in 40 CFR Part 60, Appendix A .
	7) Pursuant to the MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., maintain fuel oil analysis results used to demonstrate compliance with fuel oil sulfur content requirements.
	8) Pursuant to the MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., maintain records of the monitoring of unit operations, as necessary, to ensure continuous compliance with PM emission limits.
EU3	9) In accordance with 310 CMR 7.04(2)(a), maintain records of opacity measured by the COMS.
	10) In accordance with Approval MBR-89-COM-004, maintain facility operation and maintenance logs, which shall be made available for review by MassDEP personnel during normal business hours. These logs shall include the following information: (a) the operating hours of the equipment and the type of fuel being utilized. (b) a record of all of the calibrations and the maintenance related activities that were performed on the gas turbine, the steam injection system, and the smoke opacity monitor and recorder. (c) a record of any equipment malfunctions, opacity problems or air pollution complaints received by the facility.
	11) In accordance with Air Quality Operating Permit No. 4V06022, and the May 31, 2006 EPA PEMS approval, maintain records of all measured and calculated parameters required to calculate the NO_x emission rate on an hourly basis. This shall include any data which are substitute data and the reasons for the failure to provide a valid quality-assured hour of NOx emission rate data.

Table 5	
EU#	RECORD KEEPING REQUIREMENTS
EU3	12) In accordance with Air Quality Operating Permit No. 4V06022, and the May 31, 2006 EPA PEMS approval, maintain records of the PEMS operating envelope parameters on site in a form suitable for inspection.
	13) In accordance with Air Quality Operating Permit No. 4V06022, and the May 31, 2006 EPA PEMS approval, maintain a record of the results of QA/QC tests of the PEMS on site in a form suitable for inspection.
	14) In accordance with Air Quality Operating Permit No. 4V06022, and the May 31, 2006 EPA PEMS approval, the results of the PEMS alarm demonstration shall be maintained on site in a form suitable for inspection.
	15) In accordance with Air Quality Operating Permit No. 4V06022, Plan Approval MBR-94-COM-044 and 310 CMR 7.19(13)(d), maintain daily records of: type(s) fuel burned, heat content of each fuel, maximum fuel firing rates, total consumption of each fuel, total heating value of each fuel consumed, and actual hours of operation for each fuel burned. In addition, record the actual "bubble" NOx emission (AcE_{NOx}) limitation in pounds per day, as determined by the PEMS operated in accordance with the May 31, 2006 EPA PEMS approval, and determine the allowable "bubble" NO_x emissions (AlE_{NOx}) in pounds per day as referenced in MBR-94-COM-044.
	16) In accordance with 310 CMR 7.19(13)(d)3, Air Quality Operating Permit No. 4V06022 and Approval MBR-94-COM-044, maintain records of daily calculated allowable NO_x emission limitation (AlE_{NOX}), the actual NO_x emissions (AcE_{NOx}), the difference between actual and allowable NO_x emissions, and the quantity of Emission Reduction Credits (ERC_{NOx}), both ozone and non-ozone season, required to comply with 310 CMR 7.19. Record the amount of ERCs, both ozone (May 1 through September 30) and non-ozone season (October 1 through April 30), actually obtained. Said records shall also identify the source of ERCs obtained, including company name, emission unit and method of generation, date of generation, and the Transmittal Number of the application for certification of ERCs.
	17) In accordance with 310 CMR 7.19(13)(d)8., all records required by 310 CMR 7.19(13)(d), including computer retained and generated data, shall be kept in a permanently bound log book or any other form acceptable to the MassDEP.
	18) Maintain the test results of any Emissions Compliance Testing (stack testing) performed in accordance with Approval MBR-94-COM-044, 310 CMR 7.13, 310 CMR 7.19(13)(c), and 40 CFR Part 60, Appendix A for NO_x and CO.
	19) Compliance with the SO_2 emission rate under the Massachusetts Acid Rain Law, 310 CMR 7.22, shall be demonstrated through record keeping for and compliance with fuel oil sulfur requirements under 310 CMR 7.05, and record keeping as required by 310 CMR 7.19(13)(d)3. and Approval MBR-94-COM-044.
	20) The facility shall comply with all applicable record keeping requirements contained in 40 CFR Part 60, 40 CFR part 72, 40 CFR Part 75, 310 CMR 7.28 and 310 CMR 7.32.
	21) In accordance with 310 CMR 7.28(12), any person who owns, leases, operates or controls a budget unit must keep all measurements, data, reports and other information required by 310 CMR 7.28 for five years, or any other period consistent with the budget unit's operating permit.
	22) In accordance with 310 CMR 7.28(8)(e), information on the Authorized Account Representative (AAR) Form must be kept current.

Table 5	
EU#	RECORD KEEPING REQUIREMENTS
EU4, EU5	23) In accordance with Plan Approval No. 4P07014, a record keeping system for EU4 and EU5 shall be established and maintained on site. All such records shall be maintained up-to-date such that year-to-date information is readily available for Department examination upon request and shall be kept on-site for a minimum of five (5) years. Record keeping shall, at a minimum, include: a) Compliance records sufficient to demonstrate that emissions from the facility have not exceeded what is allowed by this Permit. Such records may include, but are not limited to, fuel usage rates, emissions test results, monitoring equipment data and reports. b) Maintenance: A record of routine maintenance activities performed on the emission units control equipment and monitoring equipment including, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed. c) Malfunctions: A record of all malfunctions of the turbines' emission control and monitoring equipment including, at a minimum: the date and time the malfunction occurred; a description of the malfunction and the corrective action taken; the date and time corrective actions were initiated; and the date and time corrective actions were completed and the equipment was returned to compliance.
	24) In accordance with Plan Approval No. 4P07014, the Permittee shall maintain a file for the Certification of Analysis, verified by a qualified laboratory, of the sulfur content of each fuel oil delivery. The Permittee shall maintain records on natural gas consumed by the subject unit. Furthermore, the Permittee shall record the sulfur content daily, or at the frequency required pursuant to any alternative fuel monitoring schedule issued for EU4 and EU5 by the Department, in accordance with 40 CFR Part 60, Subpart KKKK.
	25) In accordance with Plan Approval No. 4P07014, the Permittee shall maintain on-site for five (5) years all records of output from all continuous monitors for flue gas emissions, fuel consumption, water-to-fuel ratios, SCR and CO control system inlet temperatures, and turbines inlet and ambient temperatures, and shall make these records available to the Department upon request.
	26) In accordance with Plan Approval No. 4P07014, the Permittee shall maintain a log to record problems, upsets or failures associated with the emission control systems, DAHS, CEMS, or ammonia handling system.
	27) The Permittee shall maintain the records of all information used to show compliance with the terms and conditions of PSD Air Permit #49-119-MA10. The Permittee shall maintain the records for five years in a location accessible to staff personnel from EPA and the Department. The Permittee shall comply with any request by EPA to supply any of the these records. The record keeping shall, at a minimum, include: a. All compliance records for the turbines. Such records shall include, but are not limited to, fuel and ammonia usage; emissions test results; monitoring equipment data and reports; hours of operation of each turbine including start-ups and shut-downs; records of all fuel receipts; daily records of turbine exhaust temperature; and the records showing the hourly and monthly ULSD and natural gas consumption of each turbine. b. All records of malfunctions on the turbine and CEMS equipment including, at a minimum: the date and time the malfunction occurred; a description of the malfunction and the corrective action taken; the date and time corrective actions were initiated; and the date and time corrective actions were completed and the modified equipment was returned to compliance. For purposes of this permit, a malfunction is a sudden and reasonably unforeseeable failure that results in an exceedance of the emission limits in this permit.
	28) In accordance with Conditional Approval No. 4P07014, the Permittee shall maintain adequate monthly records to demonstrate compliance with the emission limitations of NOx, CO, VOC, SO2, PM, PM-10, PM-2.5, NH3, individual HAPs, and total HAPs specified herein. At a minimum, the information shall include the amount of fuel used during the month for each unit, and the actual emissions (i.e. actual fuel times emission rate) of NOx, CO, VOC, SO2, PM, PM-10, PM-2.5, NH3, individual HAPs and total HAPs for the month for each unit as well as the prior 11 months, as well as adequate records to document EU4 and EU5 emissions .
	29) Maintain records for Opacity in accordance with EPA Test Method 9, as specified in 40 CFR Part 60, Appendix A.

Table 5	
EU#	RECORD KEEPING REQUIREMENTS
EU3, EU4, EU5	30) In accordance with 310 CMR 7.70(8)(e)1. and **4B08035**, comply with all recordkeeping and reporting requirements in 310 CMR 7.70(8)(e), with all applicable record keeping and reporting requirements under 40 CFR 75.73, and with the requirements of 310 CMR 7.70(2)(a)5. (State Only Requirement)
	31)In accordance with 310 CMR 7.70(8)(h)6.a. and **4B08035**, comply with all output recordkeeping and reporting requirements in 310 CMR 7.70(8)(h) and with the requirements of 310 CMR 7.70(1)(e)5. and (2)(a)5. (State Only Requirement)
	32)In accordance with 310 CMR 7.70(8)(h)6.b. and **4B08035**, retain data used to monitor, determine, or calculate net generation for ten years from the date reported. (State Only Requirement)
Facility-Wide	33) Pursuant to the MassDEP's authority through 310 CMR 7.00: Appendix C(9)(b)2., maintain fuel oil analysis results used to demonstrate compliance with fuel oil sulfur content requirements.
	34) Maintain records for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12.
	35) Keep copies of Source Registration/Emission Statement Forms submitted annually to the MassDEP as required per 310 CMR 7.12(3)(b).
	36) In accordance with 310 CMR 7.00: Appendix C(10)(b), maintain records of all monitoring data and supporting information required by this Operating Permit on site for five (5) years from the date of the monitoring sample, measurement, report or initial Operating Permit Application.
	37) In accordance with 310 CMR 7.71 (6) b. and c. retain at the facility for five years and make available to the MassDEP upon request copies of the documentation of the methodology and data used to quantify emissions. (State Only Requirement)

Table 6	
EU#	REPORTING REQUIREMENTS
EU2	1) In accordance with 310 CMR 7.19(8)(d)4., notify the MassDEP, in writing, attention Bureau of Waste Prevention, Permit Chief, if the engine attains or exceeds 1000 hours of operating time during any consecutive twelve (12) month period and the facility is subject to the NO_x emission standard/limit in 310 CMR 7.19(8)(c)3.
EU2, EU3	2) In accordance with 310 CMR 7.19(13)(d)9., submit compliance records within ten (10) days of written request by the MassDEP or EPA.
	3) Pursuant to the MassDEP 's authority through 310 CMR 7.00: Appendix C(9)(b)2., and consistent with Approval MBR-89-COM-004 and Approval MBR-94-COM-044, updated versions of the Standard Operating and Maintenance Procedures (SOMP) shall be submitted to the MassDEP. The MassDEP must approve of significant changes to the SOMP prior to the change becoming effective. The updated SOMP shall supersede prior versions of the SOMP.
EU3	4) In accordance with Approval MBR-89-COM-004, notify the MassDEP of any system upsets or malfunctions with the combustion turbine, the steam injection system, and/or the smoke opacity monitor and recorder if the malfunctions contribute to a condition of air pollution. The MassDEP shall be notified as soon as possible by telephone, and subsequently in writing within seven (7) days of said occurrence. The written notification shall describe the malfunction and future actions to be undertaken to prevent the malfunction from recurring.
	5) In accordance with 310 CMR 7.19(13)(c) and Approval MBR-94-COM-044, on an annual basis: (a) submit a pretest protocol for the required Emissions Compliance Test (stack test) for review and written the MassDEP approval at least 60 days prior to the anticipated date of testing, (b) include in the pretest protocol a description of sampling point locations, sampling equipment, sampling and analytical procedures, and the operating conditions for the required Emissions Compliance Testing, and (c) submit the Emissions Compliance Testing report for review and written the MassDEP approval within 60 days of the completion of the Emissions Compliance Testing.
	6) In accordance with 310 CMR 7.19, 310 CMR 7.00 Appendix B(3),B(4) and Final Approval No. MBR-94-COM-044, submit to the Department's Southeast Regional Office on a quarterly basis the "bubble" daily emission calculations of 1) actual NOx (AcE_{NOx}) emitted in pounds per calendar day, 2) the allowable NOx (AlE_{NOx}) emission limitation in pounds per calendar day, and 3) the difference between the AcE_{NOx} and AlE_{NOx} over each calendar day (report whether or not the "bubble" was in compliance with respect to (3) above). Incorporate certification of any purchased Emission Reduction Credits (ERCs) to meet compliance and the entity from which the purchase was made. This submittal must be made no later than 30 days after the end of the quarter for which the report is being prepared. Any exceedance of the "bubble" emission limitation must be recorded and submitted to include the date of exceedance and quantity of excess emissions and reported to the Department in the next quarterly report.
	7) The Permittee shall Comply with all applicable reporting requirements contained in 40 CFR 60, 40 CFR 72, 40 CFR 75, 310 CMR 7.28.
	8) In accordance with the requirements of 310 CMR 7.28(13), NOx emissions data must be reported pursuant to the requirements of 310 CMR 7.28(11)(a)(6), (a)(7) and (b).
	9) NO_x emissions data should be reported directly to EPA's National Computer Center mainframe computer in a method acceptable to EPA. The deadline to submit data to EPA is 30 days after the end of each calendar quarter.

Table 6	
EU#	REPORTING REQUIREMENTS
EU3	10) In accordance with 310 CMR 7.28(13)(e), by October 31 of each year, any person who owns, leases, operates or controls a new or existing budget unit must report to the Department each facility's metered net electric and useful steam output for that year's control period. Net electric output must be reported in megawatt-hours, and steam output in MMBtu. If data for steam output is not available, the person may report heat input providing useful steam output as a surrogate for steam output. (See Section 5. Special Terms and Conditions (c) 4.).
	11) In accordance with 310 CMR 7.28(15), for each control period, the AAR for the budget unit shall submit by November 30 of each year, an annual compliance certification report to the Department and the NATS Administrator. The compliance certification shall contain, at a minimum, the items listed in 310 CMR 7.28(15)(c)1 through 8.
	12) Notification of QA testing is required for Relative Accuracy Test Audits (RATAs) and AppendixE/LME (Low Mass Emission) unit tests. Notification must be made at least 21days prior to the scheduled test date to the EPA as required by 40 CFR 75.61, to MassDEP Headquarters, Bureau of Waste Prevention, Division of Planning and Evaluation, and to the DEP Regional office, Attn: BWP Permit Chief. If tests must be rescheduled, 24 hours notice must be given, as specified in 40 CFR 75.61(a)(5).
	13) A previously approved RATA protocol may be referenced at the time of test notification provided that the referenced protocol was completed in accordance with current 40 CFR Part 75 procedures, addresses all previous MassDEP protocol comments to the satisfaction of the MassDEP, and none of the information has changed. If a revised protocol must be submitted, it must be submitted at least 21 days prior to the scheduled test date.
	14) A hardcopy of the QA RATA or Appendix E/LME test results must be submitted to both the MassDEP Headquarters and MassDEP Regional offices within 45 days of completion of tests. The electronic results must be submitted in the quarterly electronic data report (EDR).
	15) Results from QA daily Calibrations, quarterly Linearity checks and Appendix D Fuel Flowmeter tests must be reported electronically in the EDR submittal for the quarter in which the testing occurs.
	16) In accordance with 310 CMR 7.28(13)(c)(2), for units not subject to Acid Rain Emissions limitation, quarterly reports are only required to include all of the data and information required in 40 CFR Part 75 Subpart H for each NO_x Budget unit (or group of units using a common stack).
	17) In accordance with 310 CMR 7.28(13)(b), for units not using CEMS, all emissions and operating information in accordance with the standards specified in 40 CFR 75 Subpart H and 40 CFR 75.64 must only be submitted for the control period portion of the second and third quarters of each calendar year.
	18) In accordance with 310 CMR 7.70(8)(e)2. and **4B08035**, submit such monitoring plan in the manner prescribed in 40 CFR 75.62. (State Only Requirement)
	19) In accordance with 310 CMR 7.70(8)(e)3. and **4B08035**, submit a certification application to the Department within 45 days after completing all CO_2 monitoring system initial certification or recertification tests required under 310 CMR 7.70(8)(b) including the information required under 40 CFR 75.63 and 40 CFR 75.53(e) and (f). (State Only Requirement)
	20) In accordance with 310 CMR 7.70(8)(e)4.a.i. and **4B08035**, report the CO_2 mass emissions data for the CO_2 budget unit that commenced commercial operation before July 1, 2008, in an electronic format prescribed by the Administrator, unless otherwise prescribed by the Department, for each calendar quarter beginning with the calendar quarter covering January 1, 2009 through March 31, 2009. (State Only Requirement)

Table 6	
EU#	REPORTING REQUIREMENTS
EU3	21) In accordance with 310 CMR 7.70(8)(e)4.b. and **4B08035**, submit each quarterly report to the Department's agent within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in Subpart H of 40 CFR Part 75 and 40 CFR 75.64. Quarterly reports shall include all of the data and information required in Subpart G of 40 CFR Part 75, except for opacity, NO_x and SO_2 provisions. (State Only Requirement)
EU4, EU5	22) In accordance with Plan Approval No. 4P07014, within 60 days of its completion, the Permittee shall provide the Department with a written report describing the results of the noise survey performed within 180 days of the startup of both EU4 and EU5.
	23) In accordance with Plan Approval No. 4P07014, within 60 days of its completion, the Permittee shall provide the Department with a written report describing the results of the additional sound level test performed twelve (12) to fourteen (14) months after the initial noise survey.
	24) In accordance with Plan Approval No. 4P07014, the Permittee shall submit Standard Operating and Maintenance Procedures (SOMP) for EU4 and EU5 to the Department no later than 30 days prior to commencement of commercial operation of the facility. Thereafter, the Permittee shall submit updated versions of the SOMP to the Department no later than 30 days prior to the occurrence of a significant change. The Department must approve of significant changes to the SOMP prior to the SOMP becoming effective. The updated SOMP shall supersede prior versions of the SOMP.
	25) In accordance with PSD Permit No. 049-119-MA10, no less than 60 days before initial startup, the Permittee shall submit the NOx and O2 CEMS QA/QC program to EPA-New England for review and approval. EPA-New England will provide a written response either approving the proposed QA/QC program as submitted, or approving it subject to changes as stated. The Permittee must conduct the QA/QC program in accordance with the conditions of EPA-New England's written response. The Permittee shall not modify or depart from the QA/QC program except with the advance written approval of EPA.
	26) In accordance with Plan Approval No. 4P07014, the CEMS QA/QC program plan must be submitted in writing, and reviewed and approved in writing by the Department at least 30 days prior to commencement of operation of EU4 and EU5. Subsequent changes to the program plan will require submittal to the Department and Departmental approval prior to implementing the changes.
	27) In accordance with Plan Approval No. 4P07014, at least 60 days prior to commencing construction of the NH3 CEM systems, the NH3 CEM monitoring plan shall be submitted to the Department for review and approval. The NH3 CEM monitoring plan shall include: • Source identification • Source description • Control technology description • Applicable regulations • Type of monitor • A monitoring system flow diagram • A description of the data handling system • A sample calculation demonstrating compliance with the emission limits using conversion factors from 40 CFR 60 or approved by the Department.

Table 6	
EU#	REPORTING REQUIREMENTS
EU4, EU5	28) In accordance with Plan Approval No. 4P07014, the Permittee must obtain written Department approval of an emissions test protocol. The protocol shall describe the test methods for opacity, NOx, CO, VOC, PM, PM-10, PM-2.5 and NH3 compliance testing and procedures for NOx, CO, and VOC optimization/minimization, a detailed description of sampling port locations, sampling equipment, sampling and analytical procedures, a parametric monitoring strategy to ensure continuous monitoring and compliance with PM, PM-10 and PM-2.5 limits utilizing the methodology developed and operating conditions for any such emissions testing. The protocol must be submitted to the Department at least 90 days prior to commencement of testing of EU4 and EU5.
	29) In accordance with Plan Approval No. 4P07014, the results of performance tests using EPA methods shall be reported in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A.
	30) In accordance with Plan Approval No. 4P07014, the Permittee shall ensure that a final emissions test results report is submitted to the Department within 60 days of completion of the emissions testing program.
	31) In accordance with PSD Permit No. 049-119-MA10, the Permittee shall notify EPA of the NOx, PM-10 and volumetric flow rate/velocity performance tests in writing and provide EPA with a test protocol at least 45 days prior to such tests. The test protocol shall include a detailed description of sampling port locations, sampling equipment, sampling and analytical procedures, and operating conditions for any such emissions testing on each turbine. The Permittee shall revise the plan upon EPA request.
	32) In accordance with PSD Permit No. 049-119-MA10, within 45 days after the completion of the NOx, PM-10 and volumetric flow rate/velocity performance tests required above, a preliminary report of the test results shall be submitted to EPA. The test report shall indicate: a. The emissions of NOx and PM10 in lb/MMBtu and lbs/hr. b. The fuel flow rate for the turbines under which the tests were conducted. The Permittee shall submit the final emissions test report(s) to the EPA-New England within 60 days after the completion of each of the tests.
	33) In accordance with Plan Approval No. 4P07014, the NH3 CEM system certification protocol shall be submitted to the Department at least 60 days prior to certification testing for the CEM.
	34) In accordance with Plan Approval No. 4P07014, the NH3 CEM system certification report shall be submitted to the Department within 45 days from the completion of testing.
	35) In accordance with Plan Approval No. 4P07014, the Permittee shall notify the Department immediately by telephone or fax 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 at the facility. The Permittee also must comply with all notification procedures required under M.G.L. c. 21 E for any release or threat of release of ammonia.
	36) After the occurrence of any upsets or malfunctions to the turbines that result in a violation of any emission limitation contained in PSD Air Permit #049-119-MA10, the Permittee must notify EPA New England, Office of Environmental Stewardship, attention Compliance and Enforcement Chief, by FAX at (617) 918-1810 within two business days, and subsequently in writing to EPA within seven calendar days.

Table 6	
EU#	REPORTING REQUIREMENTS
EU4, EU5	37) In accordance with Plan Approval No. 4P07014, the Permittee shall submit a quarterly report to the Department. The report shall be submitted by the 30th of the following month after the end of each quarter and shall contain at least the following information: a) The EU4 and EU5 CEMS excess emission data, in a format acceptable to the Department. b) For each period of excess emissions or excursions from allowable operating conditions for the facility, the Permittee shall list the duration, cause, the response taken, and the amount of excess emissions. Excess emissions shall include but not limited to periods of start up, shutdown, fuel transfer, malfunction, emergency, equipment cleaning, and upsets or failures associated with the emission control system or CEMS (as described in Approval 4P07014) c) A tabulation of periods of operation (dispatch) of the unit.
	38) In accordance with Plan Approval No. 4P07014, the Permittee shall submit NH3 CEM Excess Emission Reports for each calendar quarter by the thirtieth (30th) day of April, July, October, and January covering the previous calendar periods of January through March, April through June, July through September, and October through December, respectively.
	39) In accordance with Plan Approval No. 4P07014, the Permittee shall submit an annual NH3 CEM Emission Report by January 30th that defines highest hourly average NH3 emissions (ppmvd corrected to 15%O2) per calendar day and the average calendar day NH3 emissions (ppmvd corrected to 15%O2.).
	40) In accordance with Plan Approval No. 4P07014, the Permittee shall notify the Department's Southeast Regional Office, in writing, attention Permit Chief, Bureau of Waste Prevention, when the installation of EU4 and EU5 is complete and deemed ready for operation, within 14 days thereof.
	41) In accordance with Plan Approval No. 4P07014, the Permittee shall examine and propose, as part of the final emissions test results report, a surrogate methodology or parametric monitoring for PM, PM-10 and PM-2.5 based on initial compliance test results (PM measured by EPA Method 5). PM, PM-10 and PM-2.5 emissions will be continuously estimated by a Data Acquisition and Handling System(s) (DAHS) using emission factors (lb/MMBtu) derived from the initial compliance testing.
	42) In accordance with PSD Permit No. 049-119-MA10, the Permittee shall submit to EPA New England semi-annual reports postmarked by January 30th and July 30th of each year, which contains the following information from the prior calendar 6-month period: rolling 12-month NOx emissions as calculated by the owner/operators' emissions monitoring system emissions, monthly fuel usage, and turbine NOx emission calculations.
	43) In accordance with Plan Approval No. 4P07014, the Permittee shall ensure that the subject facility complies with all applicable reporting requirements contained in 40 CFR Parts 72 and 75, 40 CFR 60, 310 CMR 7.32 and 310 CMR 7.70.
	44) In accordance with 310 CMR 7.70(8)(e)4.a.ii. and **4B08035**, report the CO_2 mass emissions data for the CO_2 budget unit that commenced commercial operation on or after July 1, 2008, in an electronic format prescribed by the Administrator, unless otherwise prescribed by the Department, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under 310 CMR 7.70(8)(a)2. or, unless that quarter is the third or fourth quarter of 2008, in which case reporting shall commence in the quarter covering January 1, 2009 through March 31, 2009. (State Only Requirement)
EU3, EU4, EU5	45) In accordance with 310 CMR 7.70(2)(a)5. and **4B08035**, each submission under the CO_2 Budget Trading Program shall be submitted, signed, and certified by the CO_2 authorized account representative. (State Only Requirement)

Table 6	
EU#	REPORTING REQUIREMENTS
EU3, EU4, EU5	46) In accordance with 310 CMR 7.70(4)(a) and **4B08035**, for each control period in which a CO_2 budget source is subject to the CO_2 requirements of 310 CMR 7.70(1)(e)3., submit to the Department by the March 1 following the relevant control period, a compliance certification report **to Patricio Silva at the MassDEP Boston office**. The compliance certification shall contain, at a minimum, the items listed in 310 CMR 7.70(4)(a)2. and 3. (State Only Requirement)
	47) In accordance with 310 CMR 7.70(6)(c) and **4B08035**, following the establishment of a CO_2 Allowance Tracking System account, all submissions to the Department or its agent pertaining to the account, shall be made only by the CO_2 authorized account representative for the account. (State Only Requirement)
	48) In accordance with 310 CMR 7.70(8)(d) and **4B08035**, the CO_2 authorized account representative shall submit written notifications to the Department and the Administrator in accordance with 40 CFR 75.61. (State Only Requirement)
	49) In accordance with 310 CMR 7.70(8)(e)1. and **4B08035**, comply with all recordkeeping and reporting requirements in 310 CMR 7.70(8)(e), the applicable record keeping and reporting requirements under 40 CFR 75.73 and with the requirements of 310 CMR 7.70(2)(a)5. (State Only Requirement)
	50) In accordance with 310 CMR 7.70(8)(e)4.c. and **4B08035**, submit to the Department or its agent a compliance certification in support of each quarterly report. (State Only Requirement)
	51) In accordance with 310 CMR 7.70(8)(h)6.a. and **4B08035**, comply with all output recordkeeping and reporting requirements in 310 CMR 7.70(8)(h) and with the requirements of 310 CMR 7.70(1)(e)5. and (2)(a)5. (State Only Requirement)
	52) In accordance with 310 CMR 7.70(8)(h)6.c. and **4B08035**, submit annual output reports in a spreadsheet both electronically and in hardcopy by March 1 for the immediately preceding calendar year **to Patricio Silva at the MassDEP Boston office** or the Department's agent. (State Only Requirement)
Facility-Wide	53) In accordance with 310 CMR 7.13(1)(d), submit the test results of any testing required by the MassDEP.
	54) Submit a Source Registration/Emission Statement Form to the MassDEP on an annual basis as required by 310 CMR 7.12.
	55) In accordance with 310 CMR 7.00: Appendix C(10)(c) submit by January 30 and July 30 for the previous six months respectively, a summary of all monitoring data and related supporting information to the MassDEP.
	56) Submit Annual Compliance report to the MassDEP and EPA by January 30 of each year and as required by General Condition 10 of this Permit.
	57) Promptly report to the MassDEP all instances of deviations from Permit requirements by telephone or fax, within three days of discovery of such deviation, as provided in 310 CMR 7.00: Appendix C(10)(f) and General Condition 25.
	58) All required reports must be certified by a responsible official as provided in 310 CMR 7.00: Appendix C(10)(h).
	59) Within 60 days of its completion, the Permittee shall provide the Department with a written report describing the results of the noise survey performed within 180 days of completion of BELD's project to upgrade transmission cables necessary to operate EU2, EU3, EU4 and EU5 at full load concurrently.

Table 6	
EU#	REPORTING REQUIREMENTS
Facility-Wide	60) All Department notifications and reporting required herein shall be made to the attention of: Department of Environmental Protection Bureau of Waste Prevention 20 Riverside Drive Lakeville, Massachusetts 02347 ATTN: Permit Chief Phone: (508) 946-2779 Fax: (508) 947-6557
	61) All EPA correspondence required under PSD Air Permit #049-119-MA10 and this Operating Permit shall be forwarded to: Air Compliance Clerk U.S. EPA New England One Congress Street, Suite 1100-SEA Boston, MA 02114-2023
	62) The Permittee must notify the Department by telephone or fax as soon as possible, but in any case no later than three (3) business days after the occurrence of any upsets or malfunctions to the facility equipment, air pollution control equipment, or monitoring equipment which result in an excess emission to the air and/or a condition of air pollution.
	63) In accordance with 310 CMR 7.71(5), by April 15th, 2010 and April 15th of each year thereafter report emissions of greenhouse gases from stationary emissions sources including, but not limited to, emissions from factory stacks, manufacturing processes and vents, fugitive emissions, and other process emissions; and owned or leased motor vehicles when stationary source greenhouse gas emissions are greater than 5,000 short tons CO2e. Report greenhouse gas emissions electronically in a format that can be accommodated by the registry. (State Only Requirement)
	64) In accordance with 310 CMR 7.71(6), certify greenhouse gas emissions reports using a form provided by the MassDEP or the registry. (State Only Requirement)
	65) In accordance with 310 CMR 7.71(7), by December 31st of the applicable year submit to the MassDEP documentation of triennial verification of the greenhouse gas emissions report. (State Only Requirement)

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	DESCRIPTION
310 CMR 7.16	Reduction of Single Occupant Commuter Vehicle Use
310 CMR 7.27	NO_x Allowance Program
40 CFR Part 64	Compliance Assurance Monitoring
42 U.S.C. 7401, §112	Hazardous Air Pollutants
42 U.S.C. 7401, §112(r)	Prevention of Accidental Releases

5. SPECIAL TERMS AND CONDITIONS

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

(a) As stated within Approval MBR-94-COM-044 and Approval MBR-89-COM-004, that should any nuisance condition(s) occur as a result of the operation of the facility, then appropriate steps shall immediately be taken to abate said nuisance condition(s). (**State Only Requirement**, 310 CMR 7.01(1))

(b) In accordance with Approval MBR-89-COM-004 and Approval MBR-94-COM-044, maintain on-site, at all times, a copy of the Standard Operating and Maintenance Procedure (SOMP) for the subject emission units. In accordance with MBR-89-COM-004, the SOMP for EU3 shall be posted near the equipment and contain the optimum operating parameters which will produce the lowest emission rates.

(c) NOx Allowance Trading Program, 310 CMR 7.28:

1. EU3 is subject to the requirements of the NO_x Allowance Trading Program, 310 CMR 7.28. The MassDEP issued a NO_x Allowance Trading Program Emission Control Plan (ECP) Approval for Braintree Electric Light Department as follows:

EMISSION UNIT	APPROVAL NUMBER	PHASE I APPROVAL ISSUE DATE	PHASE II APPROVAL ISSUE DATE
EU3	4B07017 (Transmittal No. W024321)	June 8, 2007	June 8, 2007

2. NOx Allowance use and transfer must comply with 310 CMR 7.28(10).

3. In accordance with 310 CMR 7.28(14), each year by November 30, for each budget unit, the total number of banked or current year allowances in its compliance or overdraft account must equal or exceed the NOx emissions from the budget unit in the current control period.

4. Each budget unit shall meter electric output in accordance with the approved monitoring methodology contained in Table II and Table III of the ECP Approval No. 4B07017.

   a) In the case where billing meters are used to determine output, no QA/QC activities beyond those already performed are required. To qualify as a billing meter, the measurement device must be used to measure electric or thermal output for commercial billing under a contract. The facility selling the electric or thermal output must have different owners from the owners of the party purchasing the electric or thermal output. Any electric or thermal output values that the facility reports must be the same as the values used in billing for the output.

   b) In the case where non-billing meters are used to determine output, if the facility decides to adopt a system approach to accuracy then a system accuracy of 10.0% must be achieved. If testing an output measurement system shows that the output readings are not accurate to 10.0% or less, then the measurement equipment must be retested or replaced, and meet that requirement. If the facility decides to adopt a component approach to accuracy, then a component accuracy of 3.0% must be achieved. If testing a piece of output measurement equipment shows that the output readings are not accurate to 3.0% or less of the full scale, then the measurement equipment must be retested or replaced, and meet that requirement. When a non-billing system fails to meet the 10% or 3% requirement, data should be considered invalid, prospectively, for purposes of determining allocations. Data remain invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test. The invalid data must be omitted and either zero or an output value that is likely to be lower than a measured value must be reported.

   c) Output measurement equipment must be tested for accuracy or recalibrated at least once every two years, in accordance with applicable consensus or NIST traceable standards, unless a standard allows for less frequent calibrations or accuracy tests.

(d) Per data as supplied through the Permittee's Operating Permit Application (4V06022, Transmittal No. W034607) and Significant Modification Application (4M08019, Transmittal No. W209225), all EUs shall continue to emit products of combustion through stacks with the following parameters:

EMISSION UNIT	STACK HEIGHT (Feet)	STACK EXIT DIAMETER (Feet)	STACK MATERIAL
EU1	NA	NA	NA
EU2	40	1.67	Steel
EU3	130	17	Reinforced Gunite/Steel
EU4	100	11	Steel
EU5	100	11	Steel

(e) The Permittee is subject to, and has stated in their Operating Permit Application (4V06022, Transmittal No. W034607) that they are in compliance with the requirements of 40 CFR Part 82: Protection of Stratospheric Ozone. These requirements are applicable to this facility and EPA enforces these requirements.

(f) In accordance with MBR-94-COM-044, EU3 shall comply with an allowable NO_x emission limitation (AlE_{NOx}), in pounds per day, based on the equation given below:

$$AlE_{NOx} = [0.2526 \text{ lb/MMBtu} \times HI_{\#2\ OIL}] + [0.1547 \text{ lb/MMBtu} \times HI_{NG}]$$

where:

$HI_{\#2\ OIL}$ = daily heat input in MMBTU of EU3 when burning No. 2 Fuel Oil
HI_{NG} = daily heat input in MMBTU of EU3 when burning Natural Gas

The actual NO_x emissions (AcE_{NOx}), in pounds, for EU3 shall be calculated according to the following equation:

AcE_{NOx} = Actual emissions from the combustion turbine, in pounds per day, as measured by the approved Predictive Emission Monitoring System.

Final determination of the amount of ERCs necessary for EU3 to comply with Reasonably Available Control Technology for Sources of Oxides of Nitrogen (NO_x RACT) shall be calculated utilizing a compliance assurance multiplier of 1.05 and according to the following formula:

$ERC_{NOx} = (AcE_{NOx} - AlE_{NOx}) \times 1.05$

where:

ERC_{NOx} = federally enforceable NO_x Emission Reduction Credits (ERCs) in pounds (greater than or equal to zero) certified by the MassDEP under 310 CMR 7.00: Appendix B(3)

The amount of ERCs calculated by the above formula shall be rounded to the nearest whole number. The NO_x emissions from EU3 shall be averaged over a 24-hour period or daily.

The Permittee shall comply with 310 CMR 7.00: Appendix B(3)(e) regarding the withdrawal, transfer, and use of ERCs. In accordance with 310 CMR 7.00: Appendix B(3)(e)2., the Permittee shall obtain an amount of credit equal to five (5) percent more than the amount needed for compliance calculation. Therefore, the amount of ERCs obtained shall be calculated according to the following formula and rounded to the nearest whole number:

ERC_{NOx} obtained = $(AcE_{NOx} - AlE_{NOx})(1.05)(1.05)$ or $ERC_{NOx} \times 1.05$

The Permittee shall calculate the total amounts of ozone season (May 1 through September 30) and non-ozone season (October 1 through April 30) ERCs that are necessary for compliance with NO_x RACT, and obtain and use (or retire) ERCs in accordance with the provisions of 310 CMR 7.00: Appendix B(3)(e)8. In accordance with 310 CMR 7.00: Appendix B(3)(e)8., NO_x ERCs generated during the ozone control period of May 1 through September 30 can be used for compliance at any time during the year. However, NO_x ERCs generated during the non-ozone control period of October 1 through April 30 shall only be used for compliance in the same season as generated (October 1 through April 30).

(g) In accordance with the May 31, 2006 EPA PEMS approval, the NOx MER shall be 0.700 lb/mmBtu when the unit is firing only natural gas, and 1.200 lb/mmBtu when the unit is firing any fuel oil.

(h) In accordance with the May 31, 2006 EPA PEMS approval, the sensor validation system shall include an alarm to inform the operator when sensors need repair and to indicate that the PEMS is out-of-control. In setting up the alarm system, a demonstration shall be performed at a minimum of four different PEMS training conditions, which must be representative of the entire range of expected turbine operations. For each of the four or more training conditions, the demonstration shall consist of the following:

(1) For all of the sensors used in the PEMS model, input a set of reference sensor values that were recorded either during the training of the PEMS or during a RATA of the PEMS (these values will all be within the PEMS operating envelope). Verify that these reference inputs produce the expected PEMS output, i.e., the expected NOx emission rate;

(2) Perform one-sensor failure analysis, as follows. Artificially fail one of the sensors and then, using the calculated replacement value for that sensor, assess the effect on the accuracy of the PEMS. Calculate the percent difference between the reference NOx emission rate from step (1) and the PEMS output. Repeat this procedure for each sensor, individually;

(3) Identify the sensor failure in step (2) that results in the worst accuracy. If the highest percent deviation exceeds ±10.0
percent, then set up the PEMS to alarm when any single sensor fails. If none of the percent difference values exceeds 10.0
percent, proceed to step (4);

(4) Perform two-sensor failure analysis, as follows. Artificially fail the sensor from step (3) that produced the worst accuracy
and also fail one of the other sensors. Then, using the calculated replacement values for both sensors, assess the accuracy
of the PEMS hourly average output, as in step (2). Repeat this procedure, evaluating each sensor in turn with the sensor
from step (3);

(5) Identify the combination of dual sensor failures that results in the worst accuracy. If the highest percent deviation
exceeds ± 10.0 percent, then set up the PEMS to alarm when any two sensors fail. If none of the percent difference values
exceeds 10.0 percent, then set up the PEMS to alarm with three sensor failures.

For every hour of PEMS operation, the PEMS shall check for failed sensors and provide an alarm to alert the operator of any sensors needing repair. When the PEMS alarms, the PEMS is out-of-control.

(i) In accordance with Plan Approval No. 4P07014, the Permittee shall comply with all sound requirements as documented in Section XII. SOUND. Upon the commencement of operations of EU4 and EU5, EU1 and EU3 shall not operate concurrently with EU4 and EU5 on Sundays between the hours of midnight and 5:00 a.m. unless required solely by ISO-NE to dispatch the unit as a result of a local or regional system contingency (i.e. VAR Control or transmission reliability) or Security Constrained Unit Commitment. This condition assumes that EU4 and EU5 are already running and would require concurrent operation of EU2/EU3. ("**State Only Requirement**")

(j) In accordance with Plan Approval No. 4P07014, the Permittee shall submit to the Department, plans and specifications for the exhaust stack, combustion turbine generator set, the SCR control system (including the ammonia handling and storage system), the CO catalyst control system, EU4 and EU5, and each Continuous Emissions Monitor System (CEMS) once the specific information has been determined, but in any case not later than 30 days prior to commencement of construction/installation of each component of the subject unit.

(k) Massachusetts Clean Air Interstate Rule (Mass CAIR), 310 CMR 7.32:

The owner/operator of EU3, EU4 and EU5 is subject to and shall comply with the Massachusetts Clean Air Interstate Rule (CAIR), 310 CMR 7.32 and has submitted a CAIR emission control plan application pursuant to 310 CMR 7.32(3).

((l) Reserved **)**

(m) Federal Acid Rain Program, Phase II Acid Rain Permit:

1. According to 40 CFR Part 72, EU4 and EU5 will be designated as Phase II Acid Rain "New Affected Units" 90 days after commencement of activities and not after the date that the Permittee declares the generation units commercial. Pursuant to 40 CFR Part 72.71, 40 CFR Part 72.73, and 310 CMR 7.00: Appendix C(3)(n), the Department is the permitting authority for Phase II Acid Rain Permits. Phase II Acid Rain Permit No. 4B08064 is being noticed for issuance concurrent with this Operating Permit. The Department is incorporating the requirements of the Phase II Acid Rain approval into this Operating Permit. The Phase II Acid Rain Permit will renew with the Operating Permit.

2. Within 60 days of the end of each calendar year, the facility shall hold in its SO_2 allowance account at least one allowance for each ton of SO_2 emitted during the previous year. An allowance is a limited authorization to emit SO_2 in accordance with the Acid Rain Program.

3. If the facility has excess emissions in any calendar year, it shall submit a proposed offset plan as required under 40 CFR Part 77. In addition, the Permittee shall pay any penalties specified in 40 CFR Part 77 and comply with the terms of an approved offset plan.

4. In accordance with 40 CFR Part 73, the Permittee's designated representative may buy, sell, trade, or transfer allowances between EU accounts at any time, except between 60 days of the end of the calendar year and the completion of the annual SO_2 allowance reconciliation for the preceding year(s).

5. The yearly allowance allocations as identified in 40 CFR Part 73, Tables 2, 3, or 4 (as amended) and Phase II Acid Rain Approval No. 4B08064 are identified below:

EMISSION UNIT		YEAR
		2009 - Beyond
EU 4	SO_2 allowances	0
EU 5		

6. Phase II Acid Rain Approval No. 4B08064 is incorporated by reference into Operating Permit No. 4V06022.

(n) Standards of Performance for Stationary Gas Turbines, 40 CFR Part 60, Subpart KKKK:

1. EU4 and EU 5 are subject to the new source performance standards (NSPS) of 40 CFR Part 60, Subpart KKKK. The emission limitations that are reflected in this operating permit for EU4 and EU5 are more stringent that those established in the NSPS, however the Permittee shall comply with any applicable monitoring/testing, record keeping and/or reporting requirements of Subpart KKKK.

(o) Emission Offsets and Nonattainment Review, 310 CMR 7.00: Appendix A; and Emission Banking, Trading and Averaging, 310 CMR 7.00: Appendix B:

The Permittee must obtain NO_x offsets in accordance Plan Approval No. 4P07014, Section VI. The proposed maximum potential NO_x emissions from EU 4 and EU 5 are 58.8 tons per year. 310 CMR 7.00: Appendix A(6) requires that the increase in proposed NO_x emissions be offset in actual emissions at a ratio of 1.2:1. 310 CMR 7.00: Appendix B(3)(e) required that the Permittee obtain 5% over the 1.2:1 ratio required for a total offset of 1.26:1. As required in Plan Approval No. 4P07014 the Permittee purchased 74 tons of NO_x Emission Reduction Credits (ERCs) from Mieco Inc. that were generated by the Medical Area Total Energy Plant (MATEP), Inc. in accordance with Department Approval No. MBR-99-ERC-007. The 74 tons of NO_x ERCs must be surrendered by the Permittee to the MassDEP prior to commencement of operation of EU4 and EU5.

(p) Startup Shutdown (SUSD) Operations Emission limits

In accordance with PSD Air Permit #049-119-MA10, the startup period is defined as the period from the beginning of turbine operations to a turbine operating at 50% or more of full rated power and shall not exceed 10 minutes. The shutdown period is defined as the period from the moment a turbine's operations falls to below 50% of full rated power to the end of operations and shall not exceed 5 minutes. Each turbine will operate at or above 50% power, with the exception of start up or shutdown periods.

For startup and shutdown (SUSD) operations as defined in PSD Air Permit #049-119-MA10, the owner/operator shall not exceed the following emission limits:

Natural Gas				
Pollutant	Start Up lb/MMBtu	Shut Down lb/MMBtu	Start Up lbs/hr	Shut Down lbs/hr
NOx	0.092	0.047	6.14	6.06
PM_{10}	0.020	0.020	5.00	5.00

ULSD				
Pollutant	Start Up lb/MMBtu	Shut Down lb/MMBtu	Start Up lbs/hr	Shut Down lbs/hr
NOx	0.124	0.060	11.15	10.95
PM_{10}	0.061	0.079	15.00	15.64

i. The start up lb/MMBtu limit is the average emissions limit over a 10 minute start up period.

ii. The shut down lb/MMBtu is the average emissions limit over a 5 minute shutdown period.

iii. The lbs/hr startup emission rate reflects start up emissions during the first ten minutes of the hour and the subsequent 50 minutes of emissions at 50% or greater load.

iv. The lbs/hr shutdown emission rate reflects shutdown emissions during the last five minutes and full (50% or greater) load operation for the preceding 55 minutes of operation.

(q) Selective Catalytic Reduction System Operation

In accordance with PSD Air Permit #049-119-MA10, the Permittee shall operate the SCR at all times while EU4 and EU5 are in operation and the turbine exhaust temperature exceeds 650° F.

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 is currently authorized to engage in emissions trading under the following federal and state regulatory programs:
40 CFR Parts 72, 73, and 74 - SO_2 Allowance System;
310 CMR 7.22 - SO_2 Emissions Reductions for the Purpose of Reducing Acid Rain;
310 CMR 7.28 – NO_x Allowance Trading Program;
310 CMR 7.32 – Massachusetts Clean Air Interstate Rule (MassCAIR);
310 CMR 7.70 – Massachusetts CO_2 Budget Trading Program **(State Only)**;
310 CMR 7.00, Appendix A - Emission Offsets; and
310 CMR 7.00, Appendix B - Emission Reduction Credits.

The Permittee has requested intra-facility emissions trading as provided for in Approval MBR-94-COM-044 and Section 4 and Section 5 of this Operating Permit.

Pursuant to 310 CMR 7.00: Appendix C(7)(b), emission trades, provided for in this permit, may be implemented provided the Permittee notifies EPA and the MassDEP at least fifteen (15) days in advance of the proposed changes and the Permittee provides the information required in 310 CMR 7.00: Appendix C(7)(b)3.

Any intra-facility change that does not qualify pursuant to 310 CMR 7.00: Appendix C(7)(b)2. is required to be submitted to the MassDEP pursuant to 310 CMR 7.00: Appendix B.

b) Inter-facility emission trading

The Permittee is currently authorized to engage in emissions trading under the following federal and state regulatory programs:

40 CFR Parts 72, 73, and 74 - SO_2 Allowance System;
310 CMR 7.22 - SO_2 Emissions Reductions for the Purpose of Reducing Acid Rain;
310 CMR 7.28 – NO_x Allowance Trading Program;
310 CMR 7.32 – Massachusetts Clean Air Interstate Rule (MassCAIR);
310 CMR 7.70 – Massachusetts CO_2 Budget Trading Program **(State Only)**;
310 CMR 7.00, Appendix A - Emission Offsets; and
310 CMR 7.00, Appendix B - Emission Reduction Credits.

All increases in emissions due to emission trading, must be authorized under the applicable requirements of 310 CMR 7.00: Appendix B (the "Emissions Trading Program") and 42 U.S.C. §7401 et seq. (the "Act"), and as provided for in this permit.

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 MassDEP has made available to the Permittee via the MassDEP's web site, http://www.mass.gov/dep/air/approvals/aqforms.htm , an "Operating Permit Reporting Kit". The "Operating Permit Reporting Kit" contains instructions, and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification.

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 Permit. The report shall be postmarked or delivered by January 30 to the MassDEP and to the Regional Administrator, United States Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

i. the terms and conditions of the Permit that are the basis of the certification;
ii. the current compliance status and whether compliance was continuous or intermittent during the reporting period;
iii. the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
iv. 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 postmarked or delivered by January 30 and July 30 to the MassDEP. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

i. the terms and conditions of the Permit that are the basis of the certification;
ii. the current compliance status during the reporting period;
iii. the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
iv. whether there were any deviations during the reporting period;
v. if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
vi. whether deviations in the reporting period were previously reported;
vii. if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
viii. if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
ix. 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 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, Part D.

(c) Nothing in this Permit shall alter or affect the following:

i. the liability of the source for any violation of applicable requirements prior to or at the time of Permit issuance.
ii. the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a); or
iii. 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), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22, 7.70 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 five (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 that 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, as per 310 CMR 7.00: Appendix C(3)(g)12.:

(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.

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 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. EMERGENCY CONDITIONS

The Permittee shall be shielded from enforcement action brought for noncompliance with technology based[1] emission limitations specified in this Permit as a result of an emergency[2]. In order to use emergency as an affirmative defense to an action brought for noncompliance, the Permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

(a) an emergency occurred and that the Permittee can identify the cause(s) of the emergency;

(b) the permitted facility was at the time being properly operated;

(c) during the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and

(d) the Permittee submitted notice of the emergency to the MassDEP within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must

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[1] Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

[2] An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/Emergency Response, immediate notification to the appropriate parties should be made as required by law.

25. PERMIT DEVIATION

Deviations are instances where any Permit condition is violated and not reported as an emergency pursuant to Section 24 of this Permit. 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 Waste Prevention the following deviations from Permit requirements, by telephone or fax, within three (3) days of discovery of such deviation:

- 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.
- Exceedances of parameter limits established by your Operating Permit or other Approvals, where the parameter limit is identified by the Permit or Approval as surrogate for an emission limit.
- Exceedances of Permit operational limitations directly correlated to excess emissions.
- Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other Approvals.
- Failure to perform QA/QC measures as required by your 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's Bureau of Waste Prevention Air Operating Permit Reporting Kit, which is available via the MassDEP's web site, http://www.mass.gov/dep/air/approvals/aqforms.htm . 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 fax within 3 days of discovery, said deviations shall also be submitted in writing to the regional Bureau of Waste Prevention within ten (10) days of discovery. For deviations that 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 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. LEGEND OF ABBREVIATED TERMS IN OPERATING PERMIT

*Not all abbreviations are present in every Operating Permit

AQCR = Air Quality Control Region
ASTM = American Society for Testing and Materials
BACT = Best Available Control Technology
BELD = Braintree Electric Light Department
Btu = British thermal unit
BWP = Bureau of Waste Prevention
CAIR = Clean Air Interstate Rule
CEMS = Continuous Emissions Monitoring System
CFR = Code of Federal Regulations
CMR = Code of Massachusetts Regulations
CO = Carbon Monoxide
CO_2 = Carbon Dioxide
CO_2e = Carbon Dioxide Equivalent
COMS = Continuous Opacity Monitoring System
DAHS = Data Acquisition and Handling System
dB(A) = decibels (A-weighted sound level)
DEP = Massachusetts Department of Environmental Protection
° C = degrees Celsius
° F = degrees Fahrenheit
ECP = Emission Control Plan
EPA = Environmental Protection Agency
EU# = Emission Unit Number
FMF FAC. NO. = Facility Master File Number
FMF RO NO. = Facility Master File Regulated Object Number
FT^3/day = Cubic Feet Per Day
GCV = gross calorific value
Gal/hr = gallons per hour
Gal/min = gallons per minute
Gal/Month = gallons per month
GHG = Greenhouse gas
HAP = Hazardous Air Pollutant(s)
Hg = Mercury
HHV = Higher Heating Value
HP = Horsepower
hscf/hr = hundred standard cubic feet per hour
in H_20 = inches of water
in. Hg = inches of mercury
ISO = Represent 5̃9F, 60% Relative Humidity, 29.92 Inches Mercury At Sea Level
kW = kilowatt
kPa = kilopascal
lb/hr = pounds per hour
lb/MMBtu = pounds per million Btu
lb/MWh = pounds per Megawatt-hour
M-prefix = thousand
MM-prefix = million
MassDEP = Massachusetts Department of Environmental Protection
M.G.L. = Massachusetts General Laws
MMBtu = million British thermal units
MMBTU/hr = Million British Thermal Units Per Hour

mm Hg = millimeters of mercury
MRP = month rolling period (consecutive months)
MW = Megawatt
MW_e = Megawatt electrical
MWh = Megawatt-hour (net electrical output)
NH_3 = Ammonia
NESHAP = National Emission Standards for Hazardous Air Pollutants
NSPS = New Source Performance Standards
No. = Number
NO_2 = Nitrogen dioxide
NO_x = Oxides of Nitrogen
O_2 = Oxygen
Pb = Lead
PM = Particulate Matter
PM_{10} = Particulate Matter less than or equal to 10 microns in aerodynamic diameter
$PM_{2.5}$ = Particulate Matter less than or equal to 2.5 Microns in aerodynamic diameter
Ppm = parts per million
Ppmvd = parts per million by volume, dry basis
PEMS = Predictive Emission Monitoring System
PLT ID = Plant Identification
PTE = Potential To Emit
PSD = Prevention of Significant Deterioration
PSI = pounds per square inch
QA = Quality Assurance
QC = Quality Control
RACT = Reasonable Available Control Technology
RAA = Relative Accuracy Audit
RATA = Relative Accuracy Test Audit
SCR = Selective Catalytic Reduction
SSEIS = Stationary Source Emission Inventory System
S = Sulfur
SF_6 = Sulfur hexafluoride
SO_2 = Sulfur Dioxide
SOMP = Standard Operating and Maintenance Procedures
TPY = Tons Per Year (12 month consecutive period)
ULSD = Ultra-low Sulfur Distillate
VOC = Volatile Organic Compound
@ = at
< = less than
> = greater than
$\leq$ = less than or equal to
$\geq$ = greater than or equal to
NA = Not Applicable
% = percent
10^6 BTU/hr = 1,000,000 BTU Per Hour
$\pm$ = plus or minus

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.