



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

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COMMISSIONER

**FPL Energy Wyman, LLC
& FPL Energy Wyman IV, LLC
Cumberland County
Yarmouth, Maine
A-388-70-E-R**

**Departmental
Findings of Fact and Order
Part 70 Air Emission License**

After review of the Part 70 License renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	FPL Energy Wyman, LLC & FPL Energy Wyman IV, LLC (FPLE Wyman)
LICENSE NUMBER	A-388-70-E-R
LICENSE TYPE	Part 70 License Renewal
NAICS CODES	221112 – Fossil Fuel Electric Power Generation
NATURE OF BUSINESS	850 MW electric generating facility
FACILITY LOCATION	Cousins Island, Yarmouth, Maine

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

EMISSION UNIT	UNIT CAPACITY	UNIT TYPE
Unit #1	630 MMBtu/hr	Boiler
Unit #2	630 MMBtu/hr	Boiler
Unit #3	1190 MMBtu/hr	Boiler
Unit #4	6290 MMBtu/hr	Boiler
Unit #5	72 MMBtu/hr	Boiler
Diesel Generator	5.25 MMBtu/hr	Diesel Generator

FPLE Wyman has additional insignificant activities which do not need to be listed in the emission equipment table above. The list of insignificant activities can be

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04679-2094
(207) 764-0477 FAX: (207) 760-3143

found in the Part 70 license application, dated November 1, 2006, and in Appendix B of *Part 70 Air Emission License Regulations*, 06-096 CMR 140 (as amended).

C. Application Classification

The application for FPLE Wyman does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be a Part 70 License renewal issued under 06-096 CMR 140 (as amended).

This license includes the incorporation of the requirements of the revised stack testing language in 38 M.R.S.A. §589, sub-section 2 to allow particulate matter testing to occur once every 5 years unless extenuating circumstances exist. The license also includes the statutory language of 38 MRSA §603-A regarding the future sulfur content requirements of fuel oil.

D. Units of Measurement

K	degree Kelvin
g/s	grams per second
gr/dscf	grains per dry standard cubic feet
km	kilometers
lb/hr	pounds per hour
lb/MMBtu	pounds per million British Thermal Units
lb/ton	pounds per ton
lb/ton BLS	pounds per ton of black liquor solids
m	meters
m/s	meters per second
mg/dscm	milligrams per dry standard cubic meters
MMBtu/hr	million British Thermal Units per hour
MW	megawatt
ng/dscm	nanograms per dry standard cubic meter
ppm	parts per million
tons/day	tons per day
tpy	tons per year
ug/m ³	micrograms per cubic meter

II. FACILITY AND EMISSION UNIT DESCRIPTION

A. Process Description

FPLE Wyman is an 850-megawatt electric generating facility located on Cousins Island in Yarmouth, Maine. The equipment consists of four electrical generation units (Units #1-#4), all of which fire #6 fuel oil. There is also a smaller oil-fired auxiliary boiler (Unit #5) which provides building heat and auxiliary steam. A back-up diesel generator provides electricity for use on-site.

FPLE Wyman is part of the New England Power Pool (NEPOOL) grid. The operating loads, dispatch schedule, and number of hours the facility is on-line is determined by NEPOOL; therefore there are variations in the facility's operation from hour to hour and season to season. The peak generating times are during the winter and summer seasons.

B. NO_x RACT (Reasonably Available Control Technology) and NO_x Control Program

Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides, 06-096 CMR 138 (as amended) is applicable to sources that have the potential to emit quantities of NO_x equal to or greater than 100 tons/year. Amendment A-388-71-C-A, issued to the facility on May 18, 1995, addressed NO_x RACT requirements. Units #1 and #2 were determined to be meeting RACT with the existing low NO_x burner systems and bias drilled burner caps. It was determined that Units #3 and #4 met the 0.3 lb/MMBtu NO_x RACT limit. NO_x RACT for Unit #5 was the installation of a low NO_x burner. The NO_x RACT requirements are incorporated in this renewal.

NO_x Control Program, 06-096 CMR 145 (as amended) is applicable to fossil fuel fired electrical generating units with a heat input greater than 250 MMBtu/hr located in counties that have not received a waiver of NO_x control requirements pursuant to section 182(f) of the 1990 Clean Air Act Amendments. Units #1-#4 are subject to 06-096 CMR 145 (as amended) and FPLE Wyman was issued two amendments, A-388-71-G-M (June 6, 2002) and A-388-70-C-A (September 20, 2007) addressing these NO_x requirements. The NO_x limits for Units #1 and #2 were determined to be 0.22 lb/MMBtu for each unit, allowing for averaging between the two units. The emission limit only applies if a unit emits greater than 100 tons/year of NO_x. The NO_x limits for Units #3 and #4 individually were determined to be 0.175 lb/MMBtu and 0.170 lb/MMBtu, respectively; or the emissions from Units #3 and #4 may be averaged to meet 0.165 lb/MMBtu. These 06-096 CMR 145 NO_x limits are all on a rolling 90 operating-day average.

The 06-096 CMR 145 (as amended) requirements are incorporated in this renewal.

C. Acid Rain

FPLE Wyman Units #1, #2, #3 and #4 are subject to the federal Acid Rain Program, 40 CFR (Code of Federal Regulations) Part 70, *State Operating Permits Program*, and Part 72, *Permits Regulation*, and the facility is therefore required to have a Phase II acid rain permit. FPLE Wyman was issued an acid rain permit for Wyman Station, A-388-70-B-S, on December 29, 1997 and the acid rain permit is incorporated in this renewal.

D. Best Available Retrofit Technology (BART)

FPLE Wyman Units #3 and #4 are eligible BART sources as defined in 40 CFR Part 51, Subpart P, *Protection of Visibility*. The units are required to meet BART per 38 MRSA §582 (5)(C) and §603-A (8). A BART license, A-388-77-2-M, was issued on November 2, 2010, replacing the previous BART license. The BART findings for Unit #3 were determined to be limiting PM emissions to 0.18 lb/MMBtu and fuel oil sulfur content to 0.7% sulfur or less, both taking effect after January 1, 2013. The BART findings for Unit #4 were determined to be limiting PM emissions to 0.1 lb/MMBtu and limiting SO₂ emissions to 0.8 lb/MMBtu (corresponding to 0.7% sulfur). The 06-096 CMR 145 (NO_x Control Program, as amended) requirements were also reiterated in the BART license as NO_x limits for BART purposes.

E. CO₂ Budget

FPLE Wyman was issued license A-388-78-A-N (January 15, 2009) per Maine's *CO₂ Budget Trading Program*, 06-096 CMR 156 (as amended) for Units #1-#4.

F. Compliance Assurance Monitoring (CAM)

40 CFR Part 64, *Compliance Assurance Monitoring*, is applicable to units at major sources if the unit has emission limits, a control device to meet the limits, and pre-control emissions greater than 100 tons/year for any pollutant. FPLE Wyman submitted a CAM plan for particulate matter emissions from Units #3 and #4. In the submittal, FPLE Wyman noted that the multiclones on Unit #3 could be considered inherent process equipment and not necessarily 'control devices'. The CAM proposals for the two units included monitoring pressure differential across the multiclones for Unit #3 and monitoring ESP secondary voltage and secondary current for Unit #4. The CAM requirements are incorporated in this renewal.

G. Stack Testing for Particulate Matter

The previous license had a requirement to stack test Units #1-#5 for particulate matter once every two years. Since the issuance of the initial Part 70 air emission license, the statutory requirement of 38 M.R.S.A. §589, sub-section 2 has been revised as follows: 'A person is not required to conduct stack tests for particulate matter on a source monitored by a continuous monitoring device for opacity as specified by 40 Code of Federal Regulations, Part 60, Appendix B, specification 1 or appropriate surrogate parameters as required by the commissioner more frequently than once every 5 years unless visible emissions, operating parameters or other information indicates the source may be operating out of compliance with any applicable emission standard or unless there are more stringent federal requirements. If visible emissions, operating parameters or other information indicates potential noncompliance with an air emission standard or if there are more stringent federal requirements, the Department may require additional stack tests.' The revised timeframe for PM stack testing is incorporated in this renewal for Units #1-#4 since these units are required to monitor for opacity. Unit #5 will continue to be required to stack test for PM once every other year.

H. Units #1 and #2

Units #1 and #2 were manufactured by Foster-Wheeler with a maximum design heat input of 630 MMBtu/hr each, firing #6 fuel oil. Each front wall fired steam generating unit has six burners that are capable of firing 4,200 gal/hr collectively. Units #1 and #2 may also fire specification waste oil. Units #1 and #2 are utilized for electric power generation (55 MW each). Emissions from the two units exhaust through separate breaching to a common flue designated as flue A within stack 1.

Units #1 and #2 were installed in 1957 and 1958, respectively, prior to the applicability dates in New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart D, *Standards of Performance for Fossil-fuel-fired Steam Generators for Which Construction Is Commenced After August 17, 1971* and 40 CFR Part 60, Subpart Da, *Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978*. There are no NSPS requirements for the units at this time.

Control Equipment

Units #1 and #2 are each equipped with low NO_x burners and a multiple centrifugal separator for the control of PM emissions.

Emission Limits and Streamlining

1. Particulate Matter (PM)
 - a. *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103 (as amended), §2(A)(1) contains a lb/MMBtu limit for PM (0.20 lb/MMBtu each).
 - b. BPT establishes the applicable PM lb/hr limit (126.0 lb/hr each).
No streamlining is required for the PM limits from Units #1 and #2.

2. Particulate Matter, 10 microns and under (PM₁₀)

BPT establishes the applicable PM₁₀ lb/hr (126.0 lb/hr each).

No streamlining is required for the PM₁₀ limit from Units #1 and #2.

3. Sulfur Dioxide (SO₂)
 - a. *Low Sulfur Fuel*, 06-096 CMR 106 (as amended), §2(A)(2) contains a fuel sulfur limit of 2.0% by weight.
 - b. 38 MRSA §603-A(1) and (2), contains a requirement that beginning January 1, 2018, #6 fuel oil fired shall not exceed a maximum sulfur content limit of 0.5% by weight.
 - c. BPT establishes the applicable SO₂ lb/hr limit (1360.8 lb/hr each, on a 3 hour block average based on 2.0% sulfur).

No streamlining is required for the SO₂ limit from Units #1 and #2.

4. Nitrogen Oxide (NO_x)
 - a. 06-096 CMR 138 (as amended) establishes the requirement for the operation of low NO_x burners and BPT establishes an applicable NO_x lb/MMBtu limit (0.45 lb/MMBtu each, on a 24 hour block average basis).
 - b. 06-096 CMR 145 (as amended) establishes an applicable NO_x lb/MMBtu limit (0.22 lb/MMBtu each on a 90 day rolling average) calculated by averaging the emissions from two units to meet the limit from each unit. This limit shall apply only if NO_x emissions from an individual unit is 100 tons/year or greater. FPLE Wyman has been limiting operation of Units #1 and #2 to below the 100 ton/yr threshold.
 - c. BPT establishes the applicable NO_x lb/hr limit (283.5 lb/hr each, on a 24-average basis).

No streamlining is required for the NO_x limit from Units #1 and #2.

5. Carbon Monoxide (CO)
BPT establishes the applicable CO lb/hr limit (315.0 lb/hr each).

No streamlining is required for the CO limit from Units #1 and #2.

6. Volatile Organic Compounds (VOC)
BPT establishes the applicable VOC lb/hr limit (63.0 lb/hr each).

No streamlining is required for the VOC limit from Units #1 and #2.

7. Opacity
Visible Emission Regulation, 06-096 CMR 101 (as amended), §2(B)(1)(a)(i) contains the applicable opacity standard for each unit of 30% recorded on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a three (3) hour period.

06-096 CMR 101 (as amended) also contains allowable combined stack emissions limitations in §2(B)(5), however, for streamlining purposes the opacity from Units #1 and #2 shall be the 30% limit from each unit based on the individual continuous opacity monitors on each unit's breach.

Periodic Monitoring

Periodic monitoring of Units #1 and #2 shall consist of recordkeeping which includes records of quantity, sulfur content and heat content through purchase receipts and fuel oil analysis of the bulk storage tanks. Stack testing for PM shall occur on each unit once every five years per 38 M.R.S.A. §589, sub-section 2.

Parameter Monitors, CEMS, and COMS

FPLE Wyman shall operate and maintain a NO_x CEMS (continuous emission monitoring system), with diluent, for each unit (#1 and #2) and an opacity COMS (continuous opacity monitoring system) on each unit's breaching. A fuel flow meter shall also be operated and maintained for each unit for SO₂ compliance.

I. Unit #3

Unit #3 was manufactured by Combustion Engineering with a maximum design heat input of 1190 MMBtu/hr firing #6, and is equipped with 12 tangential low excess air type burners capable of firing a total of 7,933 gal/hr. Unit #3 may also fire #2 fuel oil and specification waste oil. Unit #3 is utilized for electric power generation with a 120 MW nominal gross capacity and exhausts through two breachings to a flue designated as flue B within stack #1.

Construction began on Unit #3 in 1963 and it entered service in 1965, prior to the applicability dates in NSPS 40 CFR Part 60, Subparts D and Da (1971 and 1978, respectively). There are no NSPS requirements for Unit #3 at this time.

Control Equipment

Unit #3 has a combustion air system to minimize NO_x emissions (installation completed in April 2003) and multiple centrifugal cyclones for the control of PM emissions.

Emission Limits and Streamlining

1. Particulate Matter (PM)
 - a. 06-096 CMR 103 (as amended), §2(A)(1) contains a lb/MMBtu limit for PM (0.20 lb/MMBtu).
 - b. A-388-77-2-M (BART) contains a lb/MMBtu limit for PM (0.18 lb/MMBtu) that shall be effective after January 1, 2013.
 - c. BPT establishes the applicable PM lb/hr limit (238.0 lb/hr).

No streamlining is required for the PM limits from Unit #3.

2. Particulate Matter, 10 microns and under (PM₁₀)
BPT establishes the applicable PM₁₀ lb/hr (238.0 lb/hr).

No streamlining is required for the PM₁₀ limit from Unit #3.

3. Sulfur Dioxide (SO₂)
 - a. 06-096 CMR 106 (as amended), §2(A)(2) contains a fuel sulfur limit of 2.0% by weight.
 - b. A-388-77-2-M (BART) contains a fuel sulfur limit requirement of 0.7% by weight that becomes effective after January 1, 2013.
 - c. 38 MRS §603-A(1) and (2), contains a requirement that beginning January 1, 2018, #6 fuel oil fired shall not exceed a maximum sulfur content limit of 0.5% by weight.
 - d. BPT establishes the applicable SO₂ lb/hr limit (2570.4 lb/hr) on a 3 hour block average based on 2.0% sulfur.

No streamlining is required for the SO₂ limit from Unit #3.

4. Nitrogen Oxide (NO_x)
 - a. 06-096 CMR 138 (as amended) contains an applicable NO_x lb/MMBtu limit (0.30 lb/MMBtu on a 24 hour block average basis).

- b. 06-096 CMR 145 (as amended), A-388-70-C-A, and A-388-77-2-M (BART) establishes an applicable NO_x lb/MMBtu limit: 0.175 lb/MMBtu on a 90 operating-day rolling average for Unit #3 alone or 0.165 lb/MMBtu on a 90 operating-day rolling average if emissions from Units #3 and #4 are averaged.
- c. BPT establishes the applicable NO_x lb/hr limit (357.3 lb/hr on a 24 hour average basis).

No streamlining is required for the NO_x limit from Unit #3.

5. Carbon Monoxide (CO)
BPT establishes the applicable CO lb/hr limit (595.0 lb/hr).

No streamlining is required for the CO limit from Unit #3.

6. Volatile Organic Compounds (VOC)
BPT establishes the applicable VOC lb/hr limit (119.0 lb/hr).

No streamlining is required for the VOC limit from Unit #3.

7. Opacity
06-096 CMR 101 (as amended), §2(B)(1)(a)(ii) contains an applicable opacity standard for the unit of 20% recorded on a six (6) minute block average basis for 90% of all six (6) minute block averages on a quarterly basis. The remaining 10% of all six (6) minute block averages on a quarterly basis shall not exceed 30% opacity.

No streamlining is required for the opacity limit from Unit #3.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which includes documentation of quantity, sulfur content and heat content through purchase receipts and fuel oil analysis of the bulk storage tanks. Stack testing for PM shall occur on Unit #3 once every five years per 38 M.R.S.A. §589, sub-section 2.

Parameter Monitors, CEMS, and COMS

FPLE Wyman shall operate and maintain a NO_x CEMS (continuous emission monitoring system), with diluent, for Unit #3 on one of the breaching and an opacity COMS (continuous opacity monitoring system) on each of the breaching. A fuel flow meter shall also be operated and maintained for Unit #3 for SO₂ compliance.

Compliance Assurance Monitoring

CAM for Unit #3 shall be the following (beginning 180 days from the issuance date of this Part 70 Air License Renewal):

Condition	Multiclone Pressure Differential Indicator
1. Measurement Method	FPLE Wyman shall monitor pressure differential on the multiclones with differential pressure transducers.
2. Indicator Range	The target pressure differential across the multiclones shall be less than 6 inches of water on a 1-hour block average basis. During the PM stack testing required by the Part 70 renewal, the pressure differential shall be recorded. FPLE Wyman may reestablish the target level based on data obtained during stack tests. Any change of the target level shall be submitted in a letter to the Department for written approval. The current target level shall remain in effect until the Department's written approval is received. If the pressure differential exceeds the target level, it is considered an excursion and the problem must be identified and repairs completed as necessary. The excursion will be reported to the Department in FPLE Wyman's semiannual reports.
3. Data Representativeness	The differential pressure transducers are installed at the gas inlet and outlet ducts per manufacturer's design.
4. QA/QC	FPLE Wyman shall calibrate, maintain, and operate the instrumentation using procedures that take into account the manufacturer's specifications. The QA/QC procedures shall be submitted to the Department.
5. Monitoring Frequency	FPLE Wyman shall measure the multiclones pressure differential continuously.
6. Data Collection Procedure	FPLE Wyman's electronic data system shall calculate and record 1-hour block average pressure differentials. The system shall alarm when a 1 hour block average pressure differential exceeds the established target level. When an alarm goes off, the operators shall manually record the time, the problem diagnosis, and the corrective action taken (including the time the corrective action was completed).
7. Averaging Period	1-hour block averages.

J. Unit #4

Unit #4 was manufactured by Foster Wheeler with a maximum design heat input of 6290 MMBtu/hr, firing #6 and #2 fuel oil, and is equipped with 30 front wall burners capable of firing up to 41,333 gal/hr. Unit #4 may also fire specification and non-specification waste oil. Unit #4 is utilized for electric power generation with a 620 MW nominal gross capacity. Unit #4 exhausts through two breachings to a 425 foot single flue designated as stack #2

Construction on Unit #4 began in 1974 and it entered into service in 1975. Therefore, Unit #4 is subject to NSPS 40 CFR Part 60, Subpart D (applicability date of August 17, 1971), but not Subpart Da (applicability date of September 18, 1978).

Control Equipment

Unit #4 has a combustion air system (installation completed in April 2003) and flue gas recirculation to minimize NO_x emissions and an electrostatic precipitator (ESP) for control of PM emissions.

Emission Limits and Streamlining

1. Particulate Matter (PM)
 - a. 06-096 CMR 103 (as amended), §2(A)(1) contains a lb/MMBtu limit for PM (0.20 lb/MMBtu).
 - b. FPLE is subject to the particulate matter requirements of 40 CFR Part 60 Subpart D (60.42(a)(1)) which limits Unit #4 to 0.10 lb/MMBtu of particulate matter.
 - c. A-388-77-2-M (BART) contains a lb/MMBtu limit for PM (0.10 lb/MMBtu).
 - d. BPT establishes the applicable PM lb/hr limit (629.0 lb/hr).

FPLE Wyman accepts streamlining for the PM lb/MMBtu limit for Unit #4 and only the more stringent 40 CFR Part 60, Subpart D and BART requirement (0.10 lb/MMBtu) is included in this renewal. No streamlining is required for the PM lb/hr limit from Unit #4.

2. Particulate Matter, 10 microns and under (PM₁₀)
BPT establishes the applicable PM₁₀ lb/hr (629.0 lb/hr).

No streamlining is required for the PM₁₀ limit from Unit #4.

3. Sulfur Dioxide (SO₂)
 - a. 06-096 CMR 106 (as amended), §2(A)(2) contains a fuel sulfur limit of 2.0% by weight.
 - b. 40 CFR Part 60 Subpart D (60.43(a)(1)) limits sulfur dioxide emissions to 0.80 lb/MMBtu.
 - c. A-388-77-2-M (BART) contains a lb/MMBtu limit for SO₂ (0.80 lb/MMBtu).
 - d. 38 MRSA §603-A(1) and (2), contains a requirement that beginning January 1, 2018, #6 fuel oil fired shall not exceed a maximum sulfur content limit of 0.5% by weight.
 - e. BPT establishes the applicable SO₂ lb/hr limit (5032.0 lb/hr) on a 3 hour block average.

FPLE Wyman accepts streamlining for the SO₂ lb/MMBtu limit for Unit #4 and only the more stringent 40 CFR Part 60, Subpart D and BART requirement (0.80 lb/MMBtu) is included in this renewal. No streamlining is required for the SO₂ lb/hr limit from Unit #4.

4. Nitrogen Oxide (NO_x)
 - a. 06-096 CMR 138 (as amended) contains an applicable NO_x lb/MMBtu limit (0.30 lb/MMBtu) on a 24 hour block average basis.
 - b. 06-096 CMR 145 (as amended), A-388-70-C-A, and A-388-77-2-M establishes an applicable NO_x lb/MMBtu limit: 0.170 lb/MMBtu on a 90 operating-day rolling average for Unit #4 alone or 0.165 lb/MMBtu on a 90 operating-day rolling average if emissions from Units #3 and #4 are averaged.
 - c. BPT establishes the applicable NO_x lb/hr limit (1887.0 lb/hr).

No streamlining is required for the NO_x limit from Unit #4.

5. Carbon Monoxide (CO)
BPT establishes the applicable CO lb/hr limit (31,450.0 lb/hr).

No streamlining is required for the CO limit from Unit#4.

6. Volatile Organic Compounds (VOC)
BPT establishes the applicable VOC lb/hr limit (629.0 lb/hr).

No streamlining is required for the VOC limit from Unit #4.

7. Opacity
 - a. 06-096 CMR 101 (as amended), §2(B)(1)(a)(ii) contains an applicable opacity standard for the unit of 20% recorded on a six (6) minute block

average basis for 90% of all six (6) minute block averages on a quarterly basis. The remaining 10% of all six (6) minute block averages on a quarterly basis shall not exceed 30% opacity.

- b. 40 CFR Part 60, Subpart D (60.42(a)(2)) contains an applicable opacity standard of 20% on a six (6) minute average, except for one six (6) minute period per hour of not more than 27% opacity.

FPLE Wyman accepts streamlining for opacity for Unit #4 and only the more stringent 40 CFR Part 60, Subpart D requirement is included in this renewal.

8. Data Collection and Monitor Up-time
 - a. 40 CFR Part 60, Sections 60.45 and 60.46 are applicable to the COMs and CEMS.
 - b. 06-096 CMR 117 (as amended) is applicable to the COMs and CEMS.

FPLE Wyman accepts streamlining for data collection requirements and monitor up-time for operation of their COMs and CEMS, therefore the more stringent 06-096 CMR 117 (as amended) requirements are included in this renewal.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which includes records of quantity, sulfur content and heat content through purchase receipts and fuel oil analysis of the bulk storage tanks. Stack testing for PM shall occur on Unit #4 once every five years per 38 M.R.S.A. §589, sub-section 2.

Periodic monitoring for the ESP shall consist of recording maintenance, failures, and corrective actions in a log; and recording voltage and current meter reading in a log at least once per 24 hour operating period.

Parameter Monitors, CEMS, and COMS

FPLE Wyman shall operate and maintain a NO_x CEMS (continuous emission monitoring system), with diluent, for Unit #4 on one of the breaching and an opacity COMS (continuous opacity monitoring system) on each of the breaching. A fuel flow meter shall also be operated and maintained for Unit #4 for SO₂ compliance.

Compliance Assurance Monitoring

CAM for Unit #4 shall be the following (beginning 180 days from the issuance date of this Part 70 Air License Renewal):

Condition	Electrostatic Precipitator Total Secondary Power
1. Indicator	EPS secondary voltage and secondary current are measured for each field to determine the power to the ESP.
2. Measurement Method	FPLE Wyman shall monitor the EPA secondary voltage using a voltmeter and the ESP secondary current using an ammeter. The total power is calculated in the Precipitator Optimization System (POS).
3. Indicator Range	An excursion shall be defined as an ESP power input less than 700 kW. Excursions trigger an alarm (by the POS), an inspection, a corrective action, and a reporting requirement.
4. Data Representativeness	The voltage and current are measured using the instrumentation the manufacturer provided with the ESP. The POS collects and records the data, and is used to generate reports.
5. QA/QC	FPLE Wyman shall confirm the meters read zero when Boiler #4 is not operating.
6. Monitoring Frequency	FPLE Wyman shall measure the voltage and current continuously, and use the data to calculate the power input every 3 hours.
7. Data Collection Procedure	FPLE Wyman's POS shall calculate and record the average power input.
8. Averaging Period	3-hour block.

K. Unit #5

Unit #5 is a Cleaver Brooks boiler with a maximum design heat input of 72 MMBtu/hr, firing #6 and #2 fuel oil, and is equipped with a single low NO_x burner. Unit #5 may also fire specification waste oil. This unit is utilized for building heat and auxiliary steam needs. Unit #5 primarily exhausts through flue A within stack #1. However, under certain conditions (SO₂ emission rate less than 0.8 lb/MMBtu), Unit #5 may discharge to stack #5. A flapper shut off valve in the duct segregates the exhaust between stack #1 and stack #5. Stack #5 has a cap and mesh screening.

Unit #5 was installed in 1977, therefore Unit #5 is not subject to NSPS 40 CFR Part 60, Subpart Dc (applicability date of June 9, 1989).

Control Equipment

Unit #5 is each equipped with a low NO_x burner.

Emission Limits and Streamlining

1. Particulate Matter (PM)
 - a. *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103 (as amended), §2(A)(1) contains a lb/MMBtu limit for PM (0.20 lb/MMBtu).
 - b. BPT establishes the applicable PM lb/hr limit (14.4 lb/hr).

No streamlining is required for the PM limits from Unit #5.

2. Particulate Matter, 10 microns and under (PM₁₀)
BPT establishes the applicable PM₁₀ lb/hr (14.4 lb/hr).

No streamlining is required for the PM₁₀ limit from Unit #5.

3. Sulfur Dioxide (SO₂)
 - a. *Low Sulfur Fuel*, 06-096 CMR 106 (as amended), §2(A)(2) contains a fuel sulfur limit of 2.0% by weight.
 - b. 38 MRSA §603-A(1) and (2), contains a requirement that beginning January 1, 2018, #6 fuel oil fired shall not exceed a maximum sulfur content limit of 0.5% by weight.
 - c. BPT establishes the applicable SO₂ lb/hr limit (155.5 lb/hr based on 2.0% sulfur).

No streamlining is required for the SO₂ limit from Unit #5.

4. Nitrogen Oxide (NO_x)
 - a. 06-096 CMR 138 (as amended) establishes the requirement for the operation of low NO_x burners and BPT establishes an applicable NO_x lb/MMBtu limit (0.35 lb/MMBtu).
 - b. BPT establishes the applicable NO_x lb/hr limit (25.2 lb/hr).

No streamlining is required for the NO_x limit from Unit #5.

5. Carbon Monoxide (CO)
BPT establishes the applicable CO lb/hr limit (36.0 lb/hr).

No streamlining is required for the CO limit from Unit #5.

6. Volatile Organic Compounds (VOC)
BPT establishes the applicable VOC lb/hr limit (7.2 lb/hr).

No streamlining is required for the VOC limit from Unit #5.

7. Opacity

Visible Emission Regulation, 06-096 CMR 101 (as amended), §2(B)(1)(a)(i) contains the applicable opacity standard of 30% recorded on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a three (3) hour period.

Periodic Monitoring

Periodic monitoring of Unit #5 shall consist of recordkeeping which includes records of fuel quantity, sulfur content and heat content through purchase receipts and fuel oil analysis of the bulk storage tanks. Stack testing for PM shall occur on Unit #5 once every two years since an opacity monitor is not required.

L. Emergency Generator

The emergency generator is a Consolidated Power, Inc. unit with a maximum design heat input of 5.25 MMBtu/hr, firing #2 fuel oil and installed in 1975. The generator is utilized to provide back-up power for facility operations.

The emergency generator is limited to firing #2 fuel/diesel oil with a maximum sulfur content of 0.5% and operating 925 hours (firing 34,500 gallons) annually on a 12 month rolling total basis.

Emission Limits and Streamlining

1. Particulate Matter (PM)

a. *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103 (as amended), §2(A)(1) contains a lb/MMBtu limit for PM (0.20 lb/MMBtu).

b. BPT establishes the applicable PM lb/hr limit (1.1 lb/hr).

No streamlining is required for the PM limits from the generator.

2. Particulate Matter, 10 microns and under (PM₁₀)

BPT establishes the applicable PM₁₀ lb/hr (1.1 lb/hr).

No streamlining is required for the PM₁₀ limit from the generator.

3. Sulfur Dioxide (SO₂)
 - a. BPT establishes the #2 fuel sulfur limit of 0.5% by weight.
 - b. 38 MRSA §603-A(2)(A)(3), contains a requirement that beginning January 1, 2016, #2 fuel oil fired shall not exceed a maximum sulfur content limit of 0.005% by weight (50 ppm), and beginning January 1, 2018, #2 fuel oil fired shall not exceed a maximum sulfur content limit of 0.0015% by weight (15 ppm).
 - c. BPT establishes the applicable SO₂ lb/hr limit (2.6 lb/hr based on 0.5% sulfur).

No streamlining is required for the SO₂ limit from the generator.

4. Nitrogen Oxide (NO_x)

BPT establishes the applicable NO_x lb/hr limit (16.8 lb/hr), based on the AP-42 factor of 3.2 lb/MMBtu from Table 3.4-1 dated 10/96.

No streamlining is required for the NO_x limit from the generator.

5. Carbon Monoxide (CO)

BPT establishes the applicable CO lb/hr limit (5.0 lb/hr), based on the AP-42 factor of 0.95 lb/MMBtu from Table 3.4-1 dated 10/96.

No streamlining is required for the CO limit from the generator.

6. Volatile Organic Compounds (VOC)

BPT establishes the applicable VOC lb/hr limit (0.5 lb/hr), based on the AP-42 factor of 0.09 lb/MMBtu from Table 3.4-1 dated 10/96.

No streamlining is required for the VOC limit from the generator.

7. Opacity

Visible Emission Regulation, 06-096 CMR 101 (as amended), §2(B)(1)(a)(i) contains the applicable opacity standard of 30% recorded on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a three (3) hour period.

Periodic Monitoring

Periodic monitoring of the emergency generator shall consist of recordkeeping which includes fuel records of quantity, sulfur content and heat content through

purchase receipts and fuel oil analysis of the bulk storage tanks. Records shall also be maintained on the hours of operation.

Federal Requirements

The generator is applicable to 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engine*. A unit with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions is considered existing if construction or reconstruction was commenced before December 19, 2002. To be considered an emergency unit, the following emergency definition must be met:

Emergency Definition

Emergency stationary reciprocating internal combustion engine (RICE) is defined in 40 CFR Part 63, Subpart ZZZZ as any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc. Stationary RICE used for peak shaving are not considered emergency stationary RICE. Stationary RICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under §63.6640(f).

§63.6640(f) limits maintenance checks and readiness testing of the units to 100 hours per year. Emergency stationary RICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must

be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power.

The generator's operational status meets the emergency definition and the unit's age is prior to the regulation's new source date; therefore, the unit is considered an existing, emergency generator. §63.6590 (b)(3)(iii) states that an existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions does not have to meet the requirements of 40 CFR Part 63, Subpart ZZZZ or Subpart A, including initial notification requirements. At this time, no additional federal requirements are included in this license for the emergency generator.

M. Facility Emissions

1. FPLE Wyman shall be restricted to the following annual emissions, based on a 12 month rolling total. The tons per year limits were calculated based on Units 1-5 operating 8760 hrs/year and the generator operating 925 hrs/year.

Total Licensed Annual Emission for the Facility
Tons/year
 (used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Units 1-5 total	4964.29	4964.29	45,900.3	12,422.56	143,274.18	3859.66
Generator #1	0.49	0.49	1.22	7.77	2.31	0.22
Total TPY	4965	4965	45,902	12,430	143,276	3860

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011 through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans*, 40 CFR Part 52, Subpart A, §52.21 Prevention of Significant Deterioration of Air Quality rule. "Greenhouse gases" as defined in 06-096 CMR 100 (as amended) means the aggregate group of the following gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Greenhouse gases (GHG) for

purposes of licensing are calculated and reported as carbon dioxide equivalents (CO₂ e).

Based on the facility's potential fuel use, the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, FPLE Wyman is above the major source threshold of 100,000 tons of CO₂ e per year.

III. AIR QUALITY ANALYSIS

FPLE Wyman previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards as stated in license A-388-71-A-R (December 27, 1995) and in amendment A-388-71-D-M (February 16, 1996). An additional ambient air quality analysis is not required for this Part 70 License Renewal.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this sources:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-388-70-E-R pursuant to 06-096 CMR 140 and the preconstruction permitting requirements of 06-096 CMR 115 and subject to the standard and special conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to FPLE Wyman pursuant to the Department's preconstruction permitting requirements in 06-096 CMR 108 or 115 have been incorporated into this Part 70 license, except for such conditions that MEDEP has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such the conditions in this license supercede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in 06-096 CMR 115 for making such changes and pursuant to the applicable requirements in 06-096 CMR 140.

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD STATEMENTS

- (1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both; [06-096 CMR 140]
- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege; [06-096 CMR 140]
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 CMR 140]
- (4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license; [06-096 CMR 140]
- (5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 140]
- (6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:
 - A. Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or

- B. The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated August 28, 1996.

	SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
1.	Units #1, #2, and #3	40 CFR Part 60 Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators	Commenced construction prior to August 17, 1971
2.	Unit #5	40 CFR Part 60 Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators	Unit does not trigger size threshold of 250 MMBtu/hr
3.	Unit #6	Chapter 138	NO _x RACT	Exempt in accordance with section 1(B)(1)
4.	Units #1, #2, #3, #4	40 CFR Part 60 Subpart Da	Standards of Performance for Fossil-Fuel-Fired Steam Generators	Commenced construction prior to September 18, 1978
5.	Units #5 and #6	40 CRF Part 72	Acid Rain Program	Not affected units
6.	Unit #5	Chapter 145	NO _x Control Program	Exempt since smaller than 250 MMBtu/hr

[06-096 CMR 140]

- (7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:
- A. Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is

later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to 06-096 CMR 140;

- B. Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;
- C. The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or
- D. The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

[06-096 CMR 140]

- (8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license. [06-096 CMR 140]

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (38 M.R.S.A. §347-C);
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140; [06-096 CMR 140]
- (3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive

dust, and shall submit a description of the program to the Department upon request; [06-096 CMR 140]

Enforceable by State-only

- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 M.R.S.A. §353.
- (5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions; [06-096 CMR 140]
Enforceable by State-only
- (6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license; [06-096 CMR 140]
- (7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license. [06-096 CMR 140]
- (8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing under circumstances representative of the facility's normal process and operating conditions:
 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;
 2. to demonstrate compliance with the applicable emission standards; or
 3. pursuant to any other requirement of this license to perform stack testing.

- B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. submit a written report to the Department within thirty (30) days from date of test completion.
[06-096 CMR 140]
Enforceable by State-only
- (9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:
- A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
[06-096 CMR 140]
Enforceable by State-only
- (10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.
- A. The licensee shall notify the Commissioner within 48 hours of a violation of any emission standard and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the

probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

- B. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 M.R.S.A. § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

- C. All other deviations shall be reported to the Department in the facility's semiannual report.

[06-096 CMR 140]

- (11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 140]
- (12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. [06-096 CMR 140]
- (13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:
- (a) The identification of each term or condition of the Part 70 license that is the basis of the certification;
 - (b) The compliance status;
 - (c) Whether compliance was continuous or intermittent;

- (d) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
- (e) Such other facts as the Department may require to determine the compliance status of the source;
[06-096 CMR 140]

SPECIAL CONDITIONS

(14) **Units #1 and #2 – 630 MMBtu/hr each**

A. Heat Input and Allowable Fuels

- 1. Units #1 and #2 may fire #6 fuel oil and specification waste oil (as defined by the Bureau of Remediation and Waste Management). [06-096 CMR 140, BPT and 06-096 CMR 860]
- 2. FPLE Wyman shall maintain monthly records of the quantity of fuel consumed and the sulfur content of the fuel. [06-096 CMR 140, BPT]
- 3. Units #1 and #2 shall be limited to a maximum heat input of 630 MMBtu/hr each (based on a three (3) hour block average), firing #6 fuel oil. Records shall be maintained showing compliance with this limit, including records of fuel flow into each unit and the heat content of the fuel. [06-096 CMR 140, BPT] **Enforceable by State Only**

B. Fuel Sulfur Content

- 1. Until December 31, 2017, the sulfur content of the #6 fuel oil fired shall not exceed 2.0% by weight. [06-096 CMR 106]
- 2. Beginning January 1, 2018, the #6 fuel oil fired shall not exceed a maximum sulfur content limit of 0.5% by weight. [38 MRSA §603-A(1) and (2)]
- 3. Sulfur content compliance shall be demonstrated by fuel oil analysis of the bulk fuel oil storage tanks if the fuel is blended on-site or by fuel delivery receipts if the maximum sulfur content delivered is at or below the sulfur content limits listed above. [06-096 CMR 140, BPT]

C. Emissions from Units #1 and #2 shall each not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	06-096 CMR 103, Section 2(A)(1)	-
NO _x	0.45 * (24-hr block avg)	06-096 CMR 138, NO _x RACT	-

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	126.0	06-096 CMR 140, BPT	Enforceable by State-only
PM ₁₀	126.0	06-096 CMR 140, BPT	Enforceable by State-only
SO ₂ (2.0%S)	1,360.8 (3-hr block avg)	06-096 CMR 140, BPT	Enforceable by State-only
NO _x	283.5 (24-hr block avg)	06-096 CMR 140, BPT	Enforceable by State-only
CO	315.0	06-096 CMR 140, BPT	Enforceable by State-only
VOC	63.0	06-096 CMR 140, BPT	Enforceable by State-only

* This limit is both the federally enforceable and state enforceable limit unless the facility is subject to Condition (14)D below. If subject to Condition (14)D, the 0.45 lb/MMBtu limit remains the federally enforceable limit and the limit in Condition 14(D) becomes the state enforceable limit.

D. Additional NO_x Control

The following only applies to a unit when the total tons per year of NO_x from the unit is equal to or greater than the major source threshold of 100 tons per year, on a 12 month calendar year basis. The demonstration of annual emissions from the units shall be determined by actual NO_x CEMs data for each unit for the 12 month calendar year. [06-096 CMR 145, Section 3(E) and A-388-70-D-A, December 9, 2005] **Enforceable by State-only**

1. FPLE Wyman shall meet the following emissions limitations from each unit or FPLE Wyman may average the total emissions from Units #1 and #2 to calculate the emissions from each unit.

Pollutant	Lb/MMBtu	Origin and Authority	Enforceability
NO _x	0.22 (90 day rolling avg)	06-096 CMR 145 and A-388-71-A-I (Oct. 2, 2002)	Enforceable by State-only

2. FPLE Wyman shall install, operate, and maintain the proposed NO_x control technology (optimization/combustion controls) which meet the requirements of 06-096 CMR 145 on Units #1 and #2. [06-096 CMR 145 and A-388-71-G-M, June 6, 2002]

- E. Visible emissions from Units #1 and #2 shall each not exceed 30% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in any 3-hour block period based on the reading from the COMs located in each breaching. The opacity limit shall not apply during a total of 4 hours during the period of cold startup or shutdown provided

records are available to demonstrate that the unit(s) was being operated to minimize emissions. [06-096 CMR 140, BPT]

F. FPLE Wyman shall operate low NO_x burners on Units #1 and #2. [06-096 CMR 138]

G. FPLE Wyman shall control particulate matter emissions from Units #1 and #2 by use of multiple centrifugal cyclones and shall maintain a log of all maintenance performed on each cyclone, as well as a log documenting the nature of all failures and the corrective actions taken. [06-096 CMR 140, BPT]

H. Monitoring and Compliance

1. Opacity

- a. FPLE Wyman shall operate a continuous opacity monitor (COM) on each breaching to demonstrate compliance with the opacity limit. [40 CFR Part 75.10(a)(4) and 06-096 CMR 117]
- b. Each COM shall be maintained and operated in accordance with 06-096 CMR 117, 40 CFR Part 75 Appendices A and B, and the Special Conditions of this license. [06-096 CMR 117 and 40 CFR Part 75]

2. PM

Compliance with the PM emission limit shall be demonstrated by stack testing in accordance with 40 CFR Part 60, Appendix A, Method 5 once every five (5) years from the most recent PM stack test. [38 M.R.S.A. §589, sub-section 2]

3. SO₂

FPLE Wyman shall operate a fuel flow meter on each unit to demonstrate compliance with the SO₂ lb/hr emission limits in accordance with 40 CFR Part 75, Appendices D and F. [40 CFR Part 75, Appendices D and F]

4. NO_x

- a. FPLE Wyman shall operate a continuous emission monitoring system (including a diluent gas monitor) (CEMS) on each breaching to demonstrate compliance with the NO_x lb/MMBtu emission rate. [40 CFR Part 75.10(a)(2) and (3) and 06-096 CMR 117]
- b. Each CEM shall be maintained and operated in accordance with 06-096 CMR 117, 40 CFR Part 75 Appendices A and B, and the Special Conditions of this license. [06-09 CMR 117 and 40 CFR Part 75]
- c. During the periods of time when Units #1 and #2 are below 120 MMBtu/hr heat input, the lb/MMBtu value that is monitored shall not be included in determining the 24-hour block arithmetic average NO_x emission rate (lb/MMBtu only). [06-096 CMR 138 and 06-096 CMR 140, BPT]

5. CO and VOC
Compliance with the CO and VOC emission limits shall be demonstrated by the appropriate stack test methods conducted upon request of the Department. [06-096 CMR 140, BPT]
6. Fuel Flow Meters
 - a. FPLE Wyman shall operate a fuel flow monitor system for each unit which continuously monitors and records the rate of fuel oil fired into and combusted within each unit.
 - b. The fuel flow monitor system shall be maintained and operated in accordance with 40 CFR Part 75, Appendices A and B, and the Special Conditions of this license.
[06-096 CMR 140, BPT and 40 CFR Part 75]

(15) **Unit #3 – 1190 MMBtu/hr**

A. Heat Input and Allowable Fuels

1. Unit #3 may fire #6 fuel oil, #2 fuel oil, and specification waste oil (as defined by the Bureau of Remediation and Waste Management). [06-096 CMR 140, BPT and 06-096 CMR 860]
2. FPLE Wyman shall maintain monthly records of the quantity of fuel consumed and the sulfur content of the fuel. [06-096 CMR 140, BPT]
3. Unit #3 shall be limited to a maximum heat input of 1190 MMBtu/hr (based on a three (3) hour block average). Records shall be maintained showing compliance with this limit, including records of fuel flow into the unit and the heat content of the fuel. [06-096 CMR 140, BPT]
Enforceable by State Only

B. Fuel Sulfur Content

1. #6 fuel oil
 - a. Until December 31, 2012, the sulfur content of the #6 fuel oil fired shall not exceed 2.0% by weight. [06-096 CMR 106]
 - b. From January 1, 2013 until December 31, 2017, the sulfur content of the #6 fuel oil fired shall not exceed 0.7% by weight. [A-388-77-2-M, November 2, 2010, BART]
 - c. Beginning January 1, 2018, the #6 fuel oil fired shall not exceed a maximum sulfur content limit of 0.5% by weight. [38 MRSA §603-A(1) and (2)]
2. #2 fuel oil
 - a. Until December 31, 2015, the #2 fuel oil fired shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). [06-096 CMR 140, BPT]

- b. Beginning January 1, 2016, the #2 fuel oil fired shall not exceed a maximum sulfur content limit of 0.005% by weight (50 ppm) [38 MRSA §603-A(2)(A)(3)], and
 - c. Beginning January 1, 2018, #2 fuel oil fired shall not exceed a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]
3. Sulfur Content Compliance
 Sulfur content compliance shall be demonstrated by fuel oil analysis of the bulk fuel oil storage tanks if the fuel is blended on-site or by fuel delivery receipts if the maximum sulfur content delivered is at or below the sulfur content limits listed above. [06-096 CMR 140, BPT]

C. Unit #3 Emission Limits

- 1. Emissions from Unit #3 shall not exceed the following limits:

Pollutant	Lb/MMBtu	Origin and Authority	Enforceability
PM	0.20 (until Dec. 31, 2012)	06-096 CMR 103, Section 2(A)(1)	-
PM	0.18 (Jan. 1, 2013 and thereafter)	A-388-77-2-M (Nov. 2, 2010, BART)	-
NO _x	0.30 (24-hr block avg)	06-096 CMR 138, NO _x RACT	-

- 2. Emissions from Unit #3 shall meet the following, either from Unit #3 alone or by averaging the emissions from Units #3 and #4 to meet the emission limit from each unit:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
NO _x Unit #3 alone	0.175 (rolling 90 operating-day avg)	06-096 CMR 145 and A-388-77-2-M (Nov. 2, 2010, BART)	-
NO _x each unit when Unit #3 and Unit #4 are averaged	0.165 (rolling 90 operating-day avg)	06-096 CMR 145 and A-388-77-2-M (Nov. 2, 2010, BART)	-

3. Emissions from Unit #3 shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	238.0	06-096 CMR 140, BPT	Enforceable by State-only
PM ₁₀	238.0	06-096 CMR 140, BPT	Enforceable by State-only
SO ₂ (2.0%S)	2,570.4 (3-hr block avg)	06-096 CMR 140, BPT	Enforceable by State-only
NO _x	357.3 (24-hr block avg)	06-096 CMR 140, BPT	Enforceable by State-only
CO	595.0	06-096 CMR 140, BPT	Enforceable by State-only
VOC	119.0	06-096 CMR 140, BPT	Enforceable by State-only

D. Visible emissions from Unit #3 shall not exceed 20% opacity on a six (6) minute block average basis for 90% of the quarterly six minute averages. The remaining six minute averages shall not exceed 30% opacity. The opacity limit shall not apply during a total of 4 hours during the period of cold startup or shutdown provided records are available to demonstrate that the unit was being operated to minimize emissions. [06-096 CMR 140, BPT]

E. FPLE Wyman shall operate NO_x emission control technology to meet the NO_x emission limit for this unit. [06-096 CMR 138 and 145]

F. FPLE Wyman shall control particulate matter emissions from Unit #3 by use of multiple centrifugal cyclones and shall maintain a log of all maintenance performed on each cyclone, as well as a log documenting the nature of all failures and corrective actions taken. [06-096 CMR 140, BPT]

G. Monitoring and Compliance

1. Opacity

- a. FPLE Wyman shall operate a continuous opacity monitor (COM) on each breaching of Unit #3 to demonstrate compliance with the opacity limit. [40 CFR Part 75.10(a)(4) and 06-096 CMR 117]
- b. Each COM shall be maintained and operated in accordance with 06-096 CMR 117, 40 CFR Part 75 Appendices A and B, and the Special Conditions of this license. [06-096 CMR 117 and 40 CFR Part 75]
- c. FPLE Wyman shall demonstrate compliance with the opacity limit using COMS data and a straight numerical average between breachings #3A and #3B. [06-096 CMR 117 and 06-096 CMR 140, BPT]

2. PM

Compliance with the PM emission limit shall be demonstrated by stack testing in accordance with 40 CFR Part 60, Appendix A, Method 5 once

every five (5) years from the most recent PM stack test. [38 M.R.S.A. §589, sub-section 2]

3. SO₂
FPLE Wyman shall operate a fuel flow meter to demonstrate compliance with the SO₂ lb/hr emission limit in accordance with 40 CFR Part 75, Appendices D and F. [40 CFR Part 75 Appendices D and F]
4. NO_x
 - a. FPLE Wyman shall operate a continuous emission monitoring system (including a diluent gas monitor) (CEMS) on one of the Unit #3 breachings to demonstrate compliance with the NO_x lb/MMBtu emission rate. [40 CFR Part 75.10(a)(2) and (3)] [06-096 CMR 117]
 - b. The CEM shall be maintained and operated in accordance with 06-096 CMR 117, 40 CFR Part 75 Appendices A and B, and the Special Conditions of this license. [06-096 CMR 117 and 40 CFR Part 75]
 - c. During the periods of time when Unit #3 is below 226 MMBtu/hr heat input, the lb/MMBtu value that is monitored shall not be included in determining the 24-hour block arithmetic average NO_x emission rate (lb/MMBtu only). [06-096 CMR 138 and 06-096 CMR 140, BPT]
5. CO and VOC
Compliance with the CO and VOC emission limits shall be demonstrated by the appropriate stack test methods conducted upon request of the Department. [06-096 CMR 140, BPT]
6. Fuel Flow Meter
 - a. FPLE Wyman shall operate a fuel flow monitor system which continuously monitors and records the rate of fuel oil fired into and combusted within the unit.
 - b. The fuel flow monitor system shall be maintained and operated in accordance with 40 CFR Part 75 Appendices A and B and the Special Conditions of this license.
[06-096 CMR 140, BPT and 40 CFR Part 75]

H. Compliance Assurance Monitoring

1. FPLE shall meet the following CAM requirements for Unit #3 (beginning 180 days from the issuance date of this Part 70 Air License Renewal):

Condition	Multiclone Pressure Differential Indicator
Measurement method	FPLE Wyman shall monitor pressure differential on the multiclones with differential pressure transducers.
Indicator Range	The target pressure differential across the multiclones shall be less than 6 inches of water on a 1-hour block average basis. During the PM stack testing required by the Part 70 renewal, the pressure differential shall be recorded. FPLE Wyman may reestablish the target level based on data obtained during stack tests. Any change of the target level shall be submitted in a letter to the Department for written approval. The current target level shall remain in effect until the Department's written approval is received. If the pressure differential exceeds the target level, it is considered an excursion and the problem must be identified and repairs completed as necessary. The excursion will be reported to the Department in FPLE Wyman's semiannual reports.
Data Representativeness	The differential pressure transducers shall remain installed at the gas inlet and outlet ducts per manufacturer's design.
QA/QC	FPLE Wyman shall calibrate, maintain, and operate the instrumentation using procedures that take into account the manufacturer's specifications. The QA/QC procedures shall be submitted to the Department.
Monitoring Frequency	FPLE Wyman shall measure the multiclones pressure differential continuously.
Data Collection Procedure	FPLE Wyman's electronic data system shall calculate and record 1-hour block average pressure differentials. The system shall alarm when a 1 hour block average pressure differential exceeds the established target level. When an alarm goes off, the operators shall manually record the time, the problem diagnosis, and the corrective action taken (including the time the corrective action was completed).
Averaging Period	1-hour block averages.

2. Any excursion shall be reported on semiannual reports. If excursions occur, FPLE Wyman must also certify intermittent compliance with the emission limits for the control device monitored on their annual compliance certification. [40 CFR 64]
3. FPLE Wyman shall restore normal operation of the control equipment as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [40 CFR 64.7.d]
4. Prior to making any changes to the approved CAM plan, FPLE Wyman shall notify the Department and, if necessary, submit a proposed modification to this license to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [40 CFR 64.7(e)] Any change of the target level shall be submitted in a letter to the Department for written approval, as stated in the table above.

(16) **Unit #4** – 6290 MMBtu/hr

A. Heat Input and Allowable Fuels

1. Unit #4 may fire #6 fuel oil, #2 fuel oil, and specification and non-specification waste oil (as defined by the Bureau of Remediation and Waste Management). [06-096 CMR 140, BPT and 06-096 CMR 860]
2. FPLE Wyman shall maintain monthly records of the quantity of fuel consumed and the sulfur content of the fuel. [06-096 CMR 140, BPT]
3. Unit #4 shall be limited to a maximum heat input of 6290 MMBtu/hr (based on a three (3) hour block average). Records shall be maintained showing compliance with this limit, including records of fuel flow into the unit and the heat content of the fuel. [06-096 CMR 140, BPT]

Enforceable by State Only

B. Fuel Sulfur Content

1. #6 fuel oil
 - a. Until December 31, 2017, the sulfur content of the #6 fuel oil fired shall not exceed 0.7% by weight to meet the 40 CFR Part 60, Subpart D emission limit. [40 CFR Part 60, §60.43(a)(1)]
 - b. Beginning January 1, 2018, the #6 fuel oil fired shall not exceed a maximum sulfur content limit of 0.5% by weight. [38 MRSA §603-A(1) and (2)]
2. #2 fuel oil
 - a. Until December 31, 2015, the #2 fuel oil fired shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). [06-096 CMR 140, BPT]

- b. Beginning January 1, 2016, the #2 fuel oil fired shall not exceed a maximum sulfur content limit of 0.005% by weight (50 ppm) [38 MRSa §603-A(2)(A)(3)], and
 - c. Beginning January 1, 2018, the #2 fuel oil fired shall not exceed a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSa §603-A(2)(A)(3)]
3. Sulfur Content Compliance
 Sulfur content compliance shall be demonstrated by fuel oil analysis of the bulk fuel oil storage tanks if the fuel is blended on-site or by fuel delivery receipts if the maximum sulfur content delivered is at or below the sulfur content limits listed above. [06-096 CMR 140, BPT]

C. Unit #4 Emission Limits

- 1. Emissions from Unit #4 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.10	40 CFR Part 60, §60.42(a)(1) and A-388-77-2-M (Nov. 2, 2010, BART)	-
SO ₂	0.80 (3-hr rolling total)	40 CFR Part 60, §60.43(a)(1)	-
NO _x	0.30 (3-hr rolling)	40 CFR Part 60, §60.44(a)(2)	-

- 2. Emissions from Unit #4 shall meet the following, either from Unit #3 alone or by averaging the emissions from Units #3 and #4 to meet the emission limit from each unit:

Pollutant	Lb/MMBtu	Origin and Authority	Enforceability
NO _x Unit #4 alone	0.170 (rolling 90 operating-day avg)	06-096 CMR 145 and A-388-77-2-M (Nov. 2, 2010, BART)	-
NO _x Unit #3 and Unit #4 averaged	0.165 (rolling 90 operating-day rolling avg)	06-096 CMR 145 and A-388-77-2-M (Nov. 2, 2010, BART)	-

3. Emissions from Unit #4 shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	629.0	06-096 CMR 140, BPT	Enforceable by State-only
PM ₁₀	629.0	06-096 CMR 140, BPT	Enforceable by State-only
SO ₂	5,032.0 (3-hr block avg)	06-096 CMR 140, BPT	Enforceable by State-only
NO _x	1,887.0 (24-hr block avg)	06-096 CMR 140, BPT	Enforceable by State-only
CO	31,450.0	06-096 CMR 140, BPT	Enforceable by State-only
VOC	629.0	06-096 CMR 140, BPT	Enforceable by State-only

- D. Visible emissions from Unit #4 shall not exceed 20% opacity on a six (6) minute block average basis, except for one (1) six (6) minute period per hour of not more than 27% opacity. [40 CFR Part 60, Subpart D, 60.42 (a)(2)] The opacity limit shall not apply during a total of 4 hours during the period of cold startup or shutdown provided records are available to demonstrate that the unit(s) was being operated to minimize emissions. [40 CFR Part 60.11(c)]
- E. FPLE Wyman shall operate NO_x emission control technology to meet the NO_x emission limit for this unit. [06-096 CMR 138 and 06-096 CMR 145]
- F. FPLE Wyman shall control particulate matter emissions from Unit #4 by use of electrostatic precipitators (ESP). This system is controlled automatically for maximum optimization. FPLE Wyman shall maintain the following: [06-096 CMR 140, BPT]
1. a log of all maintenance performed on the ESP, as well as logging the nature of all failures and corrective actions taken, and
 2. a log of the voltage and current meter readings as recorded at least once per 24 hour operating period.
- G. FPLE Wyman shall operate, at a minimum, the number of ESP chambers and number of fields per chamber that operated during the most recent demonstration of compliance with the licensed particulate emission limits. [06-096 CMR 140, BPT]
- H. Monitoring and Compliance
1. Opacity
 - a. FPLE Wyman shall operate a continuous opacity monitor (COM) to demonstrate compliance with the opacity limit. [40 CFR Part 75.10(a)(4)] [06-096 CMR 117]

- b. The COM shall be maintained and operated in accordance with 06-096 CMR 117, 40 CFR Part 75 Appendices A and B, and the Special Conditions of this license. [06-096 CMR 117 and 40 CFR Part 75]
 2. PM
Compliance with the PM emission limit shall be demonstrated by stack testing in accordance with 40 CFR Part 60, Appendix A, Method 5 once every five (5) years from the most recent PM stack test. [38 M.R.S.A. §589, sub-section 2]
 3. SO₂
FPLE Wyman shall operate a fuel flow meter to demonstrate compliance with the SO₂ lb/hr emission limits. [40 CFR Part 75, Appendices D and F]
 4. NO_x
 - a. FPLE Wyman shall operate a continuous emission monitoring system (including a diluent gas monitor) (CEMS) to demonstrate compliance with the NO_x lb/MMBtu emission rate. [40 CFR Part 75.10(a)(2) and (3)] [06-096 CMR 117]
 - b. The CEM shall be maintained and operated in accordance with Chapter 117, 40 CFR Part 75 Appendices A and B, and the Special Conditions of this license. [06-096 CMR 117 and 40 CFR Part 75]
 5. CO and VOC
Compliance with the CO and VOC emission limits shall be demonstrated by the appropriate stack test methods conducted upon request of the Department. [06-096 CMR 140, BPT]
 6. Fuel Flow Meter
 - a. FPLE Wyman shall operate a fuel flow monitor system which continuously monitors and records the rate of fuel oil fired into and combusted within the unit.
 - b. The fuel flow monitor system shall be maintained and operated in accordance with 40 CFR Part 75 Appendices A and B, and the Special Conditions of this license.
[06-096 CMR 140, BPT and 40 CFR Part 75]
- I. Compliance Assurance Monitoring
 1. FPLE shall meet the following CAM requirements for Unit #4 (beginning 180 days from the issuance date of this Part 70 Air License Renewal):

Condition	Electrostatic Precipitator Total Secondary Power
a. Indicator	EPS secondary voltage and secondary current are measured for each field to determine the power to the ESP.
b. Measurement Method	FPLE Wyman shall monitor the EPA secondary voltage using a voltmeter and the ESP secondary current using an ammeter. The total power is calculated in the Precipitator Optimization System (POS).
c. Indicator Range	An excursion shall be defined as an ESP power input less than 700 kW. Excursions trigger an alarm (by the POS), an inspection, a corrective action, and a reporting requirement.
d. Data Representativeness	The voltage and current are measured using the instrumentation the manufacturer provided with the ESP. The POS collects and records the data, and is used to generate reports.
e. QA/QC	FPLE Wyman shall confirm the meters read zero when Boiler #4 is not operating.
f. Monitoring Frequency	FPLE Wyman shall measure the voltage and current continuously, and use the data to calculate the power input every 3 hours.
g. Data Collection Procedure	FPLE Wyman's POS shall calculate and record the average power input.
h. Averaging Period	3-hour block.

2. Any excursion shall be reported on semiannual reports. If excursions occur, FPLE Wyman must also certify intermittent compliance with the emission limits for the control device monitored on their annual compliance certification. [40 CFR 64]
3. FPLE Wyman shall restore normal operation of the control equipment as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [40 CFR 64.7.d]
4. Prior to making any changes to the approved CAM plan, FPLE Wyman shall notify the Department and, if necessary, submit a proposed modification to this license to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [40 CFR 64.7(e)] Any change of the target level shall be submitted in a letter to the Department for written approval, as stated in the table above.

(17) **COM and CEM Requirements**

- A. All CEMS and COMS required by this license shall meet the sampling and performance criteria specified in 40 CFR Part 51 Appendix P, and shall be operated in accordance with the appropriate requirements of 40 CFR Part 60 Appendix F, and 06-096 CMR 117, including.
 1. Conducting Relative Accuracy Testing (RATA) and/or Performance Audits in accordance with 06-096 CMR 117. FPLE Wyman shall verbally notify the Department ten (10) calendar days prior to conducting the CEM and COM audits. This notification shall also apply to all linearity audits as required by 40 CFR Part 75, which will be conducted rather than CGA due to the more stringent requirements of Part 75.
 2. Developing and maintaining an updated quality assurance plan for all CEMS and COMS in accordance with 40 CFR Part 60, Appendix F and 06-096 CMR 117.
 3. Meeting the data recovery requirements of 06-096 CMR 117.
[06-096 CMR 117 and 40 CFR Part 60]
- B. For all of the continuous emission monitors (CEMS) and continuous opacity monitors (COMS) required by this license, the licensee shall maintain records of the most current six year period and the records shall include:
 1. Documentation which shows monitor operational status during all source operating time, including specifics for calibration and audits; [06-096 CMR 117]
 2. Documentation that all CEMS and COMS are continuously accurate, reliable and operated in accordance with 06-096 CMR 117, 40 CFR Part 51, Appendix P, and 40 CFR Part 60, Appendices B and F; [06-096 CMR 117 and 40 CFR Part 60]
 3. Complete data sets of all monitored emissions as specified in this license; [06-096 CMR 117]
 4. Records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS as required by 40 CFR Part 51 Appendix P. [06-096 CMR 117 and 40 CFR Part 51]
 5. Other data indicative of compliance with the applicable emission standards for those periods when the CEMS or COMS were not in operation or produced invalid data. In the event the Department does not concur with the licensee's compliance determination, the licensee shall, upon the Department's request, provide additional data, and shall have the burden of demonstrating that the data is indicative of compliance with the applicable standard.
- C. In order to meet the requirements of 40 CFR Part 75, all CEMS and COMS, including fuel flow monitors, shall be in operation and monitoring unit emissions or opacity at all times the affected unit combusts any fuel except during periods of calibration, quality assurance, or preventative maintenance,

performed pursuant to 40 CFR Part 75.21 and Appendix B, periods of repair, periods of backup of data from the data acquisition and handling system, or periods of recertification performed pursuant to 40 CFR Part 75.20. [40 CFR Part 75]

(18) **Parameter Monitoring Requirements**

Each parameter monitor, including, but not limited to, fuel flow meters, Unit #3 multiclone differential pressure, and Unit #4 ESP secondary voltage and secondary current, must record accurate and reliable data. If the parameter monitor is recording accurate and reliable data less than 98% of the source operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions. **Enforceable by State-only**

(19) **Acid Rain Program**

- A. Units #1, #2, #3, and #4 are subject to and shall comply with all applicable requirements of the Acid Rain Program under 40 CFR Parts 72, 73, 75 (Subparts A, B, C, D, F, and G), 77 and 78.
- B. FPLE Wyman shall maintain the following records on an hourly basis for each Unit #1, #2, #3, and #4 pursuant to 40 CFR Part 75:
1. heat input;
 2. operating time;
 3. load and load range;
 4. date and hour (and minute for opacity) for each recorded value;
 5. for SO₂:
 - a. hourly flow rate of oil (bbl/hr),
 - b. sulfur content (%) from bulk storage tank,
 - c. method of oil sampling,
 - d. mass of oil combusted each hour (lb/hr), and
 - e. hourly SO₂ mass emissions (lb/hr).
 6. for NO_x:
 - a. concentration (ppm),
 - b. diluent gas concentration (%O₂ or %CO₂),
 - c. emission rate (lb/MMBtu), and
 - d. method of determination for hourly average NO_x emission rate

7. for CO₂:
 - a. concentration (%),
 - b. 40 CFR Part 75 Appendix G (mass emissions in tons based on fuel oil analysis)
 - c. mass emissions (tons/hr), and
8. for opacity:
 - a. average opacity for each six (6) minute averaging period, and
 - b. exceedances
9. all monitor % data availability;
10. data and information required by 40 CFR Part 75.55 for specific situations; and
11. certification test data and information required in 75.56.

C. FPLE Wyman shall submit to EPA a quarterly electronic data report (EDR) pursuant to 40 CFR Part 75 for Units #1, #2, #3, and #4. [40 CFR Part 75 Subpart G]

(20) **BART**

Per 40 CFR Part 51 §51.308(e)(1)(v), FPLE Wyman shall maintain the control equipment required by BART and establish procedures to ensure such equipment is properly operated and maintained. This condition shall go into effect 5 years from the date of EPA's approval of Maine's Regional Haze SIP submittal. [Per 40 CFR Part 51 §51.308(e)(1)(v)]

(21) **Unit #5 – 72 MMBtu/hr**

A. Heat Input and Allowable Fuels

1. Unit #5 may fire #6 fuel oil, #2 fuel oil, and/or specification waste oil (as defined by the Bureau of Remediation and Waste Management). [06-096 CMR 140, BPT and 06-096 CMR 860]
2. FPLE Wyman shall maintain monthly records of the quantity of fuel consumed and the sulfur content of the fuel. [06-096 CMR 140, BPT]
3. Unit #5 shall be limited to a maximum heat input of 72 MMBtu/hr (based on a three (3) hour block average). Records shall be maintained showing compliance with this limit, including records of fuel flow into the unit and the heat content of the fuel. [06-096 CMR 140, BPT] **Enforceable by State Only**

B. Fuel Sulfur Content

1. #6 fuel oil

- a. Until December 31, 2017, the sulfur content of the #6 fuel oil fired shall not exceed 2.0% by weight. [06-096 CMR 106 and 06-096 CMR 140, BPT]
- b. Beginning January 1, 2018, the #6 fuel oil fired shall not exceed a maximum sulfur content limit of 0.5% by weight. [38 MRSA §603-A(1) and (2), and 06-096 CMR 140, BPT]

2. #2 fuel oil

- a. Until December 31, 2015, the #2 fuel oil fired shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). [06-096 CMR 140, BPT]
- b. Beginning January 1, 2016, the #2 fuel oil fired shall not exceed a maximum sulfur content limit of 0.005% by weight (50 ppm) [38 MRSA §603-A(2)(A)(3)], and
- c. Beginning January 1, 2018, the #2 fuel oil fired shall not exceed a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]

3. Sulfur Content Compliance

Sulfur content compliance shall be demonstrated by fuel oil analysis of the bulk fuel oil storage tanks if the fuel is blended on-site or by fuel delivery receipts if the maximum sulfur content delivered is at or below the sulfur content limits listed above. [06-096 CMR 140, BPT]

C. Emissions from Unit #5 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	06-096 CMR 103, Section 2(A)(1)	-
NO _x	0.35	06-096 CMR 140, BPT	Enforceable by State-only

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	14.4	06-096 CMR 140, BPT	Enforceable by State-only
PM ₁₀	14.4	06-096 CMR 140, BPT	Enforceable by State-only
SO ₂ (2.0%S)	155.5	06-096 CMR 140, BPT	Enforceable by State-only
NO _x	25.2	06-096 CMR 140, BPT	Enforceable by State-only
CO	36.0	06-096 CMR 140, BPT	Enforceable by State-only
VOC	7.2	06-096 CMR 140, BPT	Enforceable by State-only

- D. Visible emissions from Unit #5 shall not exceed 30% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period. [06-096 CMR 101]
- E. FPLE Wyman shall operate low NO_x burners on Unit #5. [06-096 CMR 138, NO_x RACT]
- F. For those time periods when Unit #5 emissions are not discharged into flue A of Stack #1, emissions from Unit #5 may be discharged to Stack #5 provided the SO₂ emission rate does not exceed the 0.8 lb/MMBtu as demonstrated by records of fuel flow into Unit #5 and the sulfur content of the fuel being fired. [A-388-70-D-A, December 9, 2005]
- G. Monitoring and Compliance
1. PM
Compliance with the PM emission limit shall be demonstrated by stack testing in accordance with 40 CFR Part 60, Appendix A, Method 5 once every two (2) years by May 31.
 2. SO₂
The SO₂ emission limits shall be demonstrated through fuel use for Unit #5 and Part 75 Appendix D data obtained from Unit #1 or #2.
 3. NO_x
The NO_x emission limit shall be demonstrated by the appropriate stack test method performed once every two (2) years by May 31.
 4. CO, and VOC
Compliance with the CO and VOC emission limits shall be demonstrated by the appropriate stack test methods conducted upon request of the Department.
 5. Fuel Flow Meter
 - a. FPLE Wyman shall operate a fuel flow monitor system which continuously monitors and records the rate of fuel oil fired into and combusted within the unit.
 - b. The fuel flow monitor system shall be maintained and operated in accordance with manufacturer's specifications.
[06-096 CMR 140, BPT]

[06-096 CMR 140, BPT]

(22) **Waste Oil**

FPLE Wyman shall:

- A. Maintain records of at least one (1) on-site generated waste oil characterization test result;

- B. Maintain characterization test result records for all off-site generated waste oil fired;
- C. Maintain a log recording the quantity of all specification and off-specification waste oil burned in each unit; and
- D. Make all logs available to the Department upon request.
[06-096 CMR 140, BPT] **Enforceable by State Only**

(23) **Emergency Generator (5.25 MMBtu/hr)**

A. Generator Operation

- 1. The emergency generator is limited to 925 hours per year total operation (34,500 gal/year), based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours based on readings from an hour meter. [06-096 CMR 115]
- 2. The emergency generator shall be operated in accordance with the emergency definition in 40 CFR Part 63, Subpart ZZZZ. The generator shall each be limited to 100 hours/year for maintenance and testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving or generating income or a financial arrangement with another entity). A maximum of 15 hours per year (of the 50 hours/year) may be used as part of a demand response program. These limits are based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours. [40 CFR §63.6640(f)(1) and 06-096 CMR 140, BPT]
- 3. FPLE Wyman shall keep records that include maintenance conducted on the generator and the hours of operation. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the generator is used for demand response operation, FPLE Wyman must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [06-096 CMR 140, BPT]

B. Diesel/#2 Fuel Oil

- 1. Until December 31, 2015, the fuel oil fired shall not exceed a maximum sulfur content of 0.5% by weight. [06-096 CMR 140, BPT]
- 2. Beginning January 1, 2016, the #2 fuel oil fired shall not exceed a maximum sulfur content limit of 0.005% by weight (50 ppm) [38 MRSA §603-A(2)(A)(3)], and
- 3. Beginning January 1, 2018, the #2 fuel oil fired shall not exceed a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]

4. Compliance with the fuel oil sulfur requirements shall be demonstrated by fuel records. [06-096 CMR 140, BPT]

C. Emissions from the emergency generator shall not exceed the following [06-096 CMR 140, BPT]:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	ME DEP, Chapter 103, Section 2(A)(1)	-

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	1.1	ME DEP, Chapter 140, BPT	Enforceable by State-only
PM ₁₀	1.1	ME DEP, Chapter 140, BPT	Enforceable by State-only
SO ₂	2.6	ME DEP, Chapter 140, BPT	Enforceable by State-only
NO _x	16.8	ME DEP, Chapter 140, BPT	Enforceable by State-only
CO	5.0	ME DEP, Chapter 140, BPT	Enforceable by State-only
VOC	0.5	ME DEP, Chapter 140, BPT	Enforceable by State-only

D. Visible emissions from the generator shall not exceed 30% opacity on a 6 minute block average, except for no more than two (2) six (6) minute block averages in a 3 hour period. [06-096 CMR 101]

E. Compliance with the emission limits from the generator shall be demonstrated by stack testing upon request of the Department. [06-096 CMR 140, BPT]

(24) **Gasoline Storage Tank**

A. The fill pipe shall extend within 6 inches of the bottom of the gasoline storage tank. [06-096 CMR 118]

B. The licensee shall maintain records of the monthly and annual throughput of gasoline. [06-096 CMR 118]

(25) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20 percent, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20 percent in any one (1) hour. [06-096 CMR 101]

(26) **General Process Sources**

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101]

(27) **Quarterly Reporting**

The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following, for the control equipment, parameter monitors, Continuous Emission Monitoring Systems (CEMS) or Continuous Opacity Monitoring Systems (COMS) required by this license. [06-096 CMR 117]

- A. All control equipment downtimes and malfunctions;
- B. All CEMS or COMS downtimes and malfunctions;
- C. All parameter monitor downtimes and malfunctions;
- D. All excess events of emission and operational limitations set by this Order, Statute, state or federal regulations, as appropriate. The following information shall be reported for each excess event;
 1. Standard exceeded;
 2. Date, time, and duration of excess event;
 3. Amount of air contaminant emitted in excess of the applicable emission standard expressed in the units of the standard;
 4. A description of what caused the excess event;
 5. The strategy employed to minimize the excess event; and
 6. The strategy employed to prevent reoccurrence.
- E. A report certifying there were no excess emissions, if that is the case.

(28) **Semiannual Reporting** [06-096 CMR 140]

- A. The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The semiannual reports are due on **January 31st** and **July 31st** of each year. The facility's designated responsible official must sign this report.
- B. The semiannual report shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date.
- C. Each semiannual report shall include a summary of the periodic monitoring and Compliance Assurance Monitoring required by this license.
- D. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.

(29) **Annual Compliance Certification**

FPLE Wyman shall submit an annual compliance certification to the Department in accordance with Standard Condition (13) of this license. The annual

compliance certification is due January 31 of each year. The facility's designated responsible official must sign this report.

The annual compliance certification shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors. [06-096 CMR 140]

(30) **Additional Annual Compliance Addendum**

FPLE Wyman shall submit an annual NO_x minimization update to the Department as an addendum to the annual compliance certification. The submittal shall list any one-time or ongoing activities at the facility performed in the previous calendar year to decrease NO_x emissions and increase the units' efficiency. [A-388-70-C-A, September 26, 2007]

(31) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 CMR 137 (as amended), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

- A. A computer program and accompanying instructions supplied by the Department; or
- B. A written emission statement containing the information required in 06-096 CMR 137.

The emission statement must be submitted by the date as specified in 06-096 CMR 137.

[06-096 CMR 137]

(32) **General Applicable State Regulations**

The licensee is subject to the State regulations listed below.

<u>Origin and Authority</u>	<u>Requirement Summary</u>	<u>Enforceability</u>
06-096 CMR 102	Open Burning	-
06-096 CMR 109	Emergency Episode Regulation	-
06-096 CMR 110	Ambient Air Quality Standard	-
06-096 CMR 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. §585-B, §§5	Mercury Emission Limit	Enforceable by State-only

(33) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. An example of such units include refrigerators and any size air conditioner that contain CFCs.

[40 CFR, Part 82, Subpart F]

(34) **Asbestos Abatement**

When undertaking Asbestos abatement activities, FPLE Wyman shall comply with the Standard for Asbestos Demolition and Renovation 40 CFR Part 61, Subpart M.

(35) **Risk Management Plan**

The licensee is subject to all applicable requirements of 40 CFR Part 68 (Risk Management Plan).

(36) **Expiration of a Part 70 license**

- A. FPLE Wyman shall submit a complete Part 70 renewal application at least 6 months prior, but no more than 18-months prior, to the expiration of this air license.
- B. Pursuant to Title 5 MRSA §10002, and 06-096 CMR 140, the Part 70 license shall not expire and all terms and conditions shall remain in effect until the Department takes final action on the renewal application of the Part 70 license. An existing source submitting a complete renewal application under

FLP Energy Wyman, LLC &
FPL Energy Wyman IV, LLC
Cumberland County
Yarmouth, Maine
A-388-70-E-R

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Departmental
Findings of Fact and Order
Part 70 Air Emission License

06-096 CMR 140 prior to the expiration of the Part 70 license will not be in violation of operating without a Part 70 license. **Enforceable by State-only**

(37) **New Source Review**

FPLE Wyman is subject to all previous New Source Review (NSR) requirements summarized in this Part 70 air emissions license and the NSR requirements remain in effect even if this 06-096 CMR 140 Air Emissions License, A-388-70-E-R, expires.

DONE AND DATED IN AUGUSTA, MAINE THIS 26th DAY OF April, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Melanie L. Foster
PATRICIA W. FOSTER, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: November 6, 2006

Date of application acceptance: November 7, 2006

Date filed with the Board of Environmental Protection:

This Order prepared by Kathleen E. Tarbuck, Bureau of Air Quality.

