

FPL Energy, Inc. - Mason Station)
Lincoln County)
Wiscasset, Maine)
A-196-70-A-I)

**DEPARTMENTAL
FINDINGS OF FACT AND ORDER
PART 70 AIR EMISSION LICENSE**

After review of the Initial Part 70 License 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., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	FPL Energy, Inc. - Mason Station
LICENSE NUMBER	A-196-70-A-I
LICENSE TYPE	Initial Part 70 License
NAIC CODES	4911
NATURE OF BUSINESS	Power Generation
FACILITY LOCATION	Birch Point, Wiscasset, Maine
DATE OF LICENSE ISSUANCE	
LICENSE EXPIRATION DATE	

B. Emission Equipment

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

UNIT ID	DATE INSTALLED	UNIT CAPACITY	UNIT TYPE
Boiler #3	1952 (pre-NSPS)	423 MMBtu/hr	#6 Fuel Oil (0.5% S)
Boiler #4	1952 (pre-NSPS)	427 MMBtu/hr	#6 Fuel Oil (0.5% S)
Boiler #5	1955 (pre-NSPS)	443 MMBtu/hr	#6 Fuel Oil (0.5% S)
Boiler #1H	1974 (pre-NSPS)	57.0 MMBtu/hr	#6 Fuel Oil (0.5% S)

Mason Station has additional insignificant activities which do not need to be listed in the emission equipment table above, but may be found in the application submitted on June 25, 1998.

C. Application Classification

The application for Mason Station does not include the licensing of increased emissions or the installation of new or modified equipment; the license is considered to be an Initial Part 70 License issued under Chapter 140 for a Part 70 source.

II. EMISSION UNIT DESCRIPTION

Mason Station is an electric generating power plant located on Birch Point in Wiscasset, Maine. The plant consists of five steam generating units and a smaller oil-fired heating boiler which operates to provide building heating and auxiliary steam. Boilers 1 and 2 are deactivated. Units 3, 4, and 5 began commercial operation in 1952, 1952 and 1955 respectively. Auxiliary boiler 1H was added to the air emission license in 1976. Mason Station is subject to Title V regulations because it is required to meet the Title IV Acid Rain regulations of the 1990 Clean Air Act Amendments. The Phase II Acid Rain Permit A-196-70-A-S is attached.

Units 3, 4, and 5 are used as peaking units, as defined in 40 CFR Part 72.2, and as such the units are limited to operate no more than 10% of their annual capacity factor. This allows Mason Station to meet the nitrogen oxides (NO_x) requirements through the use of 40 CFR Part 75, Appendix E in lieu of a continuous NO_x emission monitoring system. Sulfur dioxide (SO₂) emissions are measured using provisions of 40 CFR Part 75, Appendix D in lieu of a continuous SO₂ emission monitoring system.

Post combustion control of particulate matter from Units 3, 4, and 5 consists of a multiple centrifugal separator for each boiler having an approximate efficiency rating of 85%. NO_x emissions from these boilers are based on the use of burner modifications for low NO_x, which are approximately 40% efficient.

A. Units 3 and 4:

Units 3 and 4 are Stirling Type Two Drum boilers manufactured by Babcock and Wilcox and installed in 1952, with a maximum design heat input capacity of 424 MMBtu/hr and 427 MMBtu/hr, respectively, firing #6 fuel oil (0.5% sulfur maximum by weight). Units 3 and 4 are not subject to NSPS requirements. The combined maximum firing rate of the six burners is 2,820 and 2,848 gallons per hour per boiler, respectively. Emissions from Boiler #3 exhaust through Stack #3A and emissions from Boiler #4 exhaust through Stack #4A.

Unit 5 is a Stirling Type Two Drum boiler manufactured by Babcock and Wilcox and installed in 1955 with a maximum design heat input capacity of 443

MMBtu/hr firing #6 fuel oil (0.5% sulfur maximum by weight). Unit 5 is not subject to NSPS requirements. The combined maximum firing rate of the six burners is 2,959 gallons per hour. Emissions from Boiler #5 exhaust through Stack #5.

Streamlining

1. Fuel sulfur content is regulated by Chapter 106, however the Best Practical Treatment (BPT) sulfur limit is more stringent.
2. NO_x emission value of 0.3 MMBtu/hr based upon boiler performance.
3. Chapter 101, Section 2(A) is applicable for visible emissions; however, the BPT opacity limit is more stringent.

Periodic Monitoring

Fuel oil record keeping which includes records of hours of boiler operation and fuel use through purchase receipts indicating the amount (gallons) and percent sulfur by weight.

NO_x emissions monitoring through the use of 40 CFR Part 75, Appendix E in lieu of a NO_x Continuous Emissions Monitor (CEM). Reference EPA letter dated June 3, 1998 to Mr. Nason of Central Maine Power from Mr. McLean, Director of the Acid Rain Division of the EPA.

SO₂ emissions monitoring through the use of 40 CFR Part 75, Appendix D in lieu of a SO₂ CEM. Reference EPA letter dated June 3, 1998 to Mr. Nason of Central Maine Power from Mr. McLean, Director of the Acid Rain Division of the EPA.

Documentation that the Continuous Opacity Monitor (COM) are continuously accurate, reliable and operated in accordance with Chapter 117.

B. Boiler 1H:

Boiler 1H is a model D-68-L.H boiler manufactured by Cleaver-Brooks and installed in 1974 with a maximum design heat input capacity of 57 MMBtu/hr firing #6 fuel oil (0.5% sulfur maximum by weight). Propane is used to ignite the flame. Boiler 1H is not subject to NSPS requirements. The maximum firing rate is 380 gallons per hour. Emissions from Boiler #1H exhaust through Stack #1-A.

Streamlining

1. Fuel sulfur content is regulated by Chapter 106, however the BPT sulfur limit is more stringent.
2. Chapter 101, Section 2(A) is applicable for visible emissions; however, the BPT opacity limit is more stringent.

Periodic Monitoring

Fuel oil record keeping which includes records of hours of boiler operation and fuel use through purchase receipts indicating the amount (gallons) and percent sulfur by weight.

SO₂ emissions monitoring through the use of fuel use in Boiler 1H and percent sulfur from fuel records.

Annual burner tip replacement/cleaning and annual boiler tune-up as agreed upon by the Department in lieu of a COM. Records maintained of cleaning and maintenance on Boiler 1H. Due to the peak loading requirements of this unit, a COM on boiler 1H is not feasible.

C. Facility Emissions

FPLE-Mason shall restrict fuel use to between 2,531,000 gallons (0.5% sulfur: annual SO₂ emission is the limiting factor) and 4,300,000 gallons (annual NO_x emission is the limiting factor if firing all fuel through Boilers #3, #, 4, and 5) #6 fuel oil per year based on a 12 month rolling total. Any combination of sulfur content fuels may be used (0.5% sulfur maximum) provided the 99.99 tons per year limit for SO₂ and NO_x is not exceeded as calculated in Condition 38.

Total Allowable Annual Emissions for the Facility (used to calculate the annual license fee)

<u>Pollutant</u>	<u>TPY</u>
PM	66.0
PM ₁₀	66.0
SO ₂	99.99
NO _x	99.99
CO	8.0
VOC	12.0

III. AIR QUALITY ANALYSIS

A modeling analysis for boilers 3, 4, and 5 was conducted in January of 1984. The sulfur content of the fuel and the annual fuel cap have both decreased and Maine Ambient Air Quality Standards (MAAQS) have not changed since this modeling analysis, therefore, it is not expected that MAAQS will be violated by this source.

ORDER

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

- will receive Best Practical Treatment,
- will not violate applicable emission 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-196-70-A-I, subject to the following conditions:

For each special condition which is State Enforceable only, it is designated so with the following statement: **Enforceable by State Only**. All other conditions are federally enforceable.

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;
- (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;
- (3) 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;

- (4) 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;
Enforceable by State Only
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.
- (6) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;
- (7) 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;
Enforceable by State Only
- (8) The licensee shall maintain sufficient records, to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license;
- (9) 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.
- (10) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable.
- (11) 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;
- (12) 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:

- (i) 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;
 - (ii) to demonstrate compliance with the applicable emission standards; or
 - (iii) 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.

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- (13) 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.

Enforceable by State Only

- (14) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, or this license, 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.
- (15) 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.

- (16) 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.
- (17) 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 emissions unit itself that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next working day, whichever is later, of such occasions and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

- (18) 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. Upon request, the licensee shall also furnish to the Department copies of records required to be kept by this license.
- (19) The licensee shall submit quarterly reports of any required 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.
- (20) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequent 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;
- (21) 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 Chapter 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.

- (22) 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.

SPECIAL CONDITIONS

- (23) Permit Shield for Non-Applicable Requirements

SOURCE		CITATION	DESCRIPTION	BASIS FOR DETERMINATION
Boilers 3, 4, 5&1H	a.	40 CFR Part 60 Subpart D, Da, Db & Dc	Standards of Performance for Steam Generating Units	Commenced construction prior to applicability
Boilers 3, 4, 5&1H	b.	40 CFR Part 73.	Hazardous Air Pollutants	Does not apply to oil fired utility boilers.
Boilers 3, 4, 5&1H	c.	MEDEP Chapter 138: NO _x RACT	Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides (NO _x RACT)	Facility limited to emit less than 100 tons per year NO _x .

- (24) Boilers 3, 4, and 5:

A. The maximum heat input capacity from the firing of fuel oil into Boiler 3, 4, or 5 shall not exceed 423 MMBtu/hr (2,820 gal/hr), 427 MMBtu/hr (2,848 gal/hr), and 443 (2,959 gal/hr) MMBtu/hr, respectively, per boiler demonstrated by flow meter logs or oil flow recording charts.
 [MEDEP Chapter 140, BPT]

B. Emissions from Boilers 3, 4 or 5 shall not exceed the following limits:

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>	<u>Enforceability</u>
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PM	0.20	MEDEP Chapter 103, Section 2(A)(1)	Federally Enforceable Through Title V Permit
NO _x	0.30	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit

Boiler #3 lb/hr limits

Pollutant	lb/hour	Origin and Authority	<u>Enforceability</u>
PM	84.6	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
PM ₁₀	84.6	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
SO ₂	221.4	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
NO _x	126.9	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
CO	14.1	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
VOC	2.1	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit

Boiler #4 lb/hr limits

Pollutant	lb/hour	Origin and Authority	<u>Enforceability</u>
PM	85.4	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
PM ₁₀	85.4	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
SO ₂	223.5	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
NO _x	128.3	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
CO	14.2	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
VOC	2.2	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit

Boiler #5 lb/hr limits

Pollutant	lb/hour	Origin and Authority	<u>Enforceability</u>
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PM	88.6	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
PM ₁₀	88.6	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
SO ₂	231.8	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
NO _x	132.9	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
CO	14.8	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit
VOC	2.2	MEDEP Chapter 140, BPT	Federally Enforceable Through Title V Permit

C. Particulate matter (PM, PM₁₀) emissions from Boilers 3, 4, and 5 shall be controlled by the operation and maintenance of a two stage multiple cyclonic separator system.
 [MEDEP Chapter 140, BPT]

(25) Boiler 1H:

A. The maximum heat input capacity from the firing of fuel oil into Boiler 1H shall not exceed 57 MMBtu/hr (380 gal/hr) demonstrated by flow meter logs or oil flow recording charts. Propane is utilized to start Boiler 1H.
 [MEDEP Chapter 140, BPT] **Enforceable by State Only**

B. Emissions from Boiler 1H shall not exceed the following limits:

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>	<u>Enforceability</u>
PM	0.20	MEDEP Chapter 103, Section 2(A)(1)	Federally Enforceable Through Title V Permit
NO _x	0.45	MEDEP Chapter 140, BPT	State only

<u>Pollutant</u>	<u>lb/hour</u>	<u>Origin and Authority</u>	<u>Enforceability</u>
PM	11.4	MEDEP Chapter 140, BPT	State only
PM ₁₀	11.4	MEDEP Chapter 140, BPT	State only
SO ₂	29.8	MEDEP Chapter 140, BPT	State only
NO _x	25.7	MEDEP Chapter 140, BPT	State only
CO	1.9	MEDEP Chapter 140, BPT	State only
VOC	0.1	MEDEP Chapter 140, BPT	State only

(26) The sulfur content of the fuel oil fired in the Boilers 3, 4, 5, and 1H shall not exceed 0.5% by weight demonstrated by purchase records from the supplier.
 [MEDEP Chapter 140, BPT]

- (27) Emissions from each boiler shall vent to the corresponding stacks with stack heights as listed below:

<u>Emissions Unit</u>	<u>Stack ID</u>	<u>Stack Height AGL</u>
Boiler 3	3A	149 feet
Boiler 4	4A	149 feet
Boiler 5	5	131 feet
Boiler 1H	1-A	72 feet

[MEDEP Chapter 140, BPT] **Enforceable by State Only**

- (28) A continuous O₂ monitor (periodic monitor) shall be operated to determine the excess O₂ in Boiler #3, #4 and #5. This is required per 40 CFR Part 75, Appendix E for determination of estimated NO_x emissions.

[MEDEP Chapter 140, BPT]

- (29) Mason Station shall perform a Cylinder Gas Audit (CGA) on the continuous O₂ monitor (periodic monitor) once per quarter in accordance with 40 CFR Part 60, Appendix B, Performance Specification 2, Section 10: Alternate Procedures.

[MEDEP Chapter 140, BPT]

- (30) Opacity for Boilers 3, 4, and 5 shall not to exceed 40 percent on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour block.

[MEDEP Chapter 140, BPT]

- (31) Compliance with the opacity limit for boilers 3, 4, and 5 shall be demonstrated by means of a continuous opacity monitoring system (COMS). The COMS shall be installed and certified on the breaching of the ESP to the stack or in the stack. The facility shall maintain the COMS in accordance with Chapter 117.

[MEDEP Chapter 140, BPT]

- (32) Opacity for Boiler 1H shall not to exceed 30 percent on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.

[MEDEP Chapter 140, BPT]

- (33) Compliance with the opacity limit for boiler 1H shall be annual burner tip replacement/cleaning and annual boiler tune-up as agreed upon by the Department in lieu of a COM. Records of cleaning and maintenance on Boiler 1H shall be maintained.

[MEDEP Chapter 140, BPT]

- (34) A log for Boiler 3, 4, 5 and 1H shall be maintained showing preventative maintenance actions, including burner tip replacement, that are being performed.
[MEDEP Chapter 140, BPT]
- (35) Mason Station shall monitor and record the following as specified, for Boilers 1H, 3, 4 and 5:

Parameter	Monitor	Record
fuel oil firing rate	continuously	Continuously*

* “Continuous” means that there are at least three evenly spaced data points recorded in any given hour.

Each parameter monitor 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.

[MEDEP Chapter 140, BPT] **Enforceable by State Only**

- (36) Retesting of the NO_x emission rate for the boilers shall be performed prior to the earlier of 3,000 unit operating hours or the 5-year anniversary and renewal of this License (Per 40 CFR Part 75, Appendix E, Section 2.2).
[MEDEP Chapter 140, BPT]
- (37) FPLE-Mason shall restrict fuel use to between 2,531,000 gallons (0.5% sulfur: annual SO₂ emission is the limiting factor) and 4,300,000 gallons (annual NO_x emission is the limiting factor) #6 fuel oil per year based on a 12 month rolling total. Any combination of the two sulfur content fuels may be used provided the 99.99 tons per year limit for SO₂ and NO_x is not exceeded as calculated in Condition 37.
[MEDEP Chapter 140, BPT]
- (38) **12 month rolling total**

Boilers 3, 4 and 5

A 12 month rolling total for Boilers 3, 4 and 5 will be calculated on a monthly basis by Mason Station for sulfur dioxide and nitrogen oxides emissions.

The 12 month rolling total shall be calculated using the methods described in 40 CFR Part 75, Appendix D (SO₂) and Appendix E (NO_x).
[MEDEP Chapter 140, BPT]

Boiler 1H

A 12 month rolling total for Boiler 1H will be calculated on a monthly basis by Mason Station for sulfur dioxide and nitrogen oxides emissions.

These emissions shall be calculated using % sulfur and gallons used from fuel shipping receipts in the following equations:

SO₂

$$0.000079 \text{ tons SO}_2/\text{gallon} \cdot (S)\% \text{ sulfur} \cdot (Y) \text{ gallons/year} \leq 99.99 \text{ tons SO}_2/\text{year}$$

where:

0.000079 was derived from AP-42: 157 lb S / 1000 gallons / 2000 lb/ton
S is the weight % sulfur of the fuel (not to exceed 0.5%) and
Y is the fuel use in gallons per year (previous 12 month total)

NO_x

$$0.000034 \text{ tons NO}_x/\text{gallon} \cdot (Y) \text{ gallons/year} = \text{tons NO}_x/\text{year from Boiler 1H}$$

where:

0.000034 was derived from: 0.45 lb NO_x/MMBtu • 0.15 MMBtu/gal /2000 lb/ton
Y is the fuel use in gallons per year (previous 12 month total)

The sum of NO_x/year from Boiler 1H, 3, 4, and 5 shall be less than 99.99 tons/year.

[MEDEP Chapter 140, BPT]

- (39) Annual fuel oil use in Boilers 3, 4, or 5 shall not exceed the following per year (10 percent of the annual capacity factor for steam generating units during a calendar year):

Boiler #3	2,470,320 gallons/year
Boiler #4	2,493,680 gallons/year
Boiler #5	2,587,320 gallons/year

[MEDEP Chapter 140, BPT]

(40) **COMS and Parameter Monitors**

The COMS and parameter monitors required by this license shall be the primary means of demonstrating compliance with emission standards set by this Order, statute, state or federal regulation, as applicable. Mason Station shall comply with the following:

[MEDEP Chapter 140, BPT]

A. Performance Specifications (MEDEP Chapter 117, BPT)

All COMS shall meet the sampling and performance criteria specified in 40 CFR Part 51 Appendix P, and shall be operated in accordance with Chapter 117 of the Departments regulations.

1. If the continuous opacity monitoring system is recording accurate and reliable data less than 95% 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 continuous emission monitoring system was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction so 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 of unavoidable malfunctions.
2. Develop and maintain an updated quality assurance plan for all COMS in accordance with Chapter 117 of the Department’s regulations.

B. Recordkeeping

For all of the continuous opacity monitor (COM), equipment parameter monitoring and recording, 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; and
[MEDEP Chapter 117]
2. A complete data set of all monitored parameters as specified in this license. All parameter records shall be made available to the Bureau of Air Quality upon request.
[MEDEP Chapter 117]
3. For all COMS, the records shall include:

- a. Documentation that all COM are continuously accurate, reliable and operated in accordance with Chapter 117, 40 CFR Part 51, Appendix P, and 40 CFR Part 60, Appendix B;
[MEDEP Chapter 117]
- b. Records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each COM as required by 40 CFR Part 51 Appendix P;
[MEDEP Chapter 117]
- c. Upon the written request by the Department a report or other data indicative of compliance with the applicable emission standard for those periods when the COMS were not in operation or produced invalid data. Methods allowed by 40 CFR Part 75 may be used to demonstrate compliance with applicable emission standards. Evidence indicating normal operations shall constitute such reports or other data indicative of compliance with applicable emission standards. In the event the Bureau of Air Quality does not concur with the licensee’s compliance determination, the licensee shall, upon the Bureau of Air Quality’s request, provide additional data, and shall have the burden of demonstrating that the data is indicative of compliance with the applicable standard; and
[MEDEP Chapter 140, BPT]

C. 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 parameter monitors, Continuous Opacity Monitoring Systems (COMS) required by this license:

1. All control equipment downtimes and malfunctions;
2. All COMS downtimes and malfunctions;
3. All parameter monitor downtimes and malfunctions;
4. 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;
 - a. Standard exceeded;
 - b. Date, time, and duration of excess event;
 - c. Maximum and average values of the excess event, reported in the units of the applicable standard, and copies of pertinent strip charts and printouts when requested;
 - d. A description of what caused the excess event;
 - e. The strategy employed to minimize the excess event; and
 - f. The strategy employed to prevent reoccurrence.

5. A report certifying there were no excess emissions, if that is the case.
[MEDEP Chapter 117]

(41) **Semiannual Reporting**

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The semiannual reports are due with every other quarterly report, and the initial semiannual report is due January 30, 2000 with the second quarterly report submitted following the date of signature of this license.

A. Each semiannual report shall include a summary of the periodic monitoring required by this license.

B. 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.

[MEDEP Chapter 140]

(42) **Annual Compliance Certification**

Mason Station shall submit an annual compliance certification to the Department in accordance with Condition (20) of this license. The initial annual compliance certification is due July 30, 2000 with the submittal of the second semiannual report after the signature date of this license.

[MEDEP Chapter 140]

(43) **Annual Emission Statement**

The licensee shall annually report to the Department, in a specified format, fuel use, operating rates, use of materials and other information necessary to accurately update the State's emission inventory.

[MEDEP Chapter 137] **Enforceable by State only**

(44) The license is subject to the State and Federal regulations listed below:

Chapter 102	Open Burning
Chapter 109	Emergency Episode Regulation
Chapter 110	Ambient Air Quality Standard
Chapter 113	Growth Offset Regulation

(45) Any documents (including reports) required by this license must be signed by the responsible official.

(46) This term of this license shall be five (5) years from the signature date below.

FPL Energy, Inc. – Mason Station)
Lincoln County)
Wiscasset, Maine)
A-196-70-A-I **19**

DEPARTMENTAL
FINDINGS OF FACT AND ORDER
PART 70 AIR EMISSION LICENSE

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 1999.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
 MARTHA KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application 3/16/98

Date of application acceptance 3/18/98

Date filed with Board of Environmental Protection _____

This Order prepared by Mark E. Roberts, Bureau of Air Quality