

## STATE OF MAINE

# DEPARTMENT OF ENVIRONMENTAL PROTECTION

ANGUS S. KING, JR. GOVERNOR

EDWARD O. SULLIVAN

CENTRAL MAINE POWER COMPANY	)	DEPARTMENTAL
W.F. WYMAN STATION		FINDINGS OF FACT AND ORDER
CUMBERLAND COUNTY	)	AIR EMISSION LICENSE
YARMOUTH, MAINE	)	AMENDMENT #1
A-388-71-C-A	)	

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality Control, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

## I. REGISTRATION

#### A. Introduction

- 1. Central Maine Power Company (CMP-Wyman) was issued Air Emission License #1972 on June 24, 1981, permitting the operation of emission sources associated with their W.F. Wyman Station electrical power generation facility in Yarmouth, Maine.
- 2. CMP-Wyman has requested an air emission license amendment to comply with Chapter 138 Reasonably Available Control Technology (RACT) for Facilities that Emit Nitrogen Oxides (NOx) of the Maine Air Regulations.
- 3. In addition, CMP-Wyman has requested a minor revision to their Air Emission License to change the condition which requires testing of the fuel oil sulfur content to allow for demonstration of the sulfur content through the use of the installed CEM system.

# B. Emission Equipment

CMP-Wyman is authorized to operate the following air emission units, which are subject to NOx RACT:

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#### 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 Air Emission License A-388-71-C-A, subject to the conditions found in Air Emission License #1972, and in the following conditions:

The following shall replace Condition (1) of Air Emission License #1972:

- (1) Fuel Oil Sulfur Content
  - Compliance with the fuel on sulfur content requirements of this license for Units #1, #2, #3, or #4 shall be demonstrated by the monitoring of the SO<sub>2</sub> lb/MMBtu values generated by the unit emissions and the following mathematical conversion.

$$- \text{lb SO}_2/\text{MMBtu} = \frac{(\text{S lb sulfur})*(64 \text{ ls SO}_2)*(1 \text{ lb fuel})*(1000000 \text{ Btu})}{(1.0 \text{ lb fuel})*(32 \text{ lb sulfur})*(18500 \text{ Btu})*(1 \text{ MMBtu})}$$

$$\text{Where: } S = \frac{\% \text{ sulfur content limit of the fuel}}{100}$$

The monitoring of the SO<sub>2</sub> lb/MMBtu values shall be by the operation of a CEMS on each applicable breaching of Units #1, #2, #3, and #4 to the respective stacks. The CEMS shall meet the requirements of Chapter 117 of the Maine Air Regulations.

 Compliance with the fuel oil sulfur content limitation for Unit #5 shall be based on fuel oil sulfur content tests that shall be conducted whenever there is a new shipment of fuel to the tanks that are fed to Unit #5.

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The following are new Conditions:

(p) Condition (j) of Air Emission License #1972 shall be deleted.

# (q) NOx RACT

1. CMP-Wyman shall meet the following NOx RACT emission limits:

<u>Equipment</u>	NOx <u>lb/MMBtu</u>	NOx <u>lb/hr</u>
Unit #1	0.45	283.5
Unit #2	0.45	283.5
Unit #3	0.30	357.0
Unit #4	0.30	1,848.0
Unit #5	0.35	25.2

- 2. Compliance with the NOx limits (lb/MMBtu and lb/hr) shall be demonstrated by means of a CEMS on each applicable breaching of Units #1, #2, #3, and #4 to the respective stacks. The CEMS shall meet the requirements of Chapter 117 of the Maine Air Regulations.
- 3. Compliance with the NOx CEMS monitored pollutant emission limit (lb/MMBtu and lb/hr) shall be determined on a 24 hr block average basis. During periods of time when the following units are at or below the heat input capacities specified, the lb/MMBtu value that is monitored shall not be included in determining the 24 hour block arithmetic average NOx emission rate (lb/MMBtu only):

Equipment	Capacity MMBtu/hr		
Unit #1	120		
Unit #2	120		
Unit #3	226		

- 4. The heat input capacities for Units #1, #2, #3, and #4 shall be demonstrated in accordance with 40 CFR Part 75, Appendix F, 5.2.1, Equation F15.
- 5. A 24 hour block average basis shall be defined as midnight to midnight.

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- The stack flue gas volumetric flow monitors being used to generate the CEMS data shall meet the requirements of 40 CFR Part 75, Subpart B Section 75.11.
- 7. Compliance with the NOx emission limits (lb/MMBtu and lb/hr) for Unit #5 shall be based on a stack test conducted in accordance with the appropriate EPA test methods (40 CFR, Part 60, Appendix A) by May 31, 1996 and every year thereafter.

CMP-Wyman shall submit the written report of the NOx emission demonstration by June 30, 1996 and every year thereafter.

CMP-Wyman may apply to amend the license to reduce the frequency of stack testing upon successful compliance demonstration of two consecutive annual stack tests.

#### 8. Units #1 and #2

By June 30, 1997 CMP-Wyman shall submit a written report which shall include a statistical analysis of the CEMS 24 hour block NOx emissions (lb/hr and lb/MMBtu) for Units #1 and #2 and in addition propose a NOx emission limitation that satisfies BPT. The statistical analysis shall be calculated for at least 18 months of NOx emission data.

Following the Department's review and evaluation of the report, the license shall be amended to incorporate a NOx emission limit established by the Department.

# Diesel Units

The following two diesel units shall not exceed the hour limitations on a 12 month rolling total basis, in the event the hour meters are not functioning, documentation shall be by fuel use records:

Unit	Capacity	Fuel Limit	Hour Limit
Diesel #1	1070 BHP	34,500 gallons, #2 fuel	925
Fire Pump	300 BHP	34,500 gallons, #2 fuel	4,660

#### (s) Waste Oil

1. CMP-Wyman may fire Specification waste oil in Units #1, #2, #3, #4, or #5;

CUM! YARN	WYMAN STATION BERLAND COUNTY MOUTH, MAINE -71-C-A		DINGS OF FACT AIR EMISSION I AMENDMEN	LICENSE
	2. CMP-Wyman may fire C	Off-Specification	waste oil in Unit	#4 only; and
	CMP-Wyman shall:     a. maintain characterize     waste that is fired in			offsite generated
	b. have a copy of at least	st one onsite gen	erated characteriz	ation test result;
	c. maintain a log record and	ling the quantity	of waste oil burn	ned in each boiler;
	d. make all logs and rec	ords available to	the Department	upon request.
(t)	This amendment shall revi- License #1972.	is .		
	ARTMENT OF ENVIRONME			1993.
BY:	EDWARD O. SULLIVA	and for		
	PLEASE NOTE THE ATTACHE	SHEET FOR G	JIDANCE ON APPE	EAL PROCEDURES
Date	of initial receipt of application of application acceptance	January 30,	1995	MAY I 9 1995
	Order prepared by Kim Hibba			BOARD OF ENVIRONMENTAL STATE OF MAINE