



STATE OF MAINE

DEPARTMENT OF ENVIRONMENTAL PROTECTION

ANGUS S. KING, JR.
GOVERNOR

EDWARD O. SULLIVAN
COMMISSIONER

CENTRAL MAINE POWER COMPANY)
W.F. WYMAN STATION)
CUMBERLAND COUNTY)
YARMOUTH, MAINE)
A-388-71-D-M)

DEPARTMENTAL
FINDINGS OF FACT AND ORDER
AIR EMISSION LICENSE
AMENDMENT #1

After review of the air emission license 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. Introduction

- A. Central Maine Power Company (CMP-Wyman) was issued Air Emission License A-388-71-A-R on December 27, 1995, permitting the operation of emission sources associated with their W.F. Wyman Station electrical power generation facility in Yarmouth, Maine.
- B. CMP-Wyman has subsequently requested a minor revision to their Air Emission License to revise the license language to allow Units #1, #2, #3, and #5 to burn fuel oil containing up to 2.5 percent sulfur by weight as allowed by the Maine Air Regulations for electrical generating facilities.
- C. In addition, CMP-Wyman has requested to identify consistently within the license the method by which the heat input rates (MMBtu/hr) of Units #1, #2, #3, #4 and #5 are determined.

II. Application Classification

The application for CMP-Wyman to burn fuel oil containing up to 2.5 percent sulfur by weight as fired is determined by the Bureau of Air Quality Control to not be a modification. Chapter 100 defines that a modification is not the firing of "an alternative fuel or raw material if prior to January 6, 1975, the source is designed to accommodate and is licensed to use such alternative fuel". CMP-Wyman, located within the Portland Air Quality Control Region, was originally allowed to burn fuel oil containing up to 2.5 percent sulfur by weight. Previous license restrictions of 1.5% sulfur were based on early 1970s modeling demonstrations, according to #64A, Findings of Fact. Therefore, CMP-Wyman has submitted a revised modeling analysis which demonstrates compliance with Maine Ambient Air Quality Standards while burning fuel oil containing up to 2.5 percent sulfur by weight in Units #1, #2, #3, and #5.

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(19) D. The heat input capacities for Units #1, #2, and #3 for the purpose of Condition (19)C. above shall be demonstrated in accordance with 40 CFR Part 75, Appendix F, 5.2.1, Equation F15.

CMP-Wyman has requested that a method be consistently identified for all units and that Condition (19) be modified to the same method. CMP-Wyman has proposed that the method in 40 CFR Part 75 is not representative at all loads of boiler operation and thus result in false values. For the purpose of the NOx RACT, and also the fuel oil sulfur content increase for Units #1, #2, #3, and #5, the Department determines the minor revision request to be acceptable and the following method shall replace Condition (19)D:

The MMBtu/hr heat input rates of each unit shall be determined by the fuel oil firing rates into each unit. CMP-Wyman shall continuously monitor and record the rate of fuel oil that is fired into and combusted within each unit.

ORDER

The Department hereby grants Air Emission License Minor Revision A-388-71-D-M, subject to the conditions found in Air Emission License A-388-71-A-R, and in the following conditions:

The following shall replace Condition (12)C. of Air Emission License A-388-71-A-R:

(12) The following shall apply to all of the emission limits in this order:

C. Compliance with the CEMS monitored SO₂ lb/MMBtu emission limit for Unit #4, shall be demonstrated for any 3 hour period, in accordance with 40 CFR Part 60.45 (g)(2), which is an arithmetic average of three contiguous one hour periods.

The following shall replace Condition (19)D. of Air Emission License A-388-71-A-R:

(19) NOx RACT

D. The MMBtu/hr heat input rates for Units #1, #2, and #3 for the purpose of Condition (19)C. above shall be determined on a 1 hour block average basis, in accordance with Condition (23) of this license.

The following are new Conditions:

- (22) Fuel Sulfur Increase for Units #1, #2, #3, and #5
CMP-Wyman has an annual capacity factor of 77,193,120 MMBtu/yr, 20% of the annual capacity factor is 15,438,624 MMBtu/yr. The annual average of 4 years is the same as 12 times the monthly average of 48 months, therefore 20% of the annual capacity factor is 1,286,552 MMBtu on a monthly basis.
- A. CMP-Wyman may burn fuel oil containing up to 2.5 percent sulfur by weight as fired in Units #1, #2, #3, and #5, if CMP-Wyman is not consuming more than 1,286,552 MMBtu/month on a 48 month rolling average basis.
- B. After the signature date of this license, when Condition (22)A. is in effect, CMP-Wyman shall:
1. submit to the Department within the quarterly report the total facility consumption of fuel on a MMBtu/month basis for the most recent 51 months.
 2. submit within the quarterly report for the months of that quarter the MMBtu/month values, as determined on a 48 month rolling average basis.
 3. meet the following emission limitations which shall supersede only the referenced emission limit, all other previously specified limits and requirements shall be applicable:

NEW LIMIT		
UNIT	lb SO ₂ /MMBtu	lb SO ₂ /hr
Unit #1	2.62	1,650.6
Unit #2	2.62	1,650.6
Unit #3	2.62	3,117.8
Unit #5	2.62	188.6
LIMIT WHICH IS TO BE SUPERSEDED		
UNIT	lb SO ₂ /MMBtu	lb SO ₂ /hr
Unit #1	2.16	1,360.8
Unit #2	2.16	1,360.8
Unit #3	2.16	2,570.4
Unit #5	2.16	155.5

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4. for the periods of time between when CMP-Wyman is required to burn fuel oil with a sulfur content no greater than 2.0 percent sulfur by weight as fired in Units #1, #2, and #3 and when CMP-Wyman may burn fuel up to 2.5 percent sulfur by weight as fired in Units #1, #2, and #3, prorate each of the SO₂ lb/MMBtu emission limits to reflect the number of days CMP is limited to burning fuel oil with 2.0% sulfur by weight in Units #1, #2, and #3 during the 30 day period.
5. conduct particulate emission testing on Units #1, #2, #3, and #5 and demonstrate compliance while firing fuel oil with up to 2.5 percent sulfur by weight within 60 days of written notification from the Department to perform the test.

(23) The MMBtu/hr heat input rates of each unit shall be determined by the fuel oil firing rates into each unit. CMP-Wyman shall continuously monitor and record the rate of fuel oil that is fired into and combusted within each unit. The fuel oil fired into each unit shall be monitored by a fuel flow monitor operated in accordance with the manufacturers specifications

(24) This amendment shall expire concurrently with Air Emission License A-388-71-A-R.

DONE AND DATED IN AUGUSTA, MAINE THIS 16th DAY OF February 1996.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Edward O. Sullivan
EDWARD O. SULLIVAN, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application January 16, 1996
Date of application acceptance January 16, 1996

Date filed with the Board of Environmental Protection _____

This Order prepared by Kim Hibbard, Bureau of Air Quality Control

