



DEPARTMENT ORDER

Casco Bay Energy Company, LLC
Penobscot County
Veazie, Maine
A-728-77-2-M

Departmental
Findings of Fact and Order
New Source Review
NSR #2

FINDINGS OF FACT

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, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (the Department) finds the following facts:

I. REGISTRATION

A. Introduction

| | |
|--------------------|---|
| FACILITY | Casco Bay Energy Company, LLC (CBEC) |
| LICENSE TYPE | 06-096 C.M.R. ch. 115, Minor Revision |
| NAICS CODES | 221112, Fossil Fuel Electric Power Generation |
| NATURE OF BUSINESS | Electric Services |
| FACILITY LOCATION | 125 Shore Road, Veazie, Maine |

B. NSR License Description

Casco Bay Energy Company, LLC (CBEC) has requested a New Source Review (NSR) license to clarify the licensed status of the inlet fogging systems associated with the Combustion Turbines.

C. Emission Equipment

The following equipment is addressed in this NSR license:

Fuel Burning Equipment

| <u>Equipment</u> | <u>Maximum Capacity (MMBtu/hr)</u> | <u>Maximum Firing Rate (scf/hr)</u> | <u>Fuel Type, % sulfur</u> | <u>Stack #</u> |
|-----------------------|------------------------------------|-------------------------------------|----------------------------|----------------|
| Combustion Turbine #1 | 1937 | 2,039,000 | Natural Gas, neg. | 1 |
| Combustion Turbine #2 | 1937 | 2,039,000 | Natural Gas, neg. | 2 |

D. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

The application submitted by CBEC does not violate any applicable federal or state requirements, does not reduce monitoring, reporting, testing, or recordkeeping requirements, and does not seek to modify a Best Available Control Technology (BACT) analysis.

The proposed revision will not change the facility's emission limits or result in an increase of actual emissions of greater than 4 tons/year of a single pollutant or 8 tons/year of total pollutants, both excluding greenhouse gases. Therefore, the NSR license is determined to be a minor revision under *Minor and Major Source Air Emission License Regulations* 06-96 Code of Maine Rules (C.M.R.) ch. 115. The procedures found in 06-096 C.M.R. ch. 115 can be utilized to process this application since the proposed revision is not prohibited by the Part 70 air emission license. An application to incorporate the requirements of this NSR license into the Part 70 air emission license has been submitted.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

B. Inlet Fogging Systems

1. Project Description

CBEC operates two General Electric GE 7FA combustion turbines with a combined nominal power output of 520 MW at design conditions (45° F, 60% relative humidity). During warmer weather, the turbines are only able to achieve approximately 488 MW of output. In February of 2001, CBEC installed inlet fogging systems on the turbines. The inlet fogging systems each function by reading the ambient temperature and humidity from a weather station and controlling five pumps that supply pressurized water to an array of fog nozzles. When triggered at warmer ambient temperatures, the pumps are activated individually in stages to optimally cool the inlet air of the turbine. Use of the inlet fogging systems allowed for increased output during warm weather to approximately 500 MW. In late 2001, CBEC

identified blade erosion on the turbines' compressors and ceased use of the inlet fogging systems.

CBEC has determined that blade erosion is no longer a significant concern, and has proposed to resume use of the inlet fogging systems to optimize MW output in warmer weather.

To recommission the inlet fogging systems, the following maintenance will be performed:

- Replace O-rings, filters, and cover gaskets
- Change oil in system pumps
- Grease motors
- Inspect drive belts
- Line up water to system
- Individually run each pump by hand to verify operation
- Inspect each system, including the fog nozzle grid

The above maintenance activities are identical to the routine maintenance that would have been performed annually had the inlet fogging systems continued to be utilized since their installation.

2. Department Determination

The Department concurs with CBEC that the activities associated with recommissioning the inlet fogging systems constitutes routine maintenance. The increased firing rate in warmer months will not exceed the 520 MW nominal operating output of the units as originally licensed, and emissions will remain well below the licensed limits.

C. Incorporation Into the Part 70 Air Emission License

The requirements in this 06-096 C.M.R. ch. 115 New Source Review license shall apply to the facility upon issuance. Per *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140 § 1(C)(8), for a modification at the facility that has undergone NSR requirements or been processed through 06-096 C.M.R. ch. 115, the source must apply for an amendment to their Part 70 license within one year of commencing the proposed operations, as provided in 40 C.F.R. Part 70.5. CBEC has submitted this amendment application.

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ORDER

The Department hereby grants New Source Review Minor Revision A-728-77-2-M pursuant to the preconstruction licensing requirements of 06-096 C.M.R. ch. 115.

Severability. The invalidity or unenforceability of any provision of this License or part thereof 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.

SPECIFIC CONDITIONS

No additional conditions are required.

DONE AND DATED IN AUGUSTA, MAINE THIS 15 DAY OF March, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Core for
PAUL MERCER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: November 29, 2017

Date of application acceptance: November 30, 2017

Date filed with the Board of Environmental Protection:

This Order prepared by Benjamin Goundie, Bureau of Air Quality.

