

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

ReEnergy Livermore Falls LLC Androscoggin County Livermore Falls, Maine A-555-77-2-A Departmental
Findings of Fact and Order
New Source Review
NSR #2

FINDINGS OF FACT

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, 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	ReEnergy Livermore Falls LLC (RELF)
LICENSE TYPE	06-096 C.M.R. ch. 115, Minor Modification
NAICS CODES	221117
NATURE OF BUSINESS	Biomass Electrical Power Generation
FACILITY LOCATION	267 Diamond Rd, Livermore Falls, Maine

B. Amendment Description

ReEnergy Livermore Falls LLC (RELF) has requested an amendment to their air emission license to remove emission limits for NO_x that are extraneous, irrelevant, and circular.

C. Emission Equipment

The following equipment is addressed in this NSR license:

	Maximum Heat Input			
Equipment	Capacity (MMBtu/hr)	Max. Firing Rate	% sulfur	Install. Date
Boiler #1	586 (biomass)	65.1 ton/hr	Negligible	1992

ReEnergy Livermore Falls LLC Androscoggin County Livermore Falls, Maine A-555-77-2-A Departmental
Findings of Fact and Order
New Source Review
NSR #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.

2

The application for RELF does not violate any applicable federal or state requirements and does not reduce monitoring, reporting, testing or record keeping. However, this application does seek to modify a Best Practical Treatment (BPT) determination incorporated through New Source Review (NSR).

This modification will not result in any increase in permitted or actual emissions. Therefore, this amendment is determined to be a minor modification under *Minor and Major Source Air Emission License Regulations* 06-096 CMR 115 (as amended). An application to incorporate the requirements of this NSR amendment into the Part 70 air emission license has been submitted to the Department.

II. AMENDMENT DESCRIPTION

A. Boiler #1

Boiler #1 is a wood-fired boiler manufactured by Zurn Energy installed in 1992. It supplies steam to a General Electric steam turbine capable of producing approximately 39.6 gross megawatts of electrical power.

RELF previously amended their air emission license to address emission limits and the installation and operation of NO_x control equipment which allows them to sell energy in the New England renewable energy credit (REC) market. NSR air emission license A-555-77-1-A established additional NO_x emission limits for periods of time when RELF is generating power for distribution and sale to the REC market.

These limits include the following:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability	
NO _x	0.15 (See Note 1&4)	(A-555-77-1-A) 06-096 C.M.R. ch. 115, BACT	Federally Enforceable	
NO _x	0.10 (See Note 2&4)	(A-555-77-1-A) 06-096 C.M.R. ch. 115, BACT	Federally Enforceable	
NO _x	0.075 (See Note 3)	(A-555-77-1-A) 06-096 C.M.R. ch. 115, BACT	Federally Enforceable	

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

Pollutant	lb/hr	Origin and Authority	Enforceability
NO _x	87.9 (See Note 1&4)	(A-555-77-1-A) 06-096 C.M.R. ch. 115, BACT	Federally Enforceable
NO _x	58.3 (See Note 2&4)	(A-555-77-1-A) 06-096 C.M.R. ch. 115, BACT	Federally Enforceable
NO _x	43.8 (See Note 3)	(A-555-77-1-A) 06-096 C.M.R. ch. 115, BACT	Federally Enforceable

3

- Note 1: Emission limit is applicable at all times during plant operation based on a 24-hour block average.
- Note 2: Emissions limit is applicable at all times the facility is generating power for distribution and sale as renewable energy in the New England renewable energy market, based on a 24-hour block average.
- Note 3: Emissions limit is applicable at all times the facility is generating energy for distribution and sale as renewable energy in the New England renewable energy market, based on a quarterly average.
- Note 4: A 24-hour block average shall be defined as midnight to midnight.

BACT for NO_x from Boiler #1, the facility's annual emissions, and compliance with ambient air quality standards are based on the 0.15 lb/MMBtu and 87.9 lb/hr emission limits and not the lower limits reserved only for when the facility is generating power for sale on the REC market. In addition, the add-on NO_x pollution control equipment (ECOTUBE) is not required to be operated provided Boiler #1 does not exceed the 0.15 lb/MMBtu emission limit.

RELF has requested that the 0.10 lb/MMBtu and 0.075 lb/MMBtu emission limits and the associated lb/hr NO_x emission limits be removed from their license. These limits are extraneous and irrelevant since they pertain only to RELF's participation in the REC market. These limits are also circular in nature since failure to meet the lower limits automatically disqualifies RELF from the REC market which in turn exempts them from the lower emission limits.

The Department agrees with RELF's assessment and has determined that compliance with emission limits of 0.15 lb/MMBtu and 87.9 lb/hr and the operation of the ECOTUBE system, as necessary to meet these emission limits, to be BACT for NO_x from Boiler #1.

B. Annual Emissions

This amendment does not affect permitted annual emissions of any regulated pollutant.

ReEnergy Livermore Falls LLC Androscoggin County Livermore Falls, Maine A-555-77-2-A Departmental
Findings of Fact and Order
New Source Review
NSR #2

III. AMBIENT AIR QUALITY ANALYSIS

RELF 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 (see license A-555-77-1-A issued on 3/10/08). An additional ambient air quality analysis is not required for this amendment.

4

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 New Source Review License A-555-77-2-A pursuant to the preconstruction licensing requirements of 06-096 C.M.R. ch. 115 and subject to the standard and special conditions below.

<u>Severability</u>. 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

The following shall replace Condition (16)(A) of Air Emission License A-555-77-1-A:

(16) **Boiler #1**

A. NO_x, CO, and VOC emissions from Boiler #1 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
NO _x	0.15 (See Note 1)	06-096 C.M.R. ch. 115, BACT	Federally Enforceable
СО	0.95 (See Note 1)	06-096 C.M.R. ch. 115, BACT	Federally Enforceable

ReEnergy Livermore Falls LLC Androscoggin County Livermore Falls, Maine A-555-77-2-A

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

Pollutant	lb/hr	Origin and Authority	Enforceability		
NO _x	87.9 (See Note 1)	06-096 C.M.R. ch, 115, BACT	Federally Enforceable		
СО	556.6 (See Note 1)	06-096 C.M.R. ch. 115, BACT	Federally Enforceable		
VOC	12.0 (See Note 2)	06-096 C.M.R. ch. 115, BACT	Federally Enforceable		

5

Note 1: Emission limit is applicable at all times during plant operation based on a 24-hour block average. A 24-hour block average shall be defined as midnight to midnight.

Note 2: Emission limit is applicable at all times during plant operation.

DONE AND DATED IN AUGUSTA, MAINE THIS	15	DAY OF	June	, 2017.
DEPARTMENT OF ENVIRONMENTAL PROTECTION	ON			
BY: Marc Allen Robert Case for PAUL MERCER, COMMISSIONER		_		

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 2/17/17
Date of application acceptance: 2/22/17

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Muzzey, Bureau of Air Quality.

F11ea IUN 15 2017

State of Maine Board of Environmental Protection