



DEPARTMENT ORDER

**FPL Energy Cape, LLC
Cumberland County
South Portland, Maine
A-612-71-H-R**

**Departmental
Findings of Fact and Order
Air Emission License
Renewal**

FINDINGS OF FACT

After review of the air emission license renewal 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 (Department) finds the following facts:

I. REGISTRATION

A. Introduction

FPL Energy Cape, LLC (FPL) has applied to renew their Air Emission License for the operation of emission sources associated with their power generation facility.

The equipment addressed in this license is located at 2 Ocean Street, South Portland, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity	Fuel Type, % sulfur	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.	Stack #
Turbine #4	327.6	22 MW	Distillate fuel, 0.0015%	2,340	Pre-1970	1970	4
Turbine #5	327.6	22 MW	Distillate fuel, 0.0015%	2,340	Pre-1970	1970	5
Diesel #4	4.23	600 hp	Distillate fuel, 0.0015%	30.9	Pre-1970	1970	4
Diesel #5	4.23	600 hp	Distillate fuel, 0.0015%	30.9	Pre-1970	1970	5

Parts Washer

Equipment	Capacity (gallons)	Solvent	Solvent %VOC
Parts Washer	15	Safety Kleen Premium Gold	100

C. Definitions

Distillate Fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

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 for FPL does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

E. Facility Classification

With the annual fuel limit on Turbines #4 and #5 and Diesels #4 and #5, the facility is licensed as follows:

- As a synthetic minor source of air emissions, because FPL is subject to license restrictions that keep facility emissions below major source thresholds for criteria pollutants; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

Emissions of NO_x are licensed above 80% of the major source threshold. Therefore, this facility is classified as an “80% Synthetic Minor” for the purpose of determining the minimum required compliance inspection frequency in accordance with Maine’s Compliance Monitoring Strategy.

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.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Turbines

FPL operates two turbines, designated Turbines #4 and #5, used as peaking units for Independent Systems Operator – New England (ISO-New England) and reserve capacity for Nextera Energy Resources. The units are both General Electric model MS5000M turbines rated at 22 MW. Both units fire distillate fuel.

1. BPT Findings

The BPT emission limits for the turbines are based on the following:

PM/PM ₁₀	- 0.06 lb/MMBtu [A-612-71-B-R (3/27/1996), BPT]
SO ₂	- combustion of distillate fuel with a maximum sulfur content not to exceed 0.0015% sulfur by weight
NO _x	- 0.63 lb/MMBtu from manufacturer's data
CO	- 0.05 lb/MMBtu [A-612-71-B-R (3/27/1996), BPT]
VOC	- 0.017 lb/MMBtu [A-612-71-B-R (3/27/1996), BPT]
Visible Emissions	- 06-096 C.M.R. ch. 115, BPT

The BPT emission limits for the turbines are the following:

Unit	Pollutant	lb/MMBtu
Turbine #4	PM	0.06
Turbine #5	PM	0.06

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Turbine #4 (327.6 MMBtu/hr) Distillate fuel	19.66	19.66	0.49	206.39	16.38	5.57
Turbine #5 (327.6 MMBtu/hr) Distillate fuel	19.66	19.66	0.49	206.39	16.38	5.57

Visible emissions from each of the distillate fuel-fired turbines shall not exceed 20% opacity on a six-minute block average basis except for periods of startup, shutdown, and malfunction during which time FPL shall comply with the following work practice standards.

- a. FPL shall maintain a log (written or electronic) of the date, time, and duration of all startups, shutdowns, malfunctions, or equipment maintenance.
- b. FPL shall develop and implement a written startup and shutdown plan.
- c. The duration of unit startups, shutdowns, malfunctions, or equipment maintenance shall each not exceed one hour per occurrence, unless otherwise defined and provided for in FPL's air emission license.
- d. The turbines, including any associated air pollution control equipment, shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the units.

The Department has determined that the proposed BPT visible emission limit is more stringent than the applicable limit in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit for each turbine has been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the air emission license.

The turbines shall each be limited to 500 hr/yr of operation based on a twelve-month rolling total. Compliance shall be demonstrated by a written log of all turbine operating hours.

2. New Source Performance Standards (NSPS)

Because they were manufactured prior to 1977, the turbines listed above are not subject to the New Source Performance Standards (NSPS) *Standards of Performance for Stationary Gas Turbines* 40 C.F.R. Part 60, Subpart GG. [40 C.F.R. § 60.330]

C. Diesel Engines

Each turbine is equipped with a 4.23 MMBtu/hr (600 hp) diesel internal combustion engine that is used to start the turbine, designated Diesel #4 and Diesel #5. Each time the turbines are started, the corresponding engine runs for three minutes to start the turbine and then requires a ten minute cool-down period.

1. BPT Findings

The BPT emission limits for the generators are based on the following:

- PM/PM₁₀ - 0.12 lb/MMBtu from 06-096 C.M.R. ch. 103
- SO₂ - combustion of distillate fuel with a maximum sulfur content not to exceed 0.0015% sulfur by weight
- NO_x - 3.2 lb/MMBtu from AP-42 Table 3.4-1 dated 10/96
- CO - 0.85 lb/MMBtu from AP-42 Table 3.4-1 dated 10/96
- VOC - 0.09 lb/MMBtu from AP-42 Table 3.4-1 dated 10/96
- Visible Emissions - 06-096 C.M.R. ch. 115, BPT

The BPT emission limits for the generators are the following:

Unit	Pollutant	lb/MMBtu
Diesel #4	PM	0.12
Diesel #5	PM	0.12

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Diesel #4 (4.23 MMBtu/hr) Distillate fuel	0.51	0.51	0.01	13.54	3.60	0.38
Diesel #5 (4.23 MMBtu/hr) Distillate fuel	0.51	0.51	0.01	13.54	3.60	0.38

Visible emissions from each of the distillate fuel-fired engines shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time FPL shall comply with the following work practice standards.

- a. FPL shall maintain a log (written or electronic) of the date, time, and duration of all engine startups.
- b. The engines shall be operated in accordance with the manufacturer's emission-related operating instructions.
- c. FPL shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations shall apply.
- d. The engines, including any associated air pollution control equipment, shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

The Department has determined that the proposed BPT visible emission limit is more stringent than the applicable limit in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit for each engine has been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the air emission license.

2. Diesels #4 and #5 shall each be limited to 100 hrs/yr of operation for testing and maintenance, and no more than 200 hrs/yr of total operation on a 12-month rolling total basis. Hours of operation shall be recorded using a non-resettable hour meter installed on each engine. [06-096 C.M.R. ch. 115, BPT]
3. New Source Performance Standards (NSPS)

Due to the dates of manufacture of the compression ignition engines listed above, the engines are not subject to the New Source Performance Standards (NSPS) *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE)*, 40 C.F.R. Part 60, Subpart IIII since the units were manufactured prior to April 1, 2006. [40 C.F.R. § 60.4200]

4. National Emission Standards for Hazardous Air Pollutants (NESHAP):
40 C.F.R. Part 63, Subpart ZZZZ

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ is applicable to the engines listed above. The units are considered existing, black start, stationary reciprocating internal combustion engines at an area HAP source and are not subject to New Source Performance Standards regulations. [40 C.F.R. § 63.6585]

A summary of the currently applicable federal 40 C.F.R. Part 63, Subpart ZZZZ requirements is listed below.

a. Operation and Maintenance Requirements
(40 C.F.R. § 63.6603(a) and Table 2(d))

	Operating Limitations
Compression ignition (distillate fuel) units: Diesel #4 Diesel #5	- Change oil and filter annually; - Inspect the air cleaner annually and replace as necessary; and - Inspect all hoses and belts annually and replace as necessary.

Diesel #4 and Diesel #5 shall be operated and maintained according to the manufacturer's emission-related written instructions, or FPL shall develop a maintenance plan which provides to the extent practicable for the maintenance and operation of the engines in a manner consistent with good air pollution control practices for minimizing emissions. FPL shall keep records of maintenance performed. [40 C.F.R. § 63.6625(e) and 40 C.F.R. § 63.6655(e)]

b. Optional Oil Analysis Program

FPL has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, FPL must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R. § 63.6625(i)]

c. Startup Idle and Startup Time Minimization Requirements

During periods of startup FPL must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 C.F.R. § 63.6625(h) and 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

D. Fuel Restrictions

Facility-wide fuel use shall not exceed 2,183,000 gal/year of distillate fuel. Compliance shall be demonstrated by a record of fuel use that includes gallons of fuel used and the sulfur content of the fuel. The record shall be maintained on a monthly and 12-month rolling total basis.

E. Parts Washer

The parts washer has a design capacity of 15 gallons and uses Safety Kleen Premium Gold solvent. The parts washer is subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130, and records shall be kept documenting compliance.

F. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a five-minute block average basis.

G. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.

H. Emissions Statement

FPL is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. FPL shall maintain the following records in order to comply with this rule:

1. The amount of distillate fuel fired in Turbine #4, Turbine #5, Diesel #4, and Diesel #5 (each) on a monthly basis;
2. The sulfur content of the distillate fuel fired in Turbine #4, Turbine #5, Diesel #4, and Diesel #5; and
3. Hours of operation for each emission unit on a monthly basis.

In reporting year 2020 and every third year thereafter, FPL shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. FPL shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

I. Annual Emissions

FPL shall be restricted to the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on a facility-wide limit of 2,183,000 gal/yr of distillate fuel, each diesel engine running for 200 hrs/year, and all remaining fuel fired in the turbines:

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Turbines	9.1	9.1	0.4	95.7	7.6	2.6
Engines	0.1	0.1	0.1	2.8	0.7	0.1
Total TPY	9.2	9.2	0.5	98.5	8.3	2.7

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

III. **AMBIENT AIR QUALITY ANALYSIS**

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM ₁₀	25
SO ₂	50
NO _x	50
CO	250

FPL previously submitted an ambient air quality impact analysis for air emission license A-612-72-B-R (dated March 27, 1996) demonstrating that emissions from the facility, in conjunction with all other sources, do not violate Ambient Air Quality Standards (AAQS). An additional air quality impact analysis is not required for this renewal.

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, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-612-71-H-R subject to the following conditions.

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.

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 (38 M.R.S. § 347-C).
- (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 115. [06-096 C.M.R. ch. 115]
- (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. [06-096 C.M.R. ch. 115]
- (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. [06-096 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]

- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 C.M.R. ch. 115]
- (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. [06-096 C.M.R. ch. 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. 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 a renewal of a license or amendment shall not stay any condition of the license. [06-096 C.M.R. ch. 115]
- (10) 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. [06-096 C.M.R. ch. 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:
 - A. Perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 1. 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; or
 2. 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 C.F.R. 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. [06-096 C.M.R. ch. 115]

- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate 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 C.F.R. 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.
[06-096 C.M.R. ch. 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, 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. [06-096 C.M.R. ch. 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and 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 state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 C.M.R. ch. 115]
- (15) Upon written request from 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 a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.
[06-096 C.M.R. ch. 115]

SPECIFIC CONDITIONS

(16) Fuel

- A. Total fuel use for Turbines #4 and #5 and Diesels #4 and #5 combined shall not exceed 2,183,000 gal/yr of distillate fuel, based on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]
- B. The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). The facility may continue to burn the remaining fuel in the fuel storage tanks which has may exceed this sulfur limit, but must comply with the 0.0015% by weight sulfur limit on all distillate fuel received as of the effective date of this license. [06-096 C.M.R. ch. 115, BPT]
- C. Compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the tank containing the fuel to be fired. [06-096 C.M.R. ch. 115, BPT]

(17) Turbines #4 and #5

- A. Turbines #4 and #5 shall each be limited to 500 hrs/year operation on a 12-month rolling total basis. Compliance shall be demonstrated by a written log of all turbine operating hours. [06-096 C.M.R. ch. 115, BPT]
- B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Turbine #4	PM	0.06	06-096 C.M.R. ch. 115, BPT
Turbine #5	PM	0.06	06-096 C.M.R. ch. 115, BPT

- C. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Turbine #4	19.66	19.66	0.49	206.39	16.38	5.57
Turbine #5	19.66	19.66	0.49	206.39	16.38	5.57

Visible emissions from each of the distillate fuel-fired turbines shall not exceed 20% opacity on a six-minute block average basis except for periods of startup, shutdown, and malfunction during which time FPL shall comply with the following work practice standards. [06-096 C.M.R. ch. 115, BPT]

1. FPL shall maintain a log (written or electronic) of the date, time, and duration of all startups, shutdowns, malfunctions, or equipment maintenance.
2. FPL shall develop and implement a written startup and shutdown plan.
3. The duration of unit startups, shutdowns, malfunctions, or equipment maintenance shall each not exceed one hour per occurrence, unless otherwise defined and provided for in FPL's air emission license.
4. The turbines, including any associated air pollution control equipment, shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the units.

(18) **Diesel Engines #4 and #5**

A. Each of the engines shall be limited to 100 hrs/yr of operation for maintenance and testing purposes, and no more than 200 hrs/yr of total operation on a 12-month rolling total basis. Hours of operation shall be recorded using the non-resettable hour meter installed on each engine. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Diesel #4	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)
Diesel #5	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)

C. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Diesel #4 (4.23 MMBtu/hr) Distillate fuel	0.51	0.51	0.01	13.54	3.60	0.38
Diesel #5 (4.23 MMBtu/hr) Distillate fuel	0.51	0.51	0.01	13.54	3.60	0.38

- D. Visible emissions from each of the distillate fuel-fired engines shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time FPL shall comply with the following work practice standards. [06-096 C.M.R. ch. 115, BPT]
1. FPL shall maintain a log (written or electronic) of the date, time, and duration of all engine startups.
 2. The engines shall be operated in accordance with the manufacturer's emission-related operating instructions.
 3. FPL shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations shall apply.
 4. The engines, including any associated air pollution control equipment, shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.
- E. Diesels #4 and #5 shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following:
[incorporated under 06-096 C.M.R. ch. 115, BPT]
1. FPL shall meet the following operational limitations for each of the compression ignition black start engines:
 - a. Change the oil and filter annually,
 - b. Inspect the air cleaner annually and replace as necessary, and
 - c. Inspect the hoses and belts annually and replace as necessary.

Records shall be maintained documenting compliance with the operational limitations.

[40 C.F.R. § 63.6603(a) and Table 2(d); and 06-096 C.M.R. ch. 115]

2. Oil Analysis Program Option
FPL has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, FPL must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes

for each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R. § 63.6625(i)]

3. Operation and Maintenance

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or FPL shall develop a maintenance plan which provides to the extent practicable for the maintenance and operation of each engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e)]

4. Startup Idle and Startup Time Minimization

During periods of startup, the facility must minimize each engine's time spent at idle and minimize each engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

(19) **Parts Washer**

Parts washers at FPL are subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130.

- A. FPL shall keep records of the amount of solvent added to each parts washer. [06-096 C.M.R. ch. 115, BPT]
- B. The following are exempt from the requirements of 06-096 C.M.R. ch. 130 [06-096 C.M.R. ch. 130]:
 - 1. Solvent cleaners using less than two liters (68 oz.) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
 - 2. Wipe cleaning; and,
 - 3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
- C. The following standards apply to cold cleaning machines that are applicable sources under 06-096 C.M.R. ch. 130.
 - 1. FPL shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 C.M.R. ch. 130]:
 - a. Waste solvent shall be collected and stored in closed containers.
 - b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.

- d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
 - e. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the parts washer.
 - f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
 - g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
 - h. Work area fans shall not blow across the opening of the parts washer unit.
 - i. The solvent level shall not exceed the fill line.
2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 C.M.R. ch. 130]
 3. The parts washer shall be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent.
[06-096 C.M.R. ch. 130]

(20) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a five-minute block average basis.
[06-096 C.M.R. ch. 115, BPT]

(21) **General Process Sources**

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(22) **Annual Emission Statement**

- A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, FPL shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.
- B. FPL shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:
 1. The amount of distillate fuel fired in Turbine #4, Turbine #5, Diesel #4, and Diesel #5 (each) on a monthly basis;
 2. The sulfur content of the distillate fuel fired in Turbine #4, Turbine #5, Diesel #4, and Diesel #5;
 3. Hours of operation for each emission unit on a monthly basis.
[06-096 C.M.R. ch. 137]

- C. In reporting year 2020 and every third year thereafter, FPL shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). FPL shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]
- (23) FPL shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605).

DONE AND DATED IN AUGUSTA, MAINE THIS 10th DAY OF May, 2019.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: [Signature]
GERALD D. REID, COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: January 21, 2016

Date of application acceptance: January 26, 2016

Date filed with the Board of Environmental Protection:

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

