



DEPARTMENT ORDER

**Central Maine Power Company
Kennebec County
Augusta, Maine
A-952-71-C-R/A**

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

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

Central Maine Power Company (CMP) has applied to renew and amend their Air Emission License for the operation of various portable distillate fuel-fired generator sets, also called distributed generation units (DG Units).

The main office managing this equipment is located at 83 Edison Drive in Augusta, Maine.

CMP was previously licensed to operate four DG Units limited to using 271,600 gallons/year of distillate fuel combined. CMP has requested an amendment to their license to operate an unlimited number of DG Units and to increase the combined fuel limit to 320,000 gallons/year of distillate fuel.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Engines

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (HP)	Fuel Type	Firing Rate (gal/hr)	Date of Manuf.
DG Units	Varies	Varies	distillate fuel	Varies	Varies

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.

Portable or Non-Road Engine means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

An engine is not a non-road (portable) engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road (portable) engine and is subject to applicable stationary engine requirements.

Records or Logs mean either hardcopy or electronic records.

D. Application Classification

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

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the “Significant Emissions” levels as defined in the Department’s *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

Pollutant	Current License (tpy)	Future License (tpy)	Net Change (tpy)	Significant Emission Levels
PM	0.7	2.6	+1.9	100
PM ₁₀	0.7	2.6	+1.9	100
PM _{2.5}	0.7	2.6	+1.9	100
SO ₂	0.1	0.1	–	100
NO _x	57.5	96.7	+39.2	100
CO	5.8	20.8	+15.0	100
VOC	1.3	7.9	+6.4	50*

* The DG Units may be deployed throughout the state including areas of the state in the Ozone Transport Region. Therefore, the significant emission level for VOC is 50 tpy.

This modification is determined to be a minor modification and has been processed as such. Therefore, the license is considered to be a renewal of currently licensed emission units with a minor modification 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 use limit on the DG Units, the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants because CMP is subject to license restrictions that keep facility emissions below major source thresholds for NO_x and CO; 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 new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental, and energy impacts.

B. DG Units

CMP conducts regular maintenance and upgrades on their transmission lines. This work can sometimes not occur without temporary discontinuation of an area's electric supply. In order to avoid interruption to their customers, CMP uses DG Units to supply electricity to a portion of the grid while work is conducted. Additionally, unforeseen circumstances, such as storm events, fires, floods, and car accidents, may cause power outages due to direct damage to the grid. CMP relies to DG Units to supply customers with service until emergency repairs can be made.

The DG Units are portable, trailer-mounted units that are either owned by CMP or rented from another entity. Thus, the exact size and age of each DG Unit deployed may vary. All DG Units will fire distillate fuel with a sulfur content not to exceed 0.0015% sulfur by weight (15 ppm).

1. Engine Classification

As described above, the DG Units are trailer-mounted. They will not be located at a single location for extended periods. The substations where they will be located are not intended to be powered by internal combustion engine generators under normal conditions. Therefore, in accordance with guidance from EPA, unless a DG Unit (or its replacement) is deployed and operated at a single location for more than 12 months, its engine is not considered a stationary engine. The engine is instead considered a nonroad engine in accordance with the definitions contained in 40 C.F.R. § 1068.30.

As nonroad engines that are not used to power process equipment, these engines are not required to be licensed pursuant to 06-096 C.M.R. ch. 115. However, CMP has elected to apply for and maintain an air emission license anyway for transparency and in order to document the engines' nonroad status.

CMP shall notify the Department in writing within three business days of both the deployment and removal of a DG Unit from any location where it will be operated.

2. BACT Findings

The BACT emission limits for the DG Units are based on the following:

PM/PM ₁₀ /PM _{2.5}	–	0.12 lb/MMBtu from 06-096 C.M.R. ch. 103
SO ₂	–	Combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
NO _x	–	4.41 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96
CO	–	0.95 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96
VOC	–	0.36 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96

Visible Emissions – 06-096 C.M.R. ch. 115, BACT

Since the DG Units may be either greater than or less than 4.2 MMBtu/hr, the emission limits for NO_x, CO, and VOC are based on the worst-case (i.e., highest) emission factors for distillate fuel-fired engines in EPA's compilation of emission factors, AP-42. Since the maximum input capacity for each DG Unit may vary, emission limits for these units are established in units of lb/MMBtu instead of maximum lb/hr limits.

The BACT emission limits for the DG Units are the following:

Unit	PM/PM ₁₀ /PM _{2.5} (lb/MMBtu)	SO ₂ (lb/MMBtu)	NO _x (lb/MMBtu)	CO (lb/MMBtu)	VOC (lb/MMBtu)
DG Units (each)	0.12	0.0015	4.41	0.95	0.36

Visible emissions from each DG Unit shall not exceed 20% opacity on a six-minute block average basis.

The DG Units shall be limited to a fuel use of 320,000 gallons/year on a 12-month rolling total basis for all DG Units combined. Compliance shall be demonstrated through recordkeeping including the amount of distillate fuel fired and sulfur content of the fuel.

No DG Unit or combination of DG Units may be operated at any individual site for more than 500 hours per year on a 12-month rolling total basis. Compliance shall be demonstrated through recordkeeping for each DG Unit, including each DG Unit's location when operated (including latitude and longitude), hours of operation at each location, and all hours of operation on a monthly and 12-month rolling total basis.

3. Chapter 169

Stationary Generators, 06-096 C.M.R. ch. 169, is not applicable to the DG Units because they are powered by engines that are classified as nonroad engines and not stationary engines.

4. New Source Performance Standards (NSPS)

The DG Units are not subject to *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, 40 C.F.R. Part 60, Subpart IIII, because they are powered by engines that are classified as nonroad engines and not stationary engines.

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

The DG Units are not subject to *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ, because they are powered by engines that are classified as nonroad engines and not stationary engines.

C. Emission Statements

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

1. The amount of distillate fuel fired in each DG Unit on a monthly basis;
2. The sulfur content of the distillate fuel fired in the DG Units;
3. The location (latitude and longitude) where each DG Unit was operated, the unit's size (MMBtu/hr of heat input), and the hours of operation at each location.

In reporting year 2023 and every third year thereafter, CMP 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. CMP 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)]

D. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on firing 320,000 gallons/year of distillate fuel in the DG Units.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

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

	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
DG Units	2.6	2.6	2.6	0.1	96.7	20.8	7.9
Total TPY	2.6	2.6	2.6	0.1	96.7	20.8	7.9

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
PM _{2.5}	15
SO ₂	50
NO _x	50
CO	250

The total annual licensed emissions of NO_x is above the emission level contained in the table above. However, in accordance with EPA guidance¹ on the treatment of intermittent emissions, an ambient air quality impact analysis is not required for the DG Units given the intermittent nature of their use and this use being limited to 500 hours per year.

This determination is based on information provided by the applicant regarding the licensed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require CMP to submit additional information and may require an ambient air quality impact analysis at that time.

¹ U.S. EPA, "Memorandum: Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO₂ National Ambient Air Quality Standard." March 2011. Available online: https://www.epa.gov/sites/default/files/2015-07/documents/appwno2_2.pdf

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-952-71-C-R/A 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 the written test report by the Department, or another alternative timeframe approved by the Department, 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 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]

- (16) The licensee 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). [06-096 C.M.R. ch. 115]

SPECIFIC CONDITIONS

(17) **DG Units**

- A. CMP is licensed to operate portable, trailer-mounted DG Units throughout the state. [06-096 C.M.R. ch. 115, BACT]
- B. Fuel
1. Total fuel use for all DG Units combined shall not exceed 320,000 gallons/year of distillate fuel, based on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT]
 2. CMP shall not purchase or otherwise obtain distillate fuel for use in the DG Units with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BACT]
 3. Compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel used. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, a statement from the supplier that the fuel delivered meets Maine's fuel sulfur content standards, fuel supplier certification, certificate of analysis, or testing of fuel in the tank on-site. [06-096 C.M.R. ch. 115, BACT]
- C. Emissions from each DG Unit shall not exceed the following:

Pollutant	lb/MMBtu
PM	0.12
PM ₁₀	0.12
PM _{2.5}	0.12
SO ₂	0.0015
NO _x	4.41
CO	0.95
VOC	0.36

[06-096 C.M.R. ch. 115, BACT]

- D. Visible emissions from each DG Unit shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

- E. No DG Unit or combination of DG Units may be operated at any individual site for more than 500 hours per year on a 12-month rolling total basis. Compliance shall be demonstrated through recordkeeping for each DG Unit including each DG Unit's location when operated (including latitude and longitude), hours of operation at each location, and all hours of operation on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT]

(18) **Relocation Notices**

- A. CMP shall notify the Department in writing within three business days of both the deployment and removal of a DG Unit from any location where it will be operated. It is preferred for notice of relocation to be submitted through the Department's on-line e-notice at: www.maine.gov/dep/air/compliance/forms/relocation

Written notice may also be sent by mail. Notification sent by mail shall be sent to the address below:

Attn: Relocation Notice
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

- B. The notification shall include the license number, identification of the equipment moved, the equipment's new location, the date the equipment was moved.

(19) **Annual Emission Statements**

- A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, CMP 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. CMP 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 each DG Unit on a monthly basis;
2. The sulfur content of the distillate fuel fired in the DG Units;
3. The location (latitude and longitude) where each DG Unit was operated, the unit's size (MMBtu/hr of heat input), and the hours of operation at each location.
[06-096 C.M.R. ch. 137]

- C. In reporting year 2023 and every third year thereafter, CMP shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). CMP 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)]

- (20) If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, CMP may be required to submit additional information. Upon written request from the Department, CMP shall provide information necessary to demonstrate AAQS will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter.
[06-096 C.M.R. ch. 115, § 2(O)]

DONE AND DATED IN AUGUSTA, MAINE THIS 23rd DAY OF OCTOBER, 2023.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for
MELANIE LOYZIM, 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: 8/2/2023

Date of application acceptance: 8/2/2023

Date filed with the Board of Environmental Protection:

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

