



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

DEPARTMENT ORDER

**GE Vernova Operations LLC  
Penobscot County  
Bangor, Maine  
A-404-71-W-R/A/T**

**Departmental  
Findings of Fact and Order  
Air Emission License  
Renewal and After-the-Fact  
Transfer and Amendment**

**FINDINGS OF FACT**

After review of the air emission license renewal, amendment, and transfer 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**

GE Vernova Operations LLC (GE Vernova) has requested an after-the-fact transfer of Air Emission License from General Electric Company. Additionally, GE Vernova has applied to renew their Air Emission License for the operation of emission sources associated with their steam turbine manufacturing facility. GE Vernova has requested an after-the-fact amendment to their license in order to add seven natural gas-fired make-up air units and heaters that were each installed in 2011. GE Vernova has requested to correct the heat input size of Boilers #1 and #2 and Stress Relief Furnaces #1, #2, and #3. GE Vernova has also removed Boiler #3 and all parts washers from the facility. The equipment addressed in this license is located at 534 Griffin Road and 70 Maine Avenue, Bangor, Maine.

GE operates equipment at two facilities in Bangor, Maine: one on Griffin Road and one on Maine Avenue. The Griffin Road facility consists of Buildings 10, 15, 20, 30, and 40. The Maine Avenue facility consists of Buildings 45, 50, 60, 70, 75, and 80. Due to operational demands and production needs, equipment may occasionally be moved from one facility to the other in an effort to run efficiently and optimize production.

**B. Title, Right, or Interest**

In their application, GE Vernova submitted copies of property deeds transferring ownership of General Electric Company to GE Vernova Operations LLC. The parties have provided sufficient evidence of title, right, or interest in the facility to allow the transfer of the facility's licenses.

C. Technical Capacity and Intent

GE Vernova's acquisition of the facility is not expected to result in any significant change in the employees who currently operate the equipment and facilities and conduct activities relative to the air emission license. The facility's regulatory history with the Department demonstrates that the environmental personnel are competent in air pollution control. The information submitted in the application provides sufficient evidence that GE Vernova has the technical capacity and intent to comply with their air emission license.

D. Full Name and Address

The full name and address of the new owner is:

GE Vernova Operations LLC  
534 Griffin Road  
Bangor, ME 04401

E. Certification

GE Vernova certifies that there will be no increase in air emissions beyond that provided for in the existing licenses, either in quantity or type.

F. Emission Equipment

The following equipment is addressed in this air emission license:

**External Combustion Units**

Equipment	Location	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Boiler #1	Building 30	2.7 <sup>+</sup>	2,647 scf/hr 19.3 gal/hr	Natural gas Distillate fuel	1993	1993	Bldg 30, #1
Boiler #2	Building 30	2.7 <sup>+</sup>	2,647 scf/hr 19.3 gal/hr	Natural gas Distillate fuel	1993	1993	Bldg 30, #2
<i>Boiler #3*</i>	<i>Building 30</i>	<i>2.1</i>	<i>2,059 scf/hr 15.0 gal/hr</i>	<i>Natural gas Distillate fuel</i>	<i>1981</i>	<i>1981</i>	<i>Bldg 30, #3</i>
Boiler #4	Building 20	7.0	50 gal/hr	Distillate fuel	1960	1994	Bldg 20, #4
Boiler #5	Building 10	5.0	4,902 scf/hr 35.7 gal/hr	Natural gas Distillate fuel	2000	2001	Bldg 10, #5
Boiler #6	Building 10	5.0	4,902 scf/hr 35.7 gal/hr	Natural gas Distillate fuel	2000	2001	Bldg 10, #5
Boiler #7	Building 45	3.4	3,333 scf/hr 24.3 gal/hr	Natural gas Distillate fuel	1981	1994	Bldg 45, #6

Equipment	Location	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Boiler #8	Building 45	3.4	3,333 scf/hr 24.3 gal/hr	Natural gas Distillate fuel	1981	1994	Bldg 45, #6
Boiler #9	Building 45	3.4	3,333 scf/hr 24.3 gal/hr	Natural gas Distillate fuel	1994	1994	Bldg 45, #6
Stress Relief Furnace #1	Building 70	12.0 <sup>++</sup>	11,765 scf/hr	Natural gas	1995	1995	Bldg 70, #453
Stress Relief Furnace #2	Building 50	6.0 <sup>+++</sup>	5,882 scf/hr	Natural gas	1997	1997	Bldg 50, #511
Stress Relief Furnace #3	Building 50	6.0 <sup>+++</sup>	5,882 scf/hr	Natural gas	2001	2001	Bldg 50, #512
Make-up Air Unit #1**	Building 80	1.2	1,176 scf/hr	Natural gas	2010	2011	--
Make-up Air Unit #2**	Building 80	1.2	1,176 scf/hr	Natural gas	2010	2011	--
Make-up Air Unit #3**	Building 80	1.2	1,176 scf/hr	Natural gas	2010	2011	--
Wall Heater #1**	Building 75	1.0	980 scf/hr	Natural gas	2010	2011	4" vent
Wall Heater #2**	Building 75	1.0	980 scf/hr	Natural gas	2010	2011	4" vent
Wall Heater #3**	Building 75	1.0	980 scf/hr	Natural gas	2010	2011	4" vent
OH Door Heater**	Building 80	1.0	980 scf/hr	Natural gas	2010	2011	4" vent

\* Removed from license

\*\* New to the license

+ Formerly 3.6 MMBtu/hr

++ Formerly 9.0 MMBtu/hr

+++ Formerly 4.7 MMBtu/hr

### Stationary Engines

Equipment	Max. Input Capacity (MMBtu/hr)	Fuel Type	Firing Rate	Date of Manuf.	Date of Install.
Emergency Generator No. 1	0.54	Distillate fuel	3.9 gal/hr	2002	2002
Emergency Generator No. 2	1.0	Natural gas	1,020 scf/hr	2008	2008

GE Vernova may operate small stationary engines smaller than 0.5 MMBtu/hr. These engines are considered insignificant activities and are not required to be included in this license. However, they are still subject to applicable State and Federal regulations. More information regarding requirements for small stationary engines is available on the Department's website at the link below.

<http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf>

Additionally, GE Vernova may operate portable engines used for maintenance or emergency-only purposes. These engines are considered insignificant activities and are not required to be included in this license. However, they may still be subject to applicable State and Federal regulations.

### Process Equipment

Equipment	Type of Equipment	Location	Pollution Control Equipment	Stack #
Cutter	Grinder	Building 30	Baghouse	Bldg 30, #3
GB #1	Grit Blast Booth	Building 40	Cyclone	Bldg 40, #1
HVOF	Thermal Spray	Building 80	Dust Collector	Bldg 80, #1

#### G. 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.

#### H. 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.

GE Vernova has applied to renew currently licensed emission units as well as modify their license as addressed in Section I(A) above.

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	5.0	4.3	-0.7	100
PM <sub>10</sub>	5.0	4.3	-0.7	100
PM <sub>2.5</sub>	--	4.3	4.3 <sup>1</sup>	100
SO <sub>2</sub>	0.2	0.1	-0.1	100
NO <sub>x</sub>	8.1	8.1	0.0	100
CO	4.0	4.0	0.0	100
VOC	8.3	8.3	0.0	100

Therefore, this license is considered to be a transfer, a renewal, and a minor modification and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules C.M.R. ch. 115.

#### I. Facility Classification

With the facility-wide VOC limits, the facility is licensed as follows:

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

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<sup>1</sup> The previous license did not identify PTE for PM<sub>2.5</sub>, which is why the net change is 4.3 tpy.

## 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.

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. Boilers, Furnaces, Make-up Air Units and Heaters

#### Boilers

GE Vernova operates eight boilers. Boilers #1 and #2, which are located in Building 30, are each rated at 2.7 MMBtu/hr and each fires natural gas and distillate fuel. These boilers were each manufactured and installed in 1993. Boilers #1 and #2 each exhaust through their own stacks from Building 30, Stacks #1 and #2, respectively. Boiler #4, which is located in Building 20, is rated at 7.0 MMBtu/hr and fires distillate fuel. Boiler #4 was manufactured in 1960 and installed in 1994. Boiler #4 exhausts through its own stack from Building 20, Stack #4. Boilers #5 and #6, which are located in Building 10, are each rated at 5.0 MMBtu/hr and each fires natural gas and distillate fuel. These boilers were each manufactured in 2000 and installed in 2001. Boilers #5 and #6 each exhaust through the same stack from Building 10, Stack #5. Boilers #7, #8, and #9, which are located in Building 45, are each rated at 3.4 MMBtu/hr and each fires natural gas and distillate fuel. Boilers #7 and #8 were each manufactured in 1981 and installed in 1994. Boiler #9 was manufactured and installed in 1994. Boilers #7, #8, and #9 exhaust the same stack from Building 45, Stack #6.

With limited exceptions, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm) pursuant to 38 M.R.S. § 603-A(2)(A)(3). Therefore, the distillate fuel purchased or otherwise obtained for use in Boilers #1, #2, #4, #5, #6, #7, #8, and #9 shall not exceed 0.0015% by weight (15 ppm).

### Furnaces

GE Vernova operates three furnaces. Stress Relief Furnace #1, located in Building 70, is rated at 12.0 MMBtu/hr and fires natural gas. This furnace was manufactured and installed in 1995 and exhausts through its own stack from Building 70, Stack #453. Stress Relief Furnaces #2 and #3, located in Building 50, are each rated at 6.0 MMBtu/hr and fire natural gas. Stress Relief Furnace #2 was manufactured and installed in 1997. Stress Relief Furnace #3 was manufactured and installed in 2001. Stress Relief Furnaces #2 and #3 each exhausts through its own stack from Building 50, Stacks #511 and #512, respectively.

### Make-up Air Units

GE Vernova operates Make-up Air Units #1, #2, and #3; which are all located in Building 80. Make-up Air Units are dedicated pieces of equipment that are designed to bring in filtered outside air to replace air that is exhausted from the building. Make-up Air Units #1, #2, and #3 are each rated at 1.2 MMBtu/hr and fire natural gas. These units were manufactured in 2010 and installed in 2011. The combustion exhaust from the Make-up Air Units are not vented to stacks, but are instead filtered to the outside air.

### Heaters

GE Vernova operates four space heaters: Wall Heaters #1, #2, and #3, and OH Door Heater. Wall Heaters #1, #2, and #3, which are located in building 75, are each rated at 1.0 MMBtu/hr and fire natural gas. The OH Door Heater, which is located in Building 80, is rated at 1.0 MMBtu/hr and fires natural gas. All four heaters were manufactured in 2010 and installed in 2011, and each exhausts through its own 4-inch diameter vent.

## 1. BPT Findings (Boilers and Furnaces)

The BPT emission limits for the boilers and furnaces were based on the following:

### Distillate Fuel

PM/PM <sub>10</sub> /PM <sub>2.5</sub>	– 0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
SO <sub>2</sub>	– based on firing distillate fuel with a maximum sulfur content of 0.0015% by weight
NO <sub>x</sub>	– 20 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
CO	– 5 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
VOC	– 0.34 lb/1,000 gal based on AP-42 Table 1.3-3 dated 5/10
Visible Emissions	– 06-096 C.M.R. ch. 101, §§ 4(A)(2) and 4(D)(1)

Natural Gas

PM/PM<sub>10</sub>/PM<sub>2.5</sub> – 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT  
SO<sub>2</sub> – 0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98  
NO<sub>x</sub> – 100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98  
CO – 84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98  
VOC – 5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98  
Visible – 06-096 C.M.R. ch. 101, §§ 4(A)(3) and 4(D)(1)  
Emissions

The BPT emission limits for Boilers #1, #2, #4, #5, #6, #7, #8, and #9 and Stress Relief Furnaces #1, #2, and #3 are the following:

Unit	Pollutant	lb/MMBtu
Boiler #4 <i>Distillate fuel</i>	PM	0.08
Boiler #5 <i>Distillate fuel</i>	PM	0.08
Boiler #5 <i>Natural gas</i>	PM	0.05
Boiler #6 <i>Distillate fuel</i>	PM	0.08
Boiler #6 <i>Natural gas</i>	PM	0.05
Boiler #7 <i>Distillate fuel</i>	PM	0.08
Boiler #7 <i>Natural gas</i>	PM	0.05
Boiler #8 <i>Distillate fuel</i>	PM	0.08
Boiler #8 <i>Natural gas</i>	PM	0.05
Boiler #9 <i>Distillate fuel</i>	PM	0.08
Boiler #9 <i>Natural gas</i>	PM	0.05
Stress Relief Furnace #1	PM	0.05
Stress Relief Furnace #2	PM	0.05
Stress Relief Furnace #3	PM	0.05

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 <i>Distillate fuel</i>	0.22	0.22	0.22	0.004	0.39	0.10	0.01
Boiler #1 <i>Natural gas</i>	0.14	0.14	0.14	0.002	0.26	0.22	0.01
Boiler #2 <i>Distillate fuel</i>	0.22	0.22	0.22	0.004	0.39	0.10	0.01
Boiler #2 <i>Natural gas</i>	0.14	0.14	0.14	0.002	0.26	0.22	0.01
Boiler #4 <i>Distillate fuel</i>	0.56	0.56	0.56	0.01	1.00	0.25	0.02
Boiler #5 <i>Distillate fuel</i>	0.40	0.40	0.40	0.01	0.71	0.18	0.01
Boiler #5 <i>Natural gas</i>	0.25	0.25	0.25	0.003	0.49	0.41	0.03
Boiler #6 <i>Distillate fuel</i>	0.40	0.40	0.40	0.01	0.71	0.18	0.01
Boiler #6 <i>Natural gas</i>	0.25	0.25	0.25	0.003	0.49	0.41	0.03
Boiler #7 <i>Distillate fuel</i>	0.27	0.27	0.27	0.01	0.49	0.12	0.01
Boiler #7 <i>Natural gas</i>	0.17	0.17	0.17	0.002	0.33	0.28	0.02
Boiler #8 <i>Distillate fuel</i>	0.27	0.27	0.27	0.01	0.49	0.12	0.01
Boiler #8 <i>Natural gas</i>	0.17	0.17	0.17	0.002	0.33	0.28	0.02
Boiler #9 <i>Distillate fuel</i>	0.27	0.27	0.27	0.01	0.49	0.12	0.01
Boiler #9 <i>Natural gas</i>	0.17	0.17	0.17	0.002	0.33	0.28	0.02
Stress Relief Furnace #1	0.60	0.60	0.60	0.01	1.18	0.99	0.06
Stress Relief Furnace #2	0.30	0.30	0.30	0.004	0.59	0.49	0.03
Stress Relief Furnace #3	0.30	0.30	0.30	0.004	0.59	0.49	0.03

GE Vernova shall be limited to firing of 58.8 MMscf/yr of natural gas in the boilers, furnaces, make-up air units, and heaters on a calendar year total basis. GE Vernova shall also be limited to firing 500,000 gal/yr of distillate fuel in the boilers on a calendar year total basis.

2. BACT Findings (Make-up Air Units and Space Heaters)

Following is a BACT analysis for control of emissions from Make-up Air Units #1, #2, and #3, and the space heaters Wall Heater #1, Wall Heater #2, Wall Heater #3, and OH Door Heater.

a. Particulate Matter (PM, PM<sub>10</sub>, PM<sub>2.5</sub>)

GE Vernova has proposed to burn only low-ash content fuels (natural gas) in Make-up Air Units #1, #2, and #3, Wall Heaters #1, #2, and #3, and OH Door Heater.

BACT for PM/PM<sub>10</sub>/PM<sub>2.5</sub> emissions from Make-up Air Units #1, #2, and #3, Wall Heaters #1, #2, and #3, and OH Door Heater are firing natural gas and the emission limits listed in the tables below.

b. Sulfur Dioxide (SO<sub>2</sub>)

GE Vernova has proposed to fire only natural gas. The use of this fuel results in minimal emissions of SO<sub>2</sub>, and additional add-on pollution controls are not economically feasible.

BACT for SO<sub>2</sub> emissions from Make-up Air Units #1, #2, and #3, Wall Heaters #1, #2, and #3, and OH Door Heater is the use of natural gas and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO<sub>x</sub>)

GE Vernova considered several control strategies for the control of NO<sub>x</sub> including Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), water/steam injection, flue gas recirculation (FGR), low-NO<sub>x</sub> burners, and use of oxygen trim systems.

Both SCR and SNCR are technically feasible control technologies for minimizing NO<sub>x</sub>. Both methods include injection of a NO<sub>x</sub> reducing agent, typically ammonia or urea, into the unit's combustion gases, where the reagent reacts with NO<sub>x</sub> to form nitrogen and water. Each technology is effective within a specific temperature range, 500 – 1,200 °F for SCR and 1,400 – 1,600 °F for SNCR. However, both SCR and SNCR have the negative environmental impact of emissions of unreacted ammonia. In addition, due to the initial capital cost and the annual operating costs, these systems are typically only considered cost effective for units larger than Make-up Air Units #1, #2, and #3, Wall Heaters #1, #2, and #3, and OH Door Heater.

Water/steam injection and FGR can attain similar NO<sub>x</sub> reduction efficiencies through lowering burner flame temperature and thereby reducing thermal NO<sub>x</sub> formation. However, both control strategies reduce the unit's fuel efficiency.

Low-NO<sub>x</sub> burners control mixing of fuel and air in a pattern that keeps flame temperature lower and dissipates the heat quickly. The reduced flame temperature lowers the thermal NO<sub>x</sub> emissions; the resulting lower oxygen levels in the flame also reduces fuel NO<sub>x</sub> emissions.

Given that the expected maximum NO<sub>x</sub> emissions from operating any of these units at 8,760 hr/yr is less than 2 tpy each, additional add-on pollution controls are not economically feasible.

BACT for NO<sub>x</sub> emissions from Make-up Air Units #1, #2, and #3, Wall Heaters #1, #2, #3, and OH Door Heater is maintaining good combustion practices and the emission limits listed in the tables below.

d. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)

GE Vernova considered several control strategies for the control of CO and VOC including oxidation catalysts, and thermal oxidizers.

Oxidation catalysts and thermal oxidizers both have high capital, maintenance, and operational costs considering the size of the units in question. These controls were determined to be economically infeasible.

BACT for CO and VOC emissions from Make-up Air Units #1, #2, and #3, Wall Heaters #1, #2, and #3, and OH Door Heater is the emission limits listed in the tables below.

e. Emission Limits

The BACT emission limits for Make-up Air Units #1, #2, and #3, Wall Heaters #1, #2, and #3, and OH Door Heater were based on the following:

Natural Gas

PM	– 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT
SO <sub>2</sub>	– 0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
NO <sub>x</sub>	– 100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
CO	– 84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
VOC	– 5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
Visible Emissions	– 06-096 C.M.R. ch. 101, § 4(A)(3)

The BACT emission limits for Make-up Air Units #1, #2, and #3, Wall Heaters #1, #2, and #3, and OH Door Heater are the following:

Unit	Pollutant	lb/MMBtu
Wall Heater #1	PM	0.05
Wall Heater #2	PM	0.05
Wall Heater #3	PM	0.05

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Make-up Air Unit #1	0.06	0.06	0.06	0.001	0.12	0.10	0.01
Make-up Air Unit #2	0.06	0.06	0.06	0.001	0.12	0.10	0.01
Make-up Air Unit #3	0.06	0.06	0.06	0.001	0.12	0.10	0.01
Wall Heater #1	0.05	0.05	0.05	0.001	0.10	0.08	0.01
Wall Heater #2	0.05	0.05	0.05	0.001	0.10	0.08	0.01
Wall Heater #3	0.05	0.05	0.05	0.001	0.10	0.08	0.01
OH Door Heater	0.05	0.05	0.05	0.001	0.10	0.08	0.01

### 3. Visible Emissions

#### Boilers

Visible emissions from Stacks #1 (Boiler #1), #2 (Boiler #2), #4 (Boiler #4), #5 (Boilers #5 and #6), and #6 (Boilers #7, #8, and #9) shall each not exceed 20% opacity on a six-minute block average basis when distillate fuel is being fired in any of the respective stack's boilers.

Visible emissions from Stacks #1 (Boiler #1), #2 (Boiler #2) #4 (Boiler #4), #5 (Boilers #5 and #6), and #6 (Boilers #7, #8, and #9) shall each not exceed 10% opacity on a six-minute block average basis when natural gas is the only fuel being fired in the respective stack's boilers.

#### Furnaces, Make-up Air Units, and Heaters

Visible emissions from Stress Relief Furnaces #1, #2, and #3, Make-up Air Units #1, #2, and #3, Wall Heaters #1, #2, and #3, and OH Door Heater shall each not exceed 10% opacity on a six-minute block average basis.

### 4. Periodic Monitoring

Periodic monitoring for the boilers, furnaces, MAUs, and heaters shall include recordkeeping to document fuel use both on a monthly and calendar year total basis. Documentation shall include the type of fuel used and sulfur content of the fuel, if applicable.

5. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Due to their size, the Boilers #1, #2, #4, #5, #6, #7, #8, and #9 are not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. The furnaces, MAUs, and heaters are not subject to 40 C.F.R. Part 60, Subpart Dc, because they are not steam generating units. [40 C.F.R. §§ 60.40c and 60.41c]

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

Boilers #1, #2, #4, #5, #6, #7, #8, and #9 are subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ. The units are considered existing oil boilers rated less than 10 MMBtu/hr. The furnaces, MAUs, and heaters are not subject to 40 C.F.R. Part 63, Subpart JJJJJ because they do not meet the definition of a boiler. [40 C.F.R. §§ 63.11193, 63.11195, and 63.11237]

Applicable federal 40 C.F.R. Part 63, Subpart JJJJJ requirements include the following. Additional rule information can be found on the following website: <https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source>.

a. Compliance Dates, Notifications, and Work Practice Requirements

(1) Boiler Tune-Up Program

(i) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]

(ii) Tune-ups shall be conducted at a frequency specified by the rule and based on the size, age, and operations of each boiler. See chart below:

Boiler Category	Tune-Up Frequency
Boiler #4	Every 2 years
Boilers #1, #2, #5, #6, #7, #8, and #9 (Oil fired boilers with a heat input capacity of $\leq 5$ MMBtu/hr)	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

(iii) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection for Boiler #4. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for Boilers #1, #2, #5, #6 #7, #8, and #9. [40 C.F.R. § 63.11223(b)(1)]
  2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
  3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection for Boiler #4. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for Boilers #1, #2, #5, #6 #7, #8, and #9. [40 C.F.R. § 63.11223(b)(3)]
  4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
  5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]
  6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 C.F.R. § 63.11223(b)(7)]
- (iv) Tune-Up Report: A tune-up report shall be maintained onsite and, submitted to the Department and/or EPA upon request. The report shall contain the following information:
1. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
  2. A description of any corrective actions taken as part of the tune-up of the boiler; and

3. The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

**(2) Compliance Report**

For each compliance period, two years for Boiler #4 and five years for Boilers #1, #2, #5, #6, #7, #8, and #9, GE Vernova shall prepare a compliance report by March 1<sup>st</sup> of the following year to document the information below for the respective compliance period. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- (i) Company name and address;
- (ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (iii) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- (iv) The following certifications, as applicable:
  1. "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
  2. "No secondary materials that are solid waste were combusted in any affected unit."
  3. "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

**b. Recordkeeping**

- (1) Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ including the following [40 C.F.R. § 63.11225(c)]:
  - (i) Copies of notifications and reports with supporting compliance documentation;
  - (ii) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
  - (iii) Records of the occurrence and duration of each malfunction of each applicable boiler; and
  - (iv) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.
- (2) Records shall be in a form suitable and readily available for expeditious review. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provides access at the site for at least 2 years after the date of each recorded action. The records may be maintained off-site for the remaining 3 years. [40 C.F.R. § 63.11225(d)] Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Subpart JJJJJJ shall be streamlined to the more stringent six-year requirement.

**C. Emergency Generators No. 1 and No. 2**

GE Vernova operates two emergency generators, Emergency Generators No. 1 and No. 2. The emergency generators are generator sets with each gen set consisting of an engine and an electrical generator. Emergency Generator No. 1 has an engine rated at 0.54 MMBtu/hr which fires distillate fuel. Emergency Generator No. 1 was manufactured and installed in 2002. Emergency Generator No. 2 has an engine rated at 1.0 MMBtu/hr which fires natural gas. Emergency Generator No. 2 was manufactured and installed in 2008.

1. BPT Findings

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

Distillate Fuel (Emergency Generator No. 1)

PM/PM<sub>10</sub>/PM<sub>2.5</sub> – 0.12 lb/MMBtu from 06-096 C.M.R. ch. 115, BPT  
SO<sub>2</sub> – Combustion of distillate fuel with a maximum sulfur content  
not to exceed 15 ppm (0.0015% sulfur by weight)  
NO<sub>x</sub> – 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 – 06-096 C.M.R. ch. 101  
Emissions

Natural Gas (Emergency Generator No. 2)

PM/PM<sub>10</sub>/PM<sub>2.5</sub> – 0.05 lb/MMBtu from 06-096 C.M.R. ch. 115, BPT  
SO<sub>2</sub> –  $5.88 \times 10^{-4}$  lb/MMBtu from AP-42 Table 3.2-2 dated 7/00  
NO<sub>x</sub> – 0.847 lb/MMBtu from AP-42 Table 3.2-2 dated 7/00  
CO – 0.557 lb/MMBtu from AP-42 Table 3.2-2 dated 7/00  
VOC –  $1.18 \times 10^{-1}$  lb/MMBtu from AP-42 Table 3.2-2 dated 7/00  
Visible – 06-096 C.M.R. ch. 115, BPT  
Emissions

The BPT emission limits for the generators are the following:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Emergency Generator No. 1	0.06	0.06	0.06	0.001	2.38	0.51	0.19
Emergency Generator No. 2	0.05	0.05	0.05	0.001	0.88	0.58	0.12

2. Visible Emissions

Emergency Generator No. 1

Visible emissions from Emergency Generator No. 1 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time GE Vernova shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

- The duration of the startup shall not exceed 30 minutes per event;
- Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and

c. GE Vernova shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

Emergency Generator No. 2

Chapter 101

Visible emissions from Emergency Generator No. 2 shall not exceed 20% opacity on a six-minute block average basis.

Chapter 115, BPT

Visible emissions from Emergency Generator No. 2 shall not exceed 10% opacity on a six-minute block average basis.

Visible Emissions Streamlining

The Department has determined that the BPT visible emission limit is more stringent than the applicable limit in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit from Emergency Generator No. 2 has been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the air emission license.

3. Chapter 169

Emergency Generators No. 1 and No. 2 were installed prior to the effective date of *Stationary Generators*, 06-096 C.M.R. ch. 169 and are therefore exempt from this rule pursuant to section 1.

4. New Source Performance Standards (NSPS) for Compression Ignition Internal Combustion Engines

Due to the date of manufacture of Emergency Generator No. 1, the engine is 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 unit was manufactured prior to April 1, 2006. [40 C.F.R. § 60.4200]

5. New Source Performance Standards for Spark Ignition Internal Combustion Engines

Due to the date of manufacture of Emergency Generator No. 2, the engine is not subject to the New Source Performance Standards (NSPS) *Standards of Performance for Spark*

*Ignition Internal Combustion Engines (SI ICE)*, 40 C.F.R. Part 60, Subpart JJJJ since the unit was manufactured before January 1, 2009. [40 C.F.R. § 60.4230]

6. 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 emergency engines listed above. The units are considered existing, emergency stationary reciprocating internal combustion engines at an area HAP source and are not subject to New Source Performance Standards regulations. EPA's August 9, 2010 memo (*Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE*) specifically does not exempt these units from the federal requirements. [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. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 63, Subpart ZZZZ, a stationary reciprocating internal combustion engine (RICE) is considered an **emergency** stationary RICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under 40 C.F.R. Part 63, Subpart ZZZZ, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

**There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation.** Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

- (i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE more than 100 hours per calendar year.
- (ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.**

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Emergency Generators No. 1 and No. 2 shall be limited to the usage outlined in 40 C.F.R. § 63.6640(f) and therefore may be classified as existing emergency stationary RICE as defined in 40 C.F.R. Part 63, Subpart ZZZZ. Failure to comply with all of the requirements listed in 40 C.F.R. § 63.6640(f) may cause these engines to not be considered emergency engines and therefore subject to all applicable requirements for non-emergency engines.

b. 40 C.F.R. Part 63, Subpart ZZZZ Requirements

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

	Operating Limitations
Emergency Generator No. 1	<ul style="list-style-type: none"><li>- Change oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first;</li><li>- Inspect the air cleaner every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary; and</li><li>- Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.</li></ul>
Emergency Generator No. 2	<ul style="list-style-type: none"><li>- Change oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first;</li><li>- Inspect spark plugs every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary; and</li><li>- Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.</li></ul>

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or GE Vernova shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engines in a manner consistent with good air pollution control practice for minimizing emissions.

[40 C.F.R. § 63.6625(e)]

(2) Optional Oil Analysis Program

GE Vernova 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, GE Vernova 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) Non-Resettable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]

(4) Startup Idle and Startup Time Minimization Requirements

During periods of startup the facility 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]

(5) Annual Time Limit for Maintenance and Testing

As emergency engines, the units shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 63.6640(f)]

(6) Recordkeeping

GE Vernova shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. § 63.6655(f)]

D. Thermal Spray Cells

GE Vernova operates three thermal spray cells. Each thermal spray cell is an enclosed, robotically operated coating process that uses powdered metal coatings and a High Velocity On Flame (HVOF) spray or plasma spray to transfer the coatings to metal parts. Each cell is equipped with a pulse jet dust collector equipped with high-efficiency non-fiber filters followed by a set of High Efficiency Particulate Arresting (HEPA) filters. This combination results in a 99.9% control of particulate matter (PM). At maximum production, the three thermal spray cells are estimated to emit approximately  $1.58 \times 10^{-3}$  lb of PM per year, and therefore are a negligible source of metallic PM HAP.

1. Chapter 129

The thermal spray cells use exclusively powder-based coatings and are therefore exempt from *Surface Coating Facilities* 06-096 C.M.R. ch. 129, according to § (1)(E)(2).

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

a. Equipment Standards

GE Vernova shall operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a fabric, cartridge, or HEPA filter. GE Vernova shall operate all capture and control devices according to the manufacturer's specifications and operating instructions. GE Vernova shall keep the manufacturer's specifications and operating instructions on-site at all times in a location where they can be easily accessed by the operator(s). [40 C.F.R. § 63.11507(f)(2)]

b. Management Practices

GE Vernova shall implement the following applicable management practices:

- (1) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with the thermal spray cells as practicable. [40 C.F.R. § 63.11507(g)(6)]
- (2) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable. [40 C.F.R. § 63.11507(g)(9)]
- (3) Perform regular inspections to identify leaks and other opportunities for pollution prevention. [40 C.F.R. § 63.11507(g)(12)]

c. Reporting and Recordkeeping

- (1) GE Vernova shall keep records of the repair, maintenance, preventative maintenance, and equipment inspections to document compliance with the management practices listed above [40 C.F.R. § 63.11509(e)(3)]
- (2) GE Vernova Shall keep records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control equipment. [40 C.F.R. § 63.10(b)(2)(ii)]
- (3) GE Vernova shall prepare an annual certification of compliance report for the thermal spraying operation. These reports must be prepared every year, but do not need to be submitted unless a deviation from the requirements of Subpart WWWWWW has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report. [40 C.F.R. § 63.11509(c)]

- (4) The annual compliance report shall be prepared no later than January 31 of the year immediately following the reporting period and kept in a readily accessible location for inspector review. If a deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period. [40 C.F.R. § 63.11509(c)(7)]
- (5) The annual compliance report shall contain the following items:
  - (i) A statement that the control system has been operated and maintained according to the manufacturer's specifications and instructions. [40 C.F.R. § 63.11509(c)(2)]
  - (ii) Any deviations from the compliance requirements specified in Subpart WWWW occurred during that year as well as the corrective action taken. [40 C.F.R. § 63.11509(d)]
- (6) GE Vernova shall keep each record for a minimum of 5 years and kept onsite for a minimum of 2 years. [40 C.F.R. § 63.11509(f)] Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Subpart WWWW shall be streamlined to the more stringent six-year requirement.

### **3. BPT Findings**

BPT for the thermal spray cells is determined to be compliance with the requirements set forth in 40 C.F.R. Part 63, Subpart WWWW.

#### **E. Plant-Wide Emissions**

VOC and HAP emissions from GE Vernova result from miscellaneous plant-wide use of compounds mainly for parts cleaning and maintenance. GE Vernova shall keep records of VOC and HAP emissions on a calendar year total using data from Safety Data Sheets, tracking purchases of VOC and/or HAP containing materials, and estimating emissions from processes (such as thermal spray cells) using a mass balance or other appropriate approach.

BPT for miscellaneous plant-wide VOC and Total HAP emissions shall be 8.0 ton/yr, each. GE Vernova shall minimize emissions of VOC and HAP wherever appropriate through pollution prevention activities.

F. 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 the following assumptions:

- Firing 58.8 MMscf/yr natural gas in the boilers, furnaces, make-up air units, and heaters;
- Firing 500,000 gal/yr of distillate fuel in the boilers;
- Operating Generators #1 and #2 for 100 hrs/yr each for non-emergency operation; and
- Facility-wide VOC and total HAP limits of 8.0 tpy (each).

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 <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Natural Gas Usage	1.5	1.5	1.5	--	2.9	2.5	0.2
Distillate Fuel Usage	2.8	2.8	2.8	0.1	5.0	1.3	0.1
Generator #1	--	--	--	--	0.1	--	--
Generator #2	--	--	--	--	--	--	--
Miscellaneous Usage	--	--	--	--	--	--	8.0
<b>Total TPY</b>	<b>4.3</b>	<b>4.3</b>	<b>4.3</b>	<b>0.1</b>	<b>8.0</b>	<b>3.8</b>	<b>8.3</b>

Pollutant	Tons/year
Single HAP	7.9
Total HAP	8.0

### 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 <sub>10</sub>	25
PM <sub>2.5</sub>	15
SO <sub>2</sub>	50
NO <sub>x</sub>	50
CO	250

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

This determination is based on information provided by the applicant regarding 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 GE Vernova to submit additional information and may require an ambient air quality impact analysis at that time.

### 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-404-71-W-R/A/T 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 beginning actual 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] Payment of the annual air emission license fee for GE Vernova is due by the end of August of each year. [38 M.R.S. § 353-A(3)]
- (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) **Boilers #1, #2, #4, #5, #6, #7, #8, and #9; Stress Relief Furnaces #1, #2, and #3; Make-up Air Units #1, #2, and #3, Wall Heaters #1, #2, and #3; and OH Door Heater**

A. Fuel

1. Boilers #1, #2, #5, #6, #7, #8, and #9 are each licensed to fire distillate fuel and natural gas. [06-096 C.M.R. ch. 115, BPT]
2. Boiler #4 is licensed to fire distillate fuel. [06-096 C.M.R. ch. 115, BPT]
3. Stress Relief Furnaces #1, #2, and #3, Make-up Air Units #1, #2, and #3, Wall Heaters #1, #2, and #3, and OH Door Heater are each licensed to fire natural gas. [06-096 C.M.R. ch. 115, BPT and BACT]
4. GE Vernova shall be limited to firing of 58.8 MMscf/yr of natural gas in the boilers, furnaces, make-up air units, and heaters on a calendar year total basis. GE Vernova shall also be limited to firing 500,000 gal/yr of distillate fuel in the boilers on a calendar year total basis. [06-096 C.M.R. ch. 115, BPT]
5. The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT]
6. Compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel delivered or fuel used (if applicable). Records of annual fuel use shall be kept on a monthly and calendar year 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, certificate of analysis, or testing of fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #4 <i>Distillate fuel</i>	PM	0.08	06-096 C.M.R. ch. 115, BPT
Boiler #5 <i>Distillate fuel</i>	PM	0.08	06-096 C.M.R. ch. 115, BPT
Boiler #5 <i>Natural gas</i>	PM	0.05	06-096 C.M.R. ch. 115, BPT
Boiler #6 <i>Distillate fuel</i>	PM	0.08	06-096 C.M.R. ch. 115, BPT
Boiler #6 <i>Natural gas</i>	PM	0.05	06-096 C.M.R. ch. 115, BPT
Boiler #7 <i>Distillate fuel</i>	PM	0.08	06-096 C.M.R. ch. 115, BPT

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #7 <i>Natural gas</i>	PM	0.05	06-096 C.M.R. ch. 115, BPT
Boiler #8 <i>Distillate fuel</i>	PM	0.08	06-096 C.M.R. ch. 115, BPT
Boiler #8 <i>Natural gas</i>	PM	0.05	06-096 C.M.R. ch. 115, BPT
Boiler #9 <i>Distillate fuel</i>	PM	0.08	06-096 C.M.R. ch. 115, BPT
Boiler #9 <i>Natural gas</i>	PM	0.05	06-096 C.M.R. ch. 115, BPT
Stress Relief Furnace #1	PM	0.05	06-096 C.M.R. ch. 115, BPT
Stress Relief Furnace #2	PM	0.05	06-096 C.M.R. ch. 115, BPT
Stress Relief Furnace #3	PM	0.05	06-096 C.M.R. ch. 115, BPT
Wall Heater #1	PM	0.05	06-096 C.M.R. ch. 115, BACT
Wall Heater #2	PM	0.05	06-096 C.M.R. ch. 115, BACT
Wall Heater #3	PM	0.05	06-096 C.M.R. ch. 115, BACT

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

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 <i>Distillate fuel</i>	0.22	0.22	0.22	0.004	0.39	0.10	0.01
Boiler #1 <i>Natural gas</i>	0.14	0.14	0.14	0.002	0.26	0.22	0.01
Boiler #2 <i>Distillate fuel</i>	0.22	0.22	0.22	0.004	0.39	0.10	0.01
Boiler #2 <i>Natural gas</i>	0.14	0.14	0.14	0.002	0.26	0.22	0.01
Boiler #4 <i>Distillate fuel</i>	0.56	0.56	0.56	0.01	1.00	0.25	0.02
Boiler #5 <i>Distillate fuel</i>	0.40	0.40	0.40	0.01	0.71	0.18	0.01
Boiler #5 <i>Natural gas</i>	0.25	0.25	0.25	0.003	0.49	0.41	0.03
Boiler #6 <i>Distillate fuel</i>	0.40	0.40	0.40	0.01	0.71	0.18	0.01
Boiler #6 <i>Natural gas</i>	0.25	0.25	0.25	0.003	0.49	0.41	0.03
Boiler #7 <i>Distillate fuel</i>	0.27	0.27	0.27	0.01	0.49	0.12	0.01

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #7 <i>Natural gas</i>	0.17	0.17	0.17	0.002	0.33	0.28	0.02
Boiler #8 <i>Distillate fuel</i>	0.27	0.27	0.27	0.01	0.49	0.12	0.01
Boiler #8 <i>Natural gas</i>	0.17	0.17	0.17	0.002	0.33	0.28	0.02
Boiler #9 <i>Distillate fuel</i>	0.27	0.27	0.27	0.01	0.49	0.12	0.01
Boiler #9 <i>Natural gas</i>	0.17	0.17	0.17	0.002	0.33	0.28	0.02
Stress Relief Furnace #1	0.60	0.60	0.60	0.01	1.18	0.99	0.06
Stress Relief Furnace #2	0.30	0.30	0.30	0.004	0.59	0.49	0.03
Stress Relief Furnace #3	0.30	0.30	0.30	0.004	0.59	0.49	0.03
Make-up Air Unit #1	0.06	0.06	0.06	0.001	0.12	0.10	0.01
Make-up Air Unit #2	0.06	0.06	0.06	0.001	0.12	0.10	0.01
Make-up Air Unit #3	0.06	0.06	0.06	0.001	0.12	0.10	0.01
Wall Heater #1	0.05	0.05	0.05	0.001	0.10	0.08	0.01
Wall Heater #2	0.05	0.05	0.05	0.001	0.10	0.08	0.01
Wall Heater #3	0.05	0.05	0.05	0.001	0.10	0.08	0.01
OH Door Heater	0.05	0.05	0.05	0.001	0.10	0.08	0.01

#### D. Visible Emissions

##### 1. Boilers

Visible emissions from Stacks #1 (Boiler #1), #2 (Boiler #2) #4 (Boiler #4), #5 (Boilers #5 and #6), and #6 (Boilers #7, #8, and #9) shall each not exceed 20% opacity on a six-minute block average basis when distillate fuel is being fired in any of the respective stack's boilers. [06-096 C.M.R. ch. 101, §§ 4(A)(2) and 4(D)(1)]

Visible emissions from Stacks #1 (Boiler #1), #2 (Boiler #2) , #5 (Boilers #5 and #6), and #6 (Boilers #7, #8, and #9) shall each not exceed 10% opacity on a six-minute block average basis when natural gas is the only fuel being fired in the respective stack's boilers. [06-096 C.M.R. ch. 101, §§ 4(A)(3) and 4(D)(1)]

##### 2. Furnaces, Make-up Air Units, and Heaters

Visible emissions from Stress Relief Furnaces #1, #2, and #3, Make-up Air Units #1, #2, and #3, Wall Heaters #1, #2, and #3, and OH Door Heater shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]

E. GE Vernova shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJ applicable to Boilers #1, #2, #4, #5, #6, #7, #8, and #9 including, but not limited to, the following: [incorporated under 06-096 C.M.R. ch. 115, BPT]

1. The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]

a. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	Tune-Up Frequency
Boiler #4	Every 2 years
Boilers #1, #2, #5, #6, #7, #8, and #9	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

b. The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

- (1) As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection for Boiler #4. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for Boilers #1, #2, #5, #6, #7, #8, and #9. [40 C.F.R. § 63.11223(b)(1)]
- (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
- (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection for Boiler #4. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for Boilers #1, #2, #5, #6, #7, #8, and #9. [40 C.F.R. § 63.11223(b)(3)]
- (4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
- (5) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]

- (6) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up.  
[40 C.F.R. § 63.11223(b)(7)]

- c. Tune-Up Report: A tune-up report shall be maintained onsite and submitted to the Department and EPA upon request. The report shall contain the following information:
- (1) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
  - (2) A description of any corrective actions taken as part of the tune-up of the boiler; and
  - (3) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

## 2. Compliance Report

For each compliance period, two years for Boiler #4 and five years for Boilers #1, #2, #5, #6, #7, #8, and #9, GE Vernova shall prepare a compliance report shall be prepared by March 1<sup>st</sup> of the following year to document the information below for the respective compliance period. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- a. Company name and address;
- b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
- c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- d. The following certifications, as applicable:
  - (1) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
  - (2) "No secondary materials that are solid waste were combusted in any affected unit."
  - (3) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the

manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

3. Recordkeeping

- a. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 63.11225(c)]:
  - (1) Copies of notifications and reports with supporting compliance documentation;
  - (2) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
  - (3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
  - (4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.
- b. Records shall be in a form suitable and readily available for expeditious review. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provides access at the site for at least 2 years after the date of each recorded action. The records may be maintained off-site for the remaining 3 years. [40 C.F.R. § 63.11225(d)] Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Subpart JJJJJ shall be streamlined to the more stringent six-year requirement.

(18) **Emergency Generators No. 1 and No. 2**

- A. The fuel sulfur content for Emergency Generators No. 1 and No. 2 shall be limited to 0.0015% sulfur by weight. Compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT]
- B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Emergency Generator No. 1	0.06	0.06	0.06	0.001	2.38	0.51	0.19
Emergency Generator No. 2	0.05	0.05	0.05	0.001	0.88	0.58	0.12

**C. Visible Emissions**

**1. Emergency Generator No. 1**

Visible emissions from Emergency Generator No. 1 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time GE Vernova shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

- a. The duration of the startup shall not exceed 30 minutes per event;
- b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
- c. GE Vernova shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

[06-096 C.M.R. ch. 101, § 4(A)(4)]

**2. Emergency Generator No. 2**

Visible emissions from Emergency Generator No. 2 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

**D. Emergency Generators No. 1 and No.2 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. GE Vernova shall meet the following operational limitations for Emergency Generators No. 1 and No. 2.**

**a. Emergency Generator No. 1 (distillate fuel-fired):**

- (1) Change the oil and filter every 500 hours of operation or within 1 year plus 30 days of the previous change, whichever comes first;
- (2) Inspect the air cleaner every 1,000 hours of operation or within 1 year plus 30 days of the previous inspection, whichever comes first, and replace as necessary; and
- (3) Inspect the hoses and belts every 500 hours of operation or within 1 year plus 30 days of the previous inspection, whichever comes first, and replace as necessary.

- b. Emergency Generator No. 2 (natural gas-fired):
  - (1) Change the oil and filter every 500 hours of operation or within 1 year plus 30 days of the previous change, whichever comes first;
  - (2) Inspect the spark plugs every 1,000 hours of operation or within 1 year plus 30 days of the previous inspection, whichever comes first, and replace as necessary; and
  - (3) Inspect the hoses and belts every 500 hours of operation or within 1 year plus 30 days of the previous inspection, whichever comes first, and replace as necessary.
- c. 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**

GE Vernova 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, GE Vernova 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. Non-Resettable Hour Meter**

A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]

**4. Maintenance, Testing, and Non-Emergency Operating Situations**

- a. As emergency engines, the units shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise to supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written logs) of all engine operating hours. [40 C.F.R. § 63.6640(f) and 06-096 C.M.R. ch. 115]
- b. GE Vernova shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit

operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. §§ 63.6655(e) and (f)]

**5. Operation and Maintenance**

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or GE Vernova 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)]

GE Vernova shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [06-096 C.M.R. ch. 115, BPT]

**6. 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) Thermal Spray Cells**

The Thermal Spray Cells shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart WWWWW, including the following: [incorporated under 06-096 C.M.R. ch. 115, BPT]

**A. Equipment Standards**

GE Vernova shall operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a fabric, cartridge, or HEPA filter. GE Vernova shall operate all capture and control devices according to the manufacturer's specifications and operating instructions. GE Vernova shall keep the manufacturer's specifications and operating instructions on-site at all times in a location where they can be easily accessed by the operator(s) [40 C.F.R. § 63.11507(f)(2)]

**B. Management Practices**

1. Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with the thermal spray cells as practicable. [40 C.F.R. § 63.11507(g)(6)]
2. Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable. [40 C.F.R. § 63.11507(g)(9)]
3. Perform regular inspections to identify leaks and other opportunities for pollution prevention. [40 C.F.R. § 63.11507(g)(12)]

**C. Reporting and Recordkeeping**

1. GE Vernova shall keep records of the repair, maintenance, preventative maintenance, and equipment inspections to document compliance with the management practices listed above [40 C.F.R. § 63.11509(e)(3)]
2. GE Shall keep records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control equipment. [40 C.F.R. § 63.10(b)(2)(ii)]
3. GE Vernova shall prepare an annual certification of compliance report for the thermal spraying operation. These reports must be prepared every year, but do not need to be submitted unless a deviation from the requirements of Subpart WWWW has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report. [40 C.F.R. § 63.11509(c)]
4. The annual compliance report shall be prepared no later than January 31 of the year immediately following the reporting period and kept in a readily accessible location for inspector review. If a deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period. [40 C.F.R. § 63.11509(c)(7)]
5. The annual compliance report shall contain the following items:
  - a. A statement that the control system has been operated and maintained according to the manufacturer's specifications and instructions. [40 C.F.R. § 63.11509(c)(2)]
  - b. Any deviations from the compliance requirements specified in Subpart WWWW occurred during that year as well as the corrective action taken. [40 C.F.R. § 63.11509(d)]
6. GE Vernova shall keep each record for a minimum of 5 years and kept onsite for a minimum of 2 years. [40 C.F.R. § 63.11509(f)] Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Subpart WWWW shall be streamlined to the more stringent six-year requirement.

**(20) Plant-Wide Emissions**

- A. GE Vernova shall keep records of VOC and HAP emissions on a calendar year total using data from Safety Data Sheets, tracking purchases of VOC/HAP containing material, and estimating emissions from processes (such as thermal spray cells) using a mass balance or other appropriate approach. [06-096 C.M.R. ch. 115, BPT]

- B. Miscellaneous plant-wide VOC and total HAP emissions shall not exceed 8.0 ton/yr, each. [06-096 C.M.R. ch. 115, BPT]
- C. GE Vernova shall minimize emissions of VOC and HAP wherever appropriate through pollution prevention activities. [06-096 C.M.R. ch. 115, BPT]
- (21) 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, GE Vernova may be required to submit additional information. Upon written request from the Department, GE Vernova 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 16<sup>th</sup> DAY OF DECEMBER, 2024.

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: October 2, 2024

Date of application acceptance: October 7, 2024

This Order prepared by Kendra Nash, Bureau of Air Quality.