

#OP-22-045  
DEC#BR96-0082  
Operating Permit Expiration Date: March 9, 2028

State of Vermont  
Agency of Natural Resources  
Department of Environmental Conservation



Air Quality & Climate Division  
Montpelier, Vermont

## **AIR POLLUTION CONTROL** **PERMIT TO OPERATE**

Date Permit Issued: March 9, 2023

Owner/Operator: Green Mountain Power Corporation  
163 Acorn Lane  
Colchester, Vermont 05446

Source: Electric Power Generating Facility - Unit No. 5  
Green Mountain Power Corporation  
144 Nelson Drive  
Berlin, Vermont 05602

## FINDINGS OF FACT

### (A) FACILITY DESCRIPTION

Green Mountain Power (also referred to herein as "Permittee") owns and operates an electric power generating facility referred to as Unit No. 5 near Dog River Road in the town of Berlin, Vermont (also referred to herein as "Facility"). The Facility is comprised of two Pratt & Whitney simple cycle combustion turbines connected to a single electrical power generator rated at approximately 50 megawatts (MW). The turbines are fueled with kerosene that is contained in an above-ground storage tank that is also part of the Facility. The Permittee has proposed an annual fuel cap of 2,240,000 gallons per year for the Facility.

The Facility was constructed in 1972 and is currently operated as a peaking station under ORIS code 3734. Since the electrical generator has a nameplate capacity of 25 MW or greater the Facility is subject to the Regional Greenhouse Gas Initiative (RGGI) regulation.

The activities performed at the Facility are described by the Standard Industrial Classification Code 4911 (Generation of Electricity), or North American Industry Classification System Code 221112 (Fossil Fuel Electric Power Generation).

Upon issuance of this Permit, the approved operations at the Facility include the following air pollution related operations, equipment and emission control devices.

<b>Equipment Specifications</b>			
Equipment/Make/Model	Rating/Size	Fuel Type <sup>1</sup>	Date of Installation
Pratt & Whitney FT4C-1 Gas Turbine (Unit A), serial number P-662088 <sup>2</sup>	385.1 MMBtu/hr <sup>3</sup>	Kerosene	1972
Pratt & Whitney FT4A-11 Gas Turbine (Unit B), serial number P-685025 <sup>2</sup>	355.5 MMBtu/hr <sup>3</sup>	Kerosene	1972
One (1) above ground fixed roof kerosene storage tank	1,050,000 gallon	Kerosene	1972
One (1) reserve above ground fixed roof kerosene storage tank	1,050,000 gallons	Kerosene	1972

<sup>1</sup> Facility has approval to fire biodiesel fuel blends not to exceed B20, or lighter grade distillate oils, in addition to kerosene.

<sup>2</sup> Unit A and Unit B are both coupled to a single 50 MW electrical generator

<sup>3</sup> MMBtu/hr - Million British Thermal Units per hour maximum rated heat input.

(B) FACILITY CLASSIFICATION

The Facility is classified as a source of air contaminants pursuant to Title 10 of the *Vermont Statutes Annotated* ("10 VSA") §555 and §5-401(3) [Electrical power generation facilities] and (6)(a) [Fossil fuel-burning equipment] of the *Vermont Air Pollution Control Regulations* (hereinafter "*Regulations*"). In addition, §5-101 of the *Regulations* defines a *stationary source* as any structure(s), equipment, installation(s), or operation(s), or combination thereof, which emit or may emit any air contaminant, which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person or persons under common control. Based on this definition, all of the equipment, operations, and structures at the Facility are grouped together by the Agency of Natural Resources, Department of Environmental Conservation, Air Quality & Climate Division (hereinafter "Agency") as one stationary air contaminant source for purposes of review under the *Regulations*.

(C) PRIOR AGENCY ACTIONS/APPROVALS

The Facility does not currently operate under any prior "Permit to Construct" issued by the Agency as the Facility was originally constructed prior to the adoption of the current "Permit to Construct" program under 10 V.S.A. §556 and §§5-501 and 5-502 of the *Regulations* on July 1, 1979. The Facility has not undergone any modifications subject to review under §§5-501 and 5-502 of the *Regulations* since that time. Consequently, the Facility does not currently operate under a Permit to Construct at this time.

The Facility has been issued the following "Permit to Operate" approvals under 10 V.S.A. §556a and Subchapter X of the *Regulations*.

<b>Prior Agency Approvals and Actions</b>	
Date of Action	Description of Agency Approval/Action
September 20, 1999	<p>#OP-95-105 – Initial Agency "Title V Permit to Operate" approval for Facility. Permittee initially submitted a non-Title V application in 1996 since actual emissions from the Facility were below the 50% threshold for applicability to Title V. Prior to the Agency taking action on the application, the Facility exceeded 50% of the major source threshold for NOx due to increased operation as a result of the ice storm of 1998. Permittee was subsequently required to amend their application to a Title V application and permit #OP-95-105 was issued based on this amendment. This permit imposed NOx reasonably available control technology (RACT) per §5-251(2) of the <i>Regulations</i>; requiring Permittee to either accept a cap on NOx emissions of &lt;100 tons per year, install Dry Low NOx (DLN) system to achieve a NOx emission rate of 0.24 lbs/MMBtu from units A and B, or shutdown the facility if the facility ever exceeded 50 tons per year of NOx in the future.</p> <p>The Facility subsequently exceeded the 50 tons per year NOx level in calendar year 2000. Permittee initially intended to pursue installation of DLN but the development of the DLN kits for these turbines was delayed for numerous reasons beyond the reasonable control of Permittee and the Permittee instead requested an emission cap of less than 100 tons per year of NOx.</p>

Prior Agency Approvals and Actions	
Date of Action	Description of Agency Approval/Action
April 29, 2003	#OP-03-008 - Modification to #OP-95-105 to accept a cap on NOx emissions of <100 tons per year.
September 20, 2013	#OP-08-042 – Renewal of existing operating permit, and inclusion of CO <sub>2</sub> Budget permit as required by the Regional Greenhouse Gas Initiative (RGGI) Program regulations.
August 1, 2018	#OP-17-028 – Renewal of the “Permit to Operate” and “CO <sub>2</sub> Budget Permit”.

## (D) FACILITY PERMIT APPLICABILITY

As noted above, the Facility is classified as a source of air contaminants under §5-401 of the *Regulations*. Pursuant to 10 VSA §556a and Subchapter X of the *Regulations* a Permit to Operate is required for any air contaminant source with allowable emissions of all air contaminants combined of ten (10) tons per year (“tpy”) or more or that is otherwise subject to Title 40 *Code of Federal Regulations* (“40 CFR”) Part 70.

The Facility currently operates under a Permit to Operate issued on August 1, 2018. The allowable emissions from the Facility are estimated to be greater than the ten (10) tpy combined threshold for applicability with Subchapter X of the *Regulations*, but each pollutant is less than the one-hundred (100) tpy single pollutant threshold (50 tpy for VOC) for applicability to Title V of the federal Clean Air Act. Therefore, pursuant to §§5-1002, 5-1003, and 5-1005 of the *Regulations* the Facility is classified as a “Subchapter X Major Source”. In accordance with §5-1009 of the *Regulations*, the agency is issuing the Permit to Operate herein as a renewal of the previous Permit to Operate for the Facility and the Permit herein supersedes all prior Permits for the Facility.

In accordance with §5-1009 of the *Regulations*, the Agency is issuing the Permit to Operate and CO<sub>2</sub> Budget Permit herein as a renewal of the previous Permit to Operate and CO<sub>2</sub> Budget Permit for the Facility and the Permit herein supersedes all prior Permits for the Facility. The allowable emissions for the Facility are summarized below:

Allowable Air Contaminant Emissions (tons/year) <sup>1</sup>					
PM/PM <sub>10</sub> /PM <sub>2.5</sub>	CO	NO <sub>x</sub>	SO <sub>2</sub>	VOCs	HAPs
1.8	0.5	<100	0.2	<5	<1.0

<sup>1</sup> PM/PM<sub>10</sub>/PM<sub>2.5</sub> – total particulate matter, total particulate matter of 10 micrometers in size or smaller and total particulate matter of 2.5 micrometers in size or smaller, respectively. Unless otherwise specified, all PM is assumed to be PM<sub>2.5</sub>; SO<sub>2</sub> - sulfur dioxide; NO<sub>x</sub> - oxides of nitrogen measured as NO<sub>2</sub> equivalent; CO - carbon monoxide; VOCs - volatile organic compounds; HAPs - hazardous air pollutants as defined in §112 of the federal Clean Air Act.

## (E) REVIEW OF CRITERIA POLLUTANT EMISSIONS FOR THE PERMIT TO CONSTRUCT

## (a) New Source Review Designation

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to review under the New Source Review requirements in §5-501 or §5-502 of the *Regulations* at this time.

## (b) Most Stringent Emission Rate

Pursuant to §5-502 of the *Regulations*, the owner/operator of each new major stationary source or major modification must apply control technology adequate to achieve the Most Stringent Emission Rate ("MSER") with respect to those air criteria pollutants for which there would be a major or significant actual emissions increase, respectively, but only for those currently proposed physical or operational changes which would contribute to the increased emissions.

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to review under the MSER requirements in §5-502 of the *Regulations* at this time. In addition, there have been no prior MSER evaluations conducted for any of the previous modifications to the Facility.

## (c) Ambient Air Quality Impact Evaluation

An ambient air quality impact evaluation for criteria pollutants is performed to demonstrate whether or not a proposed project will cause or contribute to violations of the national ambient air quality standards and/or significantly deteriorate existing air quality for the regulated criteria pollutants.

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to an air quality impact analysis under §5-501 of the *Regulations* at this time. In addition, there have been no prior ambient air quality impact evaluations conducted for any of the previous modifications to the Facility.

## (F) REVIEW OF CRITERIA POLLUTANT EMISSIONS FOR THE PERMIT TO OPERATE

## (a) Applicable Requirements

The operations at the Facility are subject to the following state and federal laws and regulations, the requirements of which are embodied in the conditions of this Permit.

(i) *Vermont Air Pollution Control Regulations:*

<b>Applicable Requirements from the Vermont Air Pollution Control Regulations</b>
Section 5-201 – Prohibition of Open Burning
Section 5-211(2) - Prohibition of Visible Air Contaminants, Installations Constructed Subsequent to April 30, 1970.
Section 5-221(1) - Prohibition of Potentially Polluting Materials in Fuel, Sulfur Limitation in Fuel.
Section 5-231(3) - Prohibition of Particulate Matter; Combustion Contaminants.
Section 5-231(4) - Prohibition of Particulate Matter; Fugitive Particulate Matter.
Section 5-241 – Prohibition of Nuisance and Odor.
Section 5-402 – Written Reports When Requested.
Section 5-403 – Circumvention.
Section 5-404 – Methods for Sampling and Testing of Sources.
Section 5-405 – Required Air Monitoring.
Section 5-406 – Required Air Modeling.
Section 5-407 – Prevention of Air Contaminant Emissions.
Section 5-408 – Change in Ownership or Operational Control.
Section 5-409 – False or Misleading Information.
Subchapter VIII – Registration of Air Contaminant Sources.
Subchapter X – Operating Permits.

(ii) *Vermont CO<sub>2</sub> Budget Trading Program Regulations:*

<b>Applicable Requirements from the Vermont CO<sub>2</sub> Budget Trading Program Regulations</b>
Subchapters I-X – Regional Greenhouse Gas Initiative (RGGI) Vermont CO <sub>2</sub> Budget Trading Program. Applicable to any fossil fuel-fired system that serves an electrical generator with a nameplate capacity of greater than or equal to 25 MWe.
<i>The Facility is a fossil-fuel fired electrical generation unit with a nameplate rating of greater than 25 MWe. Accordingly, the RGGI Vermont CO<sub>2</sub> Budget Trading Program is applicable and the Permittee must comply with the requirements of the CO<sub>2</sub> Budget Permit contained herein and all other relevant requirements of the Vermont CO<sub>2</sub> Budget Trading Program</i>

(iii) Reasonably Available Control Technology - §5-1010 of the *Regulations*  
Pursuant to 10 V.S.A. §556a(d) and §5-1010 of the *Regulations* the Agency

may establish and include within any Permit to Operate emission control requirements based on Reasonably Available Control Technology ("RACT").

The Permittee has proposed a fuel cap of 2,240,000 gallons per year, with the intent of limiting nitrogen oxide (NOx) emissions to less than 100 tons per year to remain below the applicability threshold of §5-251(2) of the *Vermont Air Pollution Control Regulations (Regulations)* which otherwise would impose Reasonably Available Control Technology (RACT) to reduce NOx emissions from the Facility.

Accordingly, the Agency has not imposed any RACT requirements under the authority of §5-1010 of the *Regulations* at this time.

(iv) Existing Air Pollution Control Permit to Construct and/or Operate

The Facility does not currently operate under the confines of a Permit to Construct . The Facility currently operates under the confines of a Permit to Operate issued on August 1, 2018 (#OP-17-028).

The conditions within that existing permit are considered applicable requirements pursuant to §5-1002 of the *Regulations*. The requirements of that permit which are not being modified herein are incorporated into this new Permit to Operate (#OP-22-045).

(v) Federal Requirements:

<b>Applicable Requirements from Federal Regulations and the Clean Air Act</b>
<p>40 <i>CFR</i> Part 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. Applies to each storage vessel with a capacity greater than or equal to 75 m<sup>3</sup> (19,804 gal) that is used to store volatile organic liquids (including petroleum). This subpart does not apply to the following:</p> <ol style="list-style-type: none"> <li>1. Any storage vessel with a capacity less than 75 m<sup>3</sup></li> <li>2. Any storage vessel storing a liquid with a vapor pressure less than 3.5 kPa</li> <li>3. Any storage vessel with a capacity &gt; 75 m<sup>3</sup> and &lt;151 m<sup>3</sup> with a v.p. &lt;15.0 kPa</li> <li>4. Pressure vessels &gt;29.7 psi and without emissions to the atmosphere.</li> <li>5. Vessels permanently attached to mobile vehicles.</li> <li>6. Vessels located at bulk gasoline plants.</li> <li>7. Vessels located at gasoline service stations.</li> </ol> <p>For affected facilities, there are recordkeeping requirements and depending upon the material stored there may be standards for the tank's vent system.</p> <p><i>These requirements do not apply to this Facility since the potentially affected unit was installed in 1972. In addition, kerosene has a vapor pressure less than 3.5 kPa and as such, a storage vessel containing kerosene would not be subject to this requirement.</i></p>

**Applicable Requirements from  
Federal Regulations and the Clean Air Act**

40 *CFR* Part 63, Subpart YYYY – National Emission Standards for Stationary Gas Turbines: Applicable to stationary gas turbines that are major HAP sources or are located at a major HAP source.

*These requirements do not apply to this Facility since the Facility is not a major HAP source.*

Clean Air Act §112r(1) Prevention of Accidental Release; Purpose and General Duty 40 *CFR* Part 68 Chemical Accident Prevention Programs. Facilities that produce, process, handle, or store substances identified in paragraph (3) of this subsection have a general duty to identify hazards which may result in releases using appropriate hazard assessment techniques, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which do occur.

*The Permittee has stated that the Facility does not produce, process, handle, or store substances greater than the threshold amounts identified in paragraph (3) of this subsection.*

40 *CFR* Part 98 Mandatory Greenhouse Gas Reporting. Requires reporting of GHG emissions annually to EPA for

**1)** facilities in source categories listed in §98.2(a)(1) including electric utility units subject to Acid Rain, MSW landfills that generate CH<sub>4</sub> in amounts equivalent to 25,000 metric tons of CO<sub>2</sub>e or more per year and electrical transmission and distribution equipment at facilities where the total nameplate capacity of SF<sub>6</sub> and PFC containing equipment exceeds 17,820 pounds,

**2)** facilities in source categories listed in §98.2(a)(2) including electronics manufacturing, iron and steel production and pulp and paper manufacturing that emit 25,000 metric tons of CO<sub>2</sub>e or more per year from such source categories as well as all stationary combustion,

**3)** facilities with stationary combustion sources that aggregate to 30 MMBtu/hr or more and which emit 25,000 metric tons of CO<sub>2</sub>e or more per year from all stationary combustion sources combined, and

**4)** fuel suppliers including all local natural gas distribution companies.

*The U.S. EPA has retained the implementing authority for this regulation and is responsible for determining applicability. This regulation under Part 98 is not considered to be an applicable requirement per 40 *CFR* Part 70.2 and as noted in 74 *FR* 56260 (October 30, 2009).*

*Part 98 is not anticipated to apply to the Facility with the current fuel consumption limitations contained in this permit.*

*Part 98 is anticipated to apply to the Facility in the event Facility emissions of CO<sub>2</sub>e exceed 25,000 metric tons of CO<sub>2</sub>e or more per year. It is anticipated that emissions of CO<sub>2</sub>e will not exceed 25,000 metric tons of CO<sub>2</sub>e until the 100 ton per year limitation on NO<sub>x</sub> emissions included as part of this permit has already been exceeded.*



(b) Non-Applicable Requirements

Pursuant to §5-1015(a)(14) of the *Regulations*, an owner or operator of a Facility may request a permit shield from specific state or federally enforceable regulations and standards which are not applicable to the source. The applicant has not requested such a permit shield in accordance with the requirements of §5-1015(a)(14) of the *Regulations*.

(G) CONTROL OF HAZARDOUS AIR CONTAMINANTS

Pursuant to §5-261 of the *Regulations*, any stationary source subject to the rule<sup>1</sup> with current or proposed actual emissions of a hazardous air contaminant (HAC) equal to or greater than the respective Action Level (found in Appendix C of the *Regulations*) shall be subject to the Regulation and shall achieve the Hazardous Most Stringent Emission Rate (HMSEER) for the respective HAC. HMSEER is defined as a rate of emissions which the Secretary, on a case-by-case basis, determines is achievable for a stationary source based on the lowest emission rate achieved in practice by such a category of source and considering economic impact and cost. HMSEER may be achieved through application of pollution control equipment, production processes or techniques, equipment design, work practices, chemical substitution, or innovative pollution control techniques.

Based on information provided by the Permittee, the Agency does not anticipate the Facility to have regulated emissions of an identified HAC in excess of an Action Level. Therefore, the Facility is not being reviewed pursuant to §5-261 of the *Regulations* at this time.

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<sup>1</sup> APCR §5-261(1)(c)(ii) provides that solid fuel burning equipment (not including incinerators) installed or constructed prior to January 1, 1993, and all fuel burning equipment which combust virgin liquid or gaseous fuel shall not be subject to the requirements of §5-261.

Based on the Agency's review of the Facility's application and the above Findings of Fact, the Agency concludes that the Facility, subject to the following Permit conditions, complies with all applicable state and federal air pollution control laws and regulations. Therefore, pursuant to 10 VSA §§556 and 556a, as amended, the Agency hereby issues a Permit approving the Facility, as described in the above Findings of Fact, subject to the following:

## **PERMIT CONDITIONS**

### **- Construction and Equipment Specifications -**

- (1) The Permittee shall construct and operate the Facility in accordance with the plans and specifications submitted to the Agency and in accordance with the conditions set forth herein, including the equipment specifications as listed in Findings of Fact (A) or their equivalent as approved by the Agency. [10 V.S.A. §556a(d)] [§5-409 and 5-501(1) of the *Regulations*] [Application for #OP-95-105, #OP-03-008, #OP-08-042, #OP-17-028 and #OP-22-045 ]
- (2) Stack heights: The exhaust gases from each combustion turbine exhaust shall be vented vertically through a stack which extends a minimum of forty (40) feet above the stack base grade elevation. The stack(s) shall not be equipped with any device that may obstruct the upward discharge of the exhaust gases such as a fixed rain cap of a type that has not been approved by the Agency.

For all other non-fugitive emission points at the Facility, the Agency recommends that they each be exhausted vertically through a stack(s) which extend a minimum of four (4) feet above the roof where the stack penetrates the roof and that they not be equipped with any device that may obstruct the upward discharge of the exhaust gases such as a fixed rain cap of a type that has not been approved by the Agency. The Agency may require the Permittee to increase the stack height, remove a rain cap, or conduct a dispersion analysis to verify compliance with ambient air quality standards for any stack at the Facility if, in the judgment of the Agency, adequate dispersion cannot be maintained at the current stack configuration. Adequacy may in part be based on the actual emission rate of air contaminants, the characteristics of the current stack configuration, or inspections of the Facility that indicate poor dispersion or that confirm significant visible emissions or nuisance or odor beyond the property line. [10 V.S.A. §556a(d)] [§5-406 of the *Regulations*] [Application for #OP-95-105]

**- Operational Limitations -**

- (3) The annual fuel consumption in the two combustion turbines combined shall not exceed 2,240,000 gallons per year, based on any rolling twelve (12) consecutive calendar month period. [10 V.S.A. §556a(d)] [§5-501(1) of the Regulations] [Application for #OP-03-008]
- (4) Combustion Turbine Fuel Requirements: Only kerosene, biodiesel fuel blends not to exceed B20, or lighter grade distillate oils with a sulfur content not to exceed 0.0015 percent by weight may be used as fuel for in the combustion turbines at the Facility. [10 V.S.A. §556a(d)] [§§5-501 and 5-1015(a)(1) of the Regulations] [§5-221(1) of the Regulations] [Application for #OP-17-028]
- (5) Stationary Diesel Engines: The Permittee shall not install or operate a stationary reciprocating internal combustion engine, as defined in the *Regulations*, unless the engine complies with §5-271 of the *Regulations* as may be applicable as well as any federal regulations including 40 *CFR* Part 60 Subpart IIII and 40 *CFR* Part 63 Subpart ZZZZ, as may be applicable. All engines, including emergency engines, installed on or after July 1, 2007 must comply with the applicable emission standards (Tier 2) of §5-271 immediately upon installation. Installation of any size engine, even those below 300 bhp, may still require approval from the Agency in the form of an amended permit prior to installation. [10 V.S.A. §556a(d)] [§§5-271 and 5-501 of the Regulations]
- (6) Open Burning: Open burning is prohibited except as provided for in §5-202 of the *Regulations*. Prior to conducting open burning of any material, other than leaves, brush, or tree cuttings from normal grounds maintenance, the Permittee shall contact the Air Pollution Control Officer and obtain approval for such burning, if required. [10 V.S.A. §556a(d)] [§5-202 of the Regulations]

**- Emission Limitations -**

- (7) Nitrogen Oxides - Facility wide: In order to maintain Facility emissions of nitrogen oxides (NO<sub>x</sub>) below the threshold of §5-251(2) of the *Regulations*, and of §801(c)(3)(iii) of the *Program Regulations*, the Permittee shall limit emissions of nitrogen oxides from the entire Facility to less than one-hundred (100) tons per year based on any rolling twelve (12) consecutive calendar month period. NO<sub>x</sub> emissions shall be estimated in accordance with Condition (21) of this Permit. Prior to exceeding this emission limit, Permittee will be required to obtain written approval from the Agency, implement NO<sub>x</sub> RACT in accordance with §5-251(2) of the *Regulations*, and implement emissions monitoring for CO<sub>2</sub> in accordance with §801 of the *Program Regulations*, using a method other than the low mass emission (LME) methodology. [10 V.S.A. §556a(d)] [§§5-251(2) of the *Regulations*] [§801(c)(3)(iii) of the *Program Regulations*] [Application for #OP-03-008]
- (8) Sulfur Dioxide - Facility wide: In order to maintain Facility emissions of sulfur dioxide (SO<sub>2</sub>) below the threshold of §801(c)(3)(iii) of the *Program Regulations*, the Permittee shall limit emissions of sulfur dioxide to less than twenty-five (25) tons per year based on any rolling twelve (12) consecutive calendar month period. SO<sub>2</sub> emissions shall be estimated in accordance with Condition (21) of this Permit. Prior to exceeding this emission limit, Permittee will be required to obtain written approval from the Agency and implement emissions monitoring for CO<sub>2</sub> in accordance with §801 of the *Program Regulations*, using a method other than the low mass emission (LME) methodology. [10 V.S.A. §556a(d)] [§801(c)(3)(iii) of the *Program Regulations*] [Application for #OP-08-042]
- (9) Particulate Matter: Emissions of particulate matter ("PM") from any fossil fuel burning device, except motorized vehicles, with a heat input rating of less than ten (10) million British Thermal Units per hour ("MMBtu/hr") shall not exceed 0.5 pounds per MMBtu.
- Any emission testing conducted to demonstrate compliance with the above emission limit shall be performed in accordance with 40 *CFR* Part 60, Appendix A, Reference Method 5 and Part 51, Appendix M, Reference Method 202, or equivalent methods approved in writing by the Agency. [10 V.S.A. §556a(d)] [§§5-231(3)(a)(i) and 5-404 of the *Regulations*]
- (10) Visible Emissions [Facility Wide]: Emissions of visible air contaminants from any installation at the Facility, except where otherwise noted in this Permit, shall not exceed twenty (20) percent opacity for more than a period or periods aggregating six (6) minutes in any hour and at no time shall visible emissions exceed sixty (60) percent opacity.
- Any emission testing conducted to demonstrate compliance with the above emission limits shall be performed in accordance with 40 *CFR* Part 51, Appendix M, Methods 203B and 203C, respectively, or equivalent methods approved in writing by the Agency. [10 V.S.A. §556a(d)] [§§5-211(2), 5-211(3) and 5-404 of the *Regulations*]
- (11) Volatile Organic Compounds: Emissions of volatile organic compounds from the Facility shall not equal or exceed five (5) tons per year based on any rolling twelve (12) consecutive calendar month period. [10 V.S.A. §556a(d)] [§5-502 of the *Regulations*]

- (12) Hazardous Air Pollutants: Emission of federally regulated hazardous air pollutants (HAPs) from the Facility shall not equal or exceed one (1) ton of total combined HAPs per calendar year. [10 V.S.A. §556a(d)] [§§5-261 and 5-501 of the *Regulations*] [40 CFR Part 63]
- (13) Hazardous Air Contaminants: Emissions of state hazardous air contaminants (HACs) from the applicable operations at the Facility shall not equal or exceed their respective Action Level (found in Appendix C of the *Regulations*) unless the Agency has reviewed and approved such HAC emission under §5-261(2) of the *Regulations*. [10 V.S.A. §556a(d)] [§5-261 of the *Regulations*]
- (14) Fugitive Emissions: The Permittee shall take reasonable precautions at all times to control and minimize emissions of fugitive particulate matter and volatile organic compounds from the operations at the Facility. [10 V.S.A. §556a(d)] [§5-231(4) of the *Regulations*]
- (15) Nuisance and Odor: The Permittee shall not discharge, cause, suffer, allow, or permit from any source whatsoever such quantities of air contaminants, or odors beyond the property line of a premises, which will cause injury, detriment, nuisance or annoyance to any considerable number of people or to the public or which endangers the comfort, repose, health or safety of any such persons or the public or which causes or has a natural tendency to cause injury or damage to business or property. [10 V.S.A. §556a(d)] [§5-241(1) of the *Regulations*]

#### - Compliance Testing and Monitoring -

- (16) Fuel Monitoring System - General: Permittee shall install, calibrate, maintain and operate a monitoring system to measure and record the quantity of fuel, in gallons, combusted in each of the combustion turbines. The monitoring system must have a minimum measurement accuracy of 2% and its output must be recorded with a resolution of +/- 1 gallon in a permanent form acceptable to the Agency which includes at a minimum:;
- (a) records of monitoring data during turbine operations;
  - (b) inspection, maintenance and repair records for all system components;
  - (c) documentation of calibration in conformance with the manufacturer's recommendations and, as appropriate, quarterly verification checks;
- [§§5-1015(a)(1), 1015(a)(3), 1015(a)(4) and 5-405(1) of the *Regulations*] [§801(c)(3) of the *Program Regulations*]
- (17) Fuel Monitoring System – Calibration: The Permittee shall install, maintain, and calibrate the fuel monitoring system following the manufacturer's recommended procedures and schedule. Fuel monitoring system calibration shall be performed every 5 years or 10,000 hours of meter operation, whichever comes first. Permittee shall inspect and verify, as appropriate, the performance of the monitoring system each calendar quarter by comparing meter flows to those measured using information regarding tank gauging and delivery, as performed in accordance with the Low Mass Emissions (LME) methodology as described in 40 CFR, §75.19 [§§5-1015(a)(1), 1015(a)(3), 1015(a)(4) and 5-405(1) of the *Regulations*] [§§801(c)(3)(iii), 802(d), and 802(e) of the *Program Regulations*]

**- Record Keeping and Reporting -**

- (18) Records of Fuel Use: The Permittee shall maintain records of the total quantity of fuel consumed in the combustion turbines, in gallons, recorded to the nearest gallon, each month. At the beginning of each month the Permittee shall calculate the total quantity of fuel consumed in the combustion turbines, in gallons, during the previous twelve (12) consecutive month period. [10 V.S.A. §556a(d)] [§5-405(1) of the *Regulations*]
- (19) Records of Operation: The Permittee shall maintain records of the total hours of operation of each combustion turbine, recorded to the nearest quarter hour, for each month. At the beginning of each month the Permittee shall calculate the total hours of operation for each combustion turbine, in hours, during the previous twelve (12) consecutive month period. [10 V.S.A. §556a(d)] [§5-405(1) of the *Regulations*]
- (20) Records of Fuel Oil Certifications: The Permittee shall obtain from the fuel supplier, for each shipment of fuel received at the Facility for use in combustion turbines a certification or invoice regarding the sulfur content of the fuel. The certification or invoice shall include: the date of delivery, name of the fuel supplier, fuel type, quantity of fuel delivered, the sulfur content of the fuel delivered, and either (1) a statement from the fuel oil supplier that the oil complies with the specifications for kerosene 1-K, or equivalent, as defined by the American Society of Testing and Materials in ASTM D3699, “Standard Specification for Kerosene” or (2) the location of the fuel when the sample was drawn for analysis to determine the sulfur content of the fuel, specifically including whether the fuel was sampled as delivered to the affected facility, or whether the sample was drawn from fuel in storage at the fuel supplier’s or fuel refiner’s facility, or other location, and the method used to determine the sulfur content of the fuel. [10 V.S.A. §556a(d)] [§5-405(1) of the *Regulations*]
- (21) Estimation Procedures for NO<sub>x</sub> and SO<sub>2</sub> Emissions: Beginning at the end of the first full calendar month after the date of issuance of this Permit, and at the end of each month thereafter, Permittee shall tabulate the total quantity of fuel oil consumed in the combustion turbines, in gallons, and shall estimate the total quantity of NO<sub>x</sub> and SO<sub>2</sub> emissions to the atmosphere, in tons, during the previous twelve consecutive month period.

To estimate the total quantity of NO<sub>x</sub> emissions to the atmosphere based on fuel oil usage as required by this Condition, Permittee shall use an emission factor of 0.63 pounds of NO<sub>x</sub> per million Btu for combustion turbine A (Pratt & Whitney model FT4C-1) and 0.65 pounds of NO<sub>x</sub> per million Btu for combustion turbine B (Pratt & Whitney model FT4A-11) and a default heating value of 137,000 Btu per gallon for kerosene distillate fuel or the actual average heating value of the kerosene fuel.

To estimate the total quantity of SO<sub>2</sub> emissions to the atmosphere based on fuel oil usage as required by this Condition, Permittee shall use an emission factor of 1.01(S) pounds of SO<sub>2</sub> per million Btu for combustion turbine A and an emission factor of 1.01(S) pounds of SO<sub>2</sub> per million Btu for combustion turbine B. The value of S shall be the sulfur content of the fuel in percent by weight (i.e. for 0.05% sulfur fuel, S = 0.05)

The numerical factors for estimating the total quantity of NO<sub>x</sub> emissions to the atmosphere required by this Condition may be revised if approved in writing by the Agency. [10 V.S.A. §556a(d)] [§5-405(1) of the *Regulations*] [Application for #OP-08-042]

- (22) Records: All records shall be retained for a minimum period of five (5) years from the date of record and shall be made available to the Agency upon request. [10 V.S.A. §556a(d)] [§§5-402, 5-405(1) and 5-1015(a)(7) of the *Regulations*]
- (23) Notification: The Permittee shall notify the Agency in writing within ten (10) days of any violation, of which it is aware, of any requirements of this Permit. This notification shall include, at a minimum, the cause for the violation and corrective action or preventative maintenance taken to correct the violation. [10 V.S.A. §556a(d)] [§§5-402 and 5-1015(a)(6) of the *Regulations*]
- (24) Notification: The Permittee shall notify the Agency in writing of any proposed physical or operational change at the Facility which may increase the emission rate of any air contaminant to the ambient air regardless of any concurrent emission reductions that may be achieved. This notification requirement includes the proposed installation of any new equipment that is a source of air pollution, including the replacement of an existing permitted air pollution source. If the Agency determines that a permit amendment is required, a new application and the appropriate application fee shall be submitted. The permit amendment shall be obtained prior to commencing any such change except as may otherwise be allowed by the *Regulations*. [10 V.S.A. §556a(d)] [§§5-402 and 5-501 of the *Regulations*]
- (25) Annual Registration: The Permittee shall calculate the quantity of emissions of air contaminants from the Facility annually. If the Facility emits more than five (5) tons of any and all air contaminants per year or if the Facility performs one or more of the air contaminant emitting operations listed in 5-802(2) of the *Regulations*, the Permittee shall register the source with the Secretary of the Agency (hereinafter "Secretary"), and shall renew such registration annually. Each day of operating a source which is subject to registration without a valid, current registration shall constitute a separate violation and subject the Permittee to civil penalties. The registration process shall follow the procedures set forth in Subchapter VIII of the *Regulations*, including the payment of the annual registration fee on or before May 15 of each year. [10 V.S.A. §556a(d)] [Subchapter VIII §§5-802, 5-803, 5-807, 5-808 of the *Regulations*]
- (26) All records, notifications and reports that are required to be submitted to the Agency by this Permit shall be submitted to:

Air Quality & Climate Division  
Department of Environmental Conservation  
Agency of Natural Resources  
Davis 4  
One National Life Drive  
Montpelier, Vermont 05620-3802

[10 V.S.A. §556a(d)] [§5-402 of the *Regulations*]

- (27) All records, notifications and reports that are required to be submitted to the U.S. EPA by this Permit shall be submitted to:

Attn: Air Compliance Clerk  
 Director, Enforcement and Compliance Division  
 U.S. EPA Region I  
 5 Post Office Square  
 Suite 100 (04-2)  
 Boston, MA 02109-3912

[10 V.S.A. §556a(d)] [§5-402 of the *Regulations*]

**- Regional Greenhouse Gas Initiative / Vermont CO<sub>2</sub> Budget Trading Program  
 Permit Conditions -**

The Regional Greenhouse Gas Initiative (RGGI) is a cooperative, market-based regulatory CO<sub>2</sub> emission trading program among nine Northeast and Mid-Atlantic states (States). The States include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. RGGI is intended to stabilize and then reduce emissions of CO<sub>2</sub> from fossil fuel-fired electrical generating systems with a nameplate capacity equal to or greater than 25 MWe. Sources subject to RGGI are required to purchase and hold allowances equivalent to their actual emissions of CO<sub>2</sub> over each three year control period and certify compliance at the end of each respective control period. Emission allowances are primarily auctioned by the States, which, in turn, invest the auction proceeds in energy-related consumer benefit programs.

The Facility consists of two Pratt and Whitney simple-cycle combustion turbines (Units A and B) that drive a single 50 MW generator that is used for electrical load peaking. Under the Vermont CO<sub>2</sub> Budget Trading Program Regulations (*Program Regulations*), the Facility is classed as a CO<sub>2</sub> source, and each turbine is classed as a CO<sub>2</sub> budget unit.

The Permittee shall operate the Facility in accordance with the plans and specifications submitted to the Agency, and shall comply with the terms and provisions of the Regional Greenhouse Gas Initiative (RGGI), as defined and administered under the *Program Regulations*. The *Program Regulations* include but are not necessarily limited to the following terms and provisions:

The regulatory requirements of the *Program Regulations* are summarized in the following CO<sub>2</sub> Budget Trading Program permit conditions:

- (28) In accordance with Subchapter I (General Provisions) of the *Program Regulations*, the Permittee shall:
- (a) General Provisions – Permit Requirement: The CO<sub>2</sub> Authorized Account Representative (AAR) shall submit to the Agency a complete CO<sub>2</sub> budget permit application and the Permittee shall operate the Facility in compliance with such CO<sub>2</sub> budget permit

The Permittee shall also have an Operating Permit for the Facility as required by the



*Regulations*, and operate the Facility in compliance with said Operating Permit. [§105(a) of the *Program Regulations*] [Application for #OP-08-042]

- (b) General Provisions – Monitoring Requirement: The Permittee and, to the extent applicable, the AAR for the Facility shall comply with the monitoring requirements of Subchapter VIII. The emissions measurements recorded and reported in accordance with Subchapter VIII shall be used to determine compliance with the CO<sub>2</sub> allowance requirements of §105(c) of the *Program Regulations*. [§105(b) of the *Program Regulations*]
- (c) General Provisions – CO<sub>2</sub> Allowance Requirement: As of the respective CO<sub>2</sub> allowance transfer deadline, the Permittee shall hold CO<sub>2</sub> allowances for the Facility as required under §605 of the *Program Regulations*, in the Facility's compliance account in an amount not less than the total CO<sub>2</sub> emissions for the control period from all CO<sub>2</sub> budget units at the source, as determined in accordance with Subchapters VI and VIII. [§105(c) of the *Program Regulations*]
- (d) General Provisions – Recordkeeping and Reporting Requirements: Unless otherwise provided, the Permittee shall submit the following documents and reports, and retain copies of these documents and reports on site for a period of 10 years from the date the document is created.
- i. The account certificate of representation for the CO<sub>2</sub> AAR for the source and each CO<sub>2</sub> budget unit at the source and associated documents. Such documents shall be retained for 10 years or until superseded, whichever is longer.
  - ii. All emissions monitoring information, in accordance with Subchapter VIII and 40 CFR 75.57.
  - iii. Copies of all reports, compliance certifications, and other submissions and all records made or required under the *Program Regulations*.
  - iv. Copies of all documents used to complete a CO<sub>2</sub> budget permit application and any other submission under the *Program Regulations* or to demonstrate compliance with the requirements of the *Program Regulations*.
  - v. The CO<sub>2</sub> AAR for the Facility shall submit the reports and compliance certifications required under the *Program Regulations*, including those under Subchapter IV.

As the Facility is not regularly staffed and is typically operated remotely, records required by this Permit may be kept and maintained at the Permittee's central office in Colchester, Vermont.

[§105(e) of the *Program Regulations*] [40 CFR, §75.57] [5-1015(a)(7) of the *Regulations*]

- (29) In accordance with Subchapter II (Authorized Account Representative for CO<sub>2</sub> Budget Source) of the *Program Regulations*, the Permittee shall:
- (a) Select and maintain, via submission to the Agency of an account certificate of representation, a CO<sub>2</sub> *Authorized Account Representative (AAR)*, and optionally a CO<sub>2</sub> *Authorized Alternate Account Representative (AAAR)*, that shall have responsibility with regard to all matters under the CO<sub>2</sub> Budget Trading Program

concerning the Facility. [§§201 and 202 of the *Program Regulations*]

- (b) Within 30 days following any change in the owners and operators of a CO<sub>2</sub> budget source or a CO<sub>2</sub> budget unit, including the addition of a new owner or operator, the AAR or AAAR shall submit a revision to the account certificate of representation amending the list of owners and operators to include the change. [§203 of the *Program Regulations*]
- (c) The AAR or AAAR may optionally delegate their authority to make electronic submissions to the Agency.
- (d) [§206 of the *Program Regulations*]
- (30) In accordance with Subchapter III (Permits) of the *Program Regulations* the AAR shall submit to the Agency a complete CO<sub>2</sub> budget permit application and the Permittee shall operate the Facility in compliance with any such issued CO<sub>2</sub> budget permit. The AAR submitted such application on December 31, 2008 and the permit herein is the CO<sub>2</sub> budget permit. [§§302 and 303 of the *Program Regulations*] [Application for #OP-08-042]
- (31) In accordance with Subchapter IV (Compliance Certification) of the *Program Regulations* the AAR shall submit to the Agency a compliance certification report for each control period by the first day of March (March 1) following the end of the relevant control period,. The report shall document that, as of the CO<sub>2</sub> allowance transfer deadline, the source holds CO<sub>2</sub> allowances available for compliance deductions under §605 of the *Program Regulations* in the source's compliance account in an amount not less than the total CO<sub>2</sub> emissions for the control period from all CO<sub>2</sub> budget units at the source. The certification report shall be filed electronically in the CO<sub>2</sub> Allowance Tracking System (COATS) and a copy shall also be printed, signed by the AAR, and sent by the applicable deadline to:

Attn: RGGI Administrator  
Agency of Natural Resources  
Department of Environmental Conservation  
Air Quality & Climate Division  
One National Life Drive, Davis Building, Fourth Floor  
Montpelier, Vermont 05620-3802

[§401 of the *Program Regulations*]

- (32) In accordance with Subchapter VI (CO<sub>2</sub> Allowance Tracking System - COATS) and VII (CO<sub>2</sub> Allowance Transfers) of the *Program Regulations*, the AAR shall utilize their compliance account in the COATS system for tracking of allowances necessary for Permittee's compliance with the terms of this Permit and of the *Program Regulations*. [§601 through 608 and §701 through 703 of the *Program Regulations*]
- (33) In accordance with Subchapter VIII (Monitoring and Reporting) of the *Program Regulations*, the Permittee shall:
  - (a) Begin monitoring of the CO<sub>2</sub> budget source on January 1, 2009. [§801(b)(1) of the *Program Regulations*]

- (b) Monitor and report CO<sub>2</sub> mass emissions from the two CO<sub>2</sub> budget units at the Facility in accordance with the *Program Regulations*. The CO<sub>2</sub> budget source was permitted as, and currently is considered to be, a low mass emission (LME) source as described in 40 CFR, §75.19. Accordingly, fuel usage and heat input may be determined by the methods applicable to LME sources, as described in 40 CFR §75.19(c)(3)(ii). Alternatively, other methods described in 40 CFR, §75.19 may be used to estimate CO<sub>2</sub> mass emissions with the written approval of the Agency.

The estimation of CO<sub>2</sub> mass emissions from the CO<sub>2</sub> budget units using methodology applicable to LME sources is summarized below:

- (i) The Permittee shall determine, for the respective quarter, the amount of fuel used by each CO<sub>2</sub> budget unit and the total amount of fuel used by the CO<sub>2</sub> budget source, in gallons. Fuel usage shall be determined by using, as appropriate, fuel billing delivery records, fuel tank liquid gauging records, or fuel flow meter(s), and other operating information as required, as described in the CO<sub>2</sub> Budget Permit Application or in 40 CFR §75.19(c)(3)(ii)(B).
- (ii) The Permittee will determine the gross calorific value of the fuel used, in MMBtu/gallon, in accordance with 40 CFR §75.19(c)(3)(ii)(C). This allows for the determination of the gross calorific value by analysis, as described in 40 CFR §75, Appendix D, Sections 2.2 and 2.3, or the use of a default gross calorific value for the appropriate fuel listed in Table LM-5 of 40 CFR §75.19

Should the Permittee opt to use the default gross calorific value from Table LM-5, the gross calorific value for No. 2 distillate fuel of 151,700 Btu/gallon, shall be used for kerosene fuel. Should the gross calorific value of the fuel be determined by analysis, information supporting the gross calorific value used in mass emission calculations for that year shall be submitted to the Agency as requested.

- (iii) The Permittee will determine, for each CO<sub>2</sub> budget unit, the total quarterly heat input based on the quarterly fuel usage in accordance with Equation LM-3 presented in 40 CFR §75.19(c)(3)(ii)(E), as follows:

$$HI_{fuel-qtr} = Q_{qtr} \frac{GCV_{max}}{10^6} \quad \text{Eq. LM-3 (for gaseous fuel or fuel oil)}$$

Where:

$HI_{fuel-qtr}$  = Quarterly heat input from fuel oil (MMBtu).

$Q_{qtr}$  = Volume of fuel oil combusted during the quarter, in gallons, as determined in (i) above.

$GCV_{max}$  = Gross calorific value of the fuel oil combusted during the quarter in Btu/gallon, as determined in (ii) above

$10^6$  = Conversion of Btu to Million Btu (MMBtu).

- (iv) The Permittee will determine the mass emission rate of CO<sub>2</sub> in tons/MMBtu by using the generic default emission rate in Table LM-3 of 40 CFR §75.19 for the appropriate fuel. The default mass emission rate of CO<sub>2</sub> for oil, including distillate fuel or kerosene, based on Table LM-3, shall be 0.081 tons/MMBtu.
- (v) Total quarterly mass emissions of CO<sub>2</sub> ,in tons, for each CO<sub>2</sub> budget unit will be determined by multiplying the quarterly heat input in MMBtu derived in (iii) above by the default emission rate in tons/MMBtu derived in (iv) above.
- (vi) Comply with the emission limitations regarding applicability of the LME methodology, including the requirement for CO<sub>2</sub> budget sources not subject to acid rain emissions limitations that emissions from these budget sources be less than 100 tons of NO<sub>x</sub> annually, and no more than 25 tons of SO<sub>2</sub> annually.

[§801(c)(3)of the *Program Regulations*]

- (c) Initial Certification: Permittee shall comply with the Initial Certification requirements for LME sources at the Facility by submitting the following to the Agency:
  - (i) Annual emissions registration information previously reported to the Agency for those periods of operation prior to January 1, 2009 to satisfy the requirements of 40 CFR §75.19(a)(2) and §75.20(h). This information was included as part of the application for the CO<sub>2</sub> Budget Permit submitted to the Agency on December 31, 2008.
  - (ii) If the Permittee elects to certify a fuel flow meter system for heat input determinations, the Permittee shall also meet the certification requirements contained in this Air Pollution Control Permit.
  - (iii) Permittee shall further submit, as part of the Initial Certification requirements for the two CO<sub>2</sub> budget units at the Facility, a monitoring plan in accordance with 40 CFR §§75.53 and 75.62. The submittal of the Permit Application on December 31, 2008, enrollment in the Emission Collection and Monitoring Plan System (ECMPS), and commencing to submit data into the ECMPS shall satisfy this requirement. Any subsequent changes to the monitoring plan shall be submitted to the Agency for approval. [§§802(d) and 802(e) of the *Program Regulations*]
- (d) Recertification: Permittee shall comply with the ongoing qualification/disqualification procedures described in 40 CFR §75.19(b) for LME sources, so that the CO<sub>2</sub> budget source maintains its status as an LME source. This requires an annual demonstration that the CO<sub>2</sub> budget source emits no more than 25 tons of SO<sub>2</sub> annually and less than 100 tons of NO<sub>x</sub> annually. The calculation methodology used for the annual demonstration shall be the same methodology as used in the Initial Certification.

The submittal of annual registration reports required under §5-802 of the *Regulations* using procedures described in §5-803 of the *Regulations* shall satisfy this

recertification requirement.

If the Permittee elects to recertify a fuel flow meter system for heat input determinations, the Permittee shall also meet the ongoing certification and calibration requirements contained in this Air Pollution Control Permit. [§§801(c)(3)(iii), [802(d), and 802(e) of the *Program Regulations*]

(e) CO<sub>2</sub> Mass Emissions Reporting: The Permittee's AAR shall submit a quarterly report and compliance certification of CO<sub>2</sub> mass emissions data to the Agency within 30 days of the end of each quarter. The quarterly report shall be in the format specified in 40 CFR Part 75 Subpart H and 40 CFR Part 75.64. The quarterly submission of said data into the ECMPS and COATS databases may be used to satisfy this requirement. [§805(d) of the *Program Regulations*]

(f) Requirements to Provide Annual Output Data: The Permittee shall submit an Initial Certification, stating that the output monitoring system consists entirely of billing meters. This requirement was satisfied as part of the CO<sub>2</sub> Budget Permit Application.

The Permittee shall submit to the Agency, an annual electrical output report, providing data from the Facility, which shall be the same MWh value submitted to the ISO and a statement certifying that the MWh of electrical output reported reflects the total actual electrical output for all CO<sub>2</sub> budget units at the facility used by the ISO to determine settlement resources of energy market participants.

The Permittee's AAR shall submit the annual electrical output report to the Agency in electronic format by March 1 for the previous calendar year. The annual output report may be combined with the annual registration report required under §5-802 of the *Regulations*, and the annual qualification for SO<sub>2</sub> and NO<sub>x</sub> emissions from LME sources as noted in (d) above and as further described in §801(c)(3) of the *Program Regulations*. [§808 of the *Program Regulations*] [§5-402 of the *Regulations*]

**- Standard Permit Conditions -**

- (34) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Agency which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [10 V.S.A. §§556(g) and 556a(d)] [40 CFR Part 60.11(d) and 63.6(e)]
- (35) These Permit conditions may be suspended, terminated, modified, or revoked for cause and reissued upon the filing of a written request with the Secretary of the Agency (hereinafter "Secretary") or upon the Secretary's own motion. Any modification shall be granted only with the written approval of the Secretary. If the Secretary finds that modification is appropriate, only the conditions subject to modification shall be re-opened. The filing of a request for modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay any terms or conditions of this Permit. The Secretary may provide opportunity for public comment on any proposed modification of these conditions. If public comments are solicited, the Secretary shall follow the procedures set forth in 10 V.S.A. §556 and §556a, as amended. [10 V.S.A. §§556(d) and 556a(g)] [§§5-1008(a) and 5-1008(e) of the *Regulations*]
- (36) Cause for reopening, modification, termination and revocation of this Permit includes, but is not limited to:
- (a) Inclusion of additional applicable requirements pursuant to state or federal law;
  - (b) A determination that the permit contains a material mistake or that inaccurate information was used to establish emissions standards or other terms or conditions of the operating permit;
  - (c) A determination that the operating permit must be modified or revoked to ensure compliance with applicable requirements;
  - (d) A determination that the subject source has failed to comply with a permit condition;
  - (e) For Title V subject sources, a determination by U.S. EPA that cause exists to terminate, modify, revoke or reissue an operating permit;
  - (f) Those causes which are stated as grounds for refusal to issue, renew or modify an operating permit under §5-1008(a) of the *Regulations*; or
  - (g) If more than three (3) years remain in the permit term and the source becomes subject to a new applicable requirement.
- [10 V.S.A. §556a(d)] [§5-1008(e)(4) of the *Regulations*]
- (37) The Permittee shall furnish to the Agency, within a reasonable time, any information that the Agency may request in writing to determine whether cause exists to modify, revoke, reissue, or terminate the Permit or to determine compliance with this Permit. Upon request, the Permittee shall also furnish to the Agency copies of records required to be kept by this Permit. [10 V.S.A. §556a(d)] [§5-402 of the *Regulations*]

- (38) By acceptance of this Permit, the Permittee agrees to allow representatives of the State of Vermont access to the properties covered by the Permit, at reasonable times, to ascertain compliance with Vermont environmental and health statutes and regulations and with this Permit. The Permittee also agrees to give the Agency access to review and copy any records required to be maintained by this Permit, and to sample or monitor at reasonable times to ascertain compliance with this Permit. [10 V.S.A. §§556a(d) and 557] [ §§5-402, 5-404, and 5-1015(a)(10) of the *Regulations*]
- (39) All data, plans, specifications, analyses and other information submitted or caused to be submitted to the Agency as part of the application for this Permit or an amendment to this Permit shall be complete and truthful and, for Title V permit applications, certified by a responsible official whose designation has been approved by the Secretary. Any such submission which is false or misleading shall be sufficient grounds for denial or revocation of this Permit, and may result in a fine and/or imprisonment under the authority of Vermont statutes. [10 V.S.A. §556a(d)] [ §§5-409 and 5-1006(f) of the *Regulations*]
- (40) For the purpose of establishing whether or not a person has violated or is in violation of any condition of this Permit, nothing in this Permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [10 V.S.A. §556a(d)]
- (41) Any permit noncompliance could constitute a violation of the federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [10 V.S.A. §556a(d)] [ §§5-1008(a) and 5-1008(e) of the *Regulations*]
- (42) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this Permit. [10 V.S.A. §556a(d)]
- (43) No person shall build, erect, install or use any article, machine, equipment or other contrivances, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which otherwise would constitute a violation of these *Regulations*. [10 V.S.A. §556a(d)] [ §5-403 of the *Regulations*]
- (44) The provisions of this Permit are severable. If any provision of this Permit, or its application to any person or circumstances is held invalid, illegal, or unenforceable by a court of competent jurisdiction, the invalidity shall not apply to any other portion of this Permit which can be given effect without the invalid provision or application thereof. [10 V.S.A. §556a(d)]
- (45) This Permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize any injury to private property or any invasion of personal rights. [10 V.S.A. §§556(c) and 556a(d)]

- (46) All subsequent owners and/or operators of this Facility must request an amendment and transfer of this Permit prior to commencing any operations covered by this Permit. All subsequent owners and/or operators shall submit to the Agency as part of the request for amendment all such information the Agency deems necessary to establish legal ownership and/or interest in the property and all such information the Agency deems necessary to ensure the new owners and/or operators will construct and operate the Facility in compliance with the *Regulations* and this Permit. The terms and conditions of this Permit shall remain in full force and effect after submittal of the request for amendment and until the issuance of an amended Permit or denial. Should the Secretary deny the request, the new owner and/or operator must take whatever action is necessary to comply with the denial. [10 V.S.A. §§556 and 556a] [§§5-408, 5-501, 5-1004, and 5-1013(a) of the *Regulations*]
- (47) Renewable Energy Projects – Right to Appeal to Public Utilities Commission: If this decision relates to a renewable energy plant for which a certificate of public good is required under 30 V.S.A. §248, any appeal of this decision must be filed with the Vermont Public Utilities Commission pursuant to 10 V.S.A. §8506. This section does not apply to a facility that is subject to 10 V.S.A. §1004 (dams before the Federal Energy Regulatory Commission), 10 V.S.A. §1006 (certification of hydroelectric projects) or 10 V.S.A. Chapter 43 (dams). Any appeal under this section must be filed with the Clerk of the Public Utilities Commission within 30 days of the date of this decision; the appellant must file with the Clerk an original and six copies of its appeal. The appellant shall provide notice of the filing of an appeal in accordance with 10 V.S.A. 8504(c)(2), and shall also serve a copy of the Notice of Appeal on the Vermont Department of Public Service. For further information, see the Rules and General Orders of the Public Utilities Commission, available on line at [www.psb.vermont.gov](http://www.psb.vermont.gov). The address for the Public Utilities Commission is 112 State Street, Montpelier, Vermont, 05620-2701 (Tel. # 802-828-2358). [10 V.S.A. §§556a(d) and 8506]
- (48) All Other Projects – Right to Appeal to Environmental Court: Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Court within 30 days of the date of the decision. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Court; and must be signed by the appellant or their attorney. In addition, the appeal must give the address or location and description of the property, project or facility with which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings, available on line at [www.vermontjudiciary.org](http://www.vermontjudiciary.org). The address for the Environmental Court is 2418 Airport Road, Suite 1, Barre, VT 05641 (Tel. # 802-828-1660). [10 V.S.A. §§556(c) and 556a(d)]

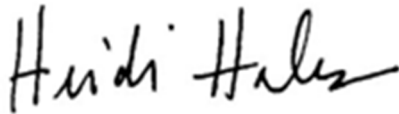


- (49) This Operating Permit shall expire as indicated on the cover page to this Permit. The Permittee shall submit to the Agency a complete application for renewal of the Operating Permit at least six (6) months before the expiration of the Operating Permit. If a timely and administratively complete application for an operating permit renewal is submitted to the Secretary, but the Secretary has failed to issue or deny such renewal before the end of the term of this Operating Permit, then the Permittee may continue to operate the subject source and all terms and conditions of this Operating Permit shall remain in effect until the Secretary has issued or denied the operating permit renewal. However, this Operating Permit shall automatically expire if, subsequent to the renewal application being determined or deemed administratively complete pursuant to §5-1006 of the *Regulations*, the Permittee fails to submit any additional information required by the Secretary as well as information pertaining to changes to the Facility within thirty (30) days or such other period as specified in writing by the Secretary. [10 V.S.A. §556a(d)] [§§5-1011 and 5-1012(a) of the *Regulations*] [§§5-1005(c) and 5-1012 of the *Regulations*]
- (50) The conditions of this Permit as set forth above supersede all conditions contained in all prior Permits issued by the Agency to the Permittee for this Facility. [10 V.S.A. §556a(d)]

The Agency's issuance of this Air Pollution Control Permit relies upon the data, judgment, and other information supplied by the Permittee. The Agency makes no assurances that the air contaminant source approved herein will meet performance objectives or vendor guarantees supplied to the source Permittee. It is the sole responsibility of the Permittee to operate the source in accordance with the conditions herein and with all applicable state and federal standards and regulations.

Permit issued and effective this 9<sup>th</sup> day of March, 2023.

Permit issuance authorized by:  
Agency of Natural Resources  
John Beling, Commissioner  
Department of Environmental Conservation



By:

\_\_\_\_\_  
Heidi C. Hales, Director  
Air Quality & Climate Division

State of Vermont  
Department of Environmental Conservation  
Air Quality & Climate Division  
Davis Building – 4<sup>th</sup> Floor  
One National Life Drive  
Montpelier, VT 05620-3802  
(802) 828-1288  
FAX (802) 828-1250

*AGENCY OF NATURAL RESOURCES*

March 9, 2023

Jason Lisai  
Green Mountain Power Corporation  
163 Acorn Lane  
Colchester, VT 05446

RE: Final Air Pollution Control Permit to Operate and CO<sub>2</sub> Budget Permit (#OP-22-045)  
Unit No. 5 - Berlin

Dear Mr. Lisai:

The Vermont Agency of Natural Resources, Department of Environmental Conservation, Air Quality & Climate Division (Agency) has completed its review of Green Mountain Power Corporation's application for the renewal of the Permit to Operate and CO<sub>2</sub> Budget Permit for the Unit No. 5 peaking electrical power generation facility (Facility). The Facility is located at 144 Nelson Road in the town of Berlin, Vermont. The Agency is now issuing a final Air Pollution Control Permit to Operate and final CO<sub>2</sub> Budget Permit approving the operation of the Facility.

Consistent with the provisions of 10 V.S.A. §556(e) and for the purposes of reducing the administrative burden of enforcing two separate permits for this Facility, the Agency has combined approval for the Air Pollution Control Permit to Operate with the approval for the CO<sub>2</sub> Budget Permit. The result is a combined Air Pollution Control Permit to Operate and CO<sub>2</sub> Budget Permit which satisfies both the operating permit (10 V.S.A. §556a and Subchapter X of the Regulations) and the CO<sub>2</sub> budget permit requirements for your Facility as described in the Vermont CO<sub>2</sub> Budget Trading Program Regulations. This combined permit incorporates and supersedes all prior Permit to Operate approvals issued in the past. Please note this permit is valid for a period of five (5) years and an application to renew the permit must be filed at least six (6) months prior to the date of expiration.



Fuel Monitoring System: Conditions (16) and (17) of this Permit require recordkeeping and periodic calibration of the fuel flow meter for the turbines at the Facility.

Also, please note the following recent changes to state regulations that apply to fuel requirements for all combustion equipment at the Facility.

Combustion Turbine Fuel Requirements: The State of Vermont has adopted regulations that will lower the allowed sulfur content of fuel oils, including kerosene, diesel, distillate and residual fuel oils. Condition (4) of this permit requires that, commencing July 1, 2018, the kerosene fuel used to fuel the Facility's turbines will be limited to a maximum of 0.0015% (15 ppm) sulfur by weight.

If you have any questions or comments, please do not hesitate to contact me by phone at (802) 272-3445, by email at [tony.mathis@vermont.gov](mailto:tony.mathis@vermont.gov), or in writing at the above address.

Sincerely,



Tony Mathis, Environmental Engineer  
Engineering Services/Permitting Section  
Air Quality & Climate Division

Cc: Beth Eliason

Y:AP Admin\StationaryFacilities\Green Mountain Power Corporation\Berlin (Unit #5)\Permits\OP-22-045\op22045\_itr-permit-final.docx

#OP-22-043  
DEC #EJ96-0191  
Operating Permit Expiration Date: June 14, 2028

State of Vermont  
Agency of Natural Resources  
Department of Environmental Conservation



Air Quality & Climate Division  
Montpelier, Vermont

## **AIR POLLUTION CONTROL** **PERMIT TO OPERATE**

Date Permit Issued: June 14, 2023

**Owner/Operator:** Green Mountain Power Corporation  
163 Acorn Lane  
Colchester, Vermont 05446

**Source:** Electric Power Generating Facility – Unit No. 16 (Gorge)  
Green Mountain Power Corporation  
154 Gorge Road  
Colchester, Vermont 05446

**FINDINGS OF FACT**

(A) FACILITY DESCRIPTION

Green Mountain Power Corporation (also referred to herein as "Permittee") owns and operates an electrical power generation facility referred to as Unit No 16 on George Street in the town of Colchester, Vermont (also referred to herein as "Facility"). The Facility is used for peak and standby electric power generation.

The Facility includes a General Electric Frame 5 simple cycle gas turbine (gas turbine) fueled with No. 2 fuel oil that powers a 17 Megawatt (MW) electrical generator. Fuel for the turbine is stored in two above ground fuel storage tanks that are also part of the Facility. The Facility, including the gas turbine and fuel storage tanks, was constructed in 1964. The Permittee currently operates under an annual fuel cap of 1,600,000 gallons per year of No. 2 fuel oil for the Facility.

Upon issuance of this Permit, the approved operations at the Facility include the following air pollution related operations, equipment and emission control devices:

Equipment Specifications			
Equipment/Make/Model	Rating	Fuel Type	Date of manufacture (installation)
General Electric Frame 5 gas turbine, serial number 147813, powering a 17 MW generator	334 MMBtu/hr <sup>1</sup>	No. 2 fuel oil / Maximum B20 biodiesel <sup>2</sup>	1964
Two (2) above-ground storage tanks	97,000 gallons / each	No. 2 fuel oil / Maximum B20 biodiesel <sup>2</sup>	1964

<sup>1</sup> MMBtu/hr - Million British thermal units per hour maximum rated heat input.

<sup>2</sup> Maximum B20 biodiesel- Biodiesel fuel blends that contain up to 20% biodiesel.

(B) FACILITY CLASSIFICATION

The Facility is classified as a source of air contaminants pursuant to Title 10 of the *Vermont Statutes Annotated* ("10 VSA") §555 and §5-401(3) [Electrical power generation facilities] and (6)(a) [Fossil fuel-burning equipment] of the *Vermont Air Pollution Control Regulations* (hereinafter "*Regulations*"). In addition, §5-101 of the *Regulations* defines a *stationary source* as any structure(s), equipment, installation(s), or operation(s), or combination thereof, which emit or may emit any air contaminant, which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person or persons under common control. Based on this definition, all of the equipment, operations, and structures at the Facility are grouped together by the Agency of Natural Resources, Department of Environmental Conservation, Air Quality & Climate Division (hereinafter "Agency") as one stationary air contaminant source for purposes of review under the *Regulations*.

## (C) PRIOR AGENCY ACTIONS/APPROVALS

The Facility does not currently operate under any prior “Permit to Construct” issued by the Agency pursuant to 10 VSA §556 and §5-501 of the *Regulations*. The Facility has been issued the following “Permit to Operate” approvals pursuant to 10 VSA §556a and Subchapter X of the *Regulations*.

Prior Agency Permit Approvals and Actions	
Date of Action	Description of Agency Approval/Action
September 15, 1998	#OP-95-104 – Initial Agency “Permit to Operate” approval for Facility. Although allowable emissions were greater than the 100 ton/year Title V threshold, actual emissions were less than 50 percent of the 100 ton/year threshold, and the Facility was permitted as a Subchapter X major source under an interim EPA policy that has since expired.
October 21, 2013	#OP-02-026 – Renewal of the “Permit to Operate”.
September 20, 2018	#OP-18-002 – Renewal of the “Permit to Operate”.

## (D) FACILITY PERMIT APPLICABILITY

As noted above, the Facility is classified as a source of air contaminants under §5-401 of the *Regulations*. Pursuant to 10 VSA §556a and Subchapter X of the *Regulations* a Permit to Operate is required for any air contaminant source with allowable emissions of all air contaminants combined of ten (10) tons per year (“tpy”) or more or that is otherwise subject to Title 40 *Code of Federal Regulations* (“40 CFR”) Part 70.

The Facility currently operates under a Permit to Operate issued on September 20, 2018. The allowable emissions from the Facility are estimated to be greater than the ten (10) tpy combined threshold for applicability with Subchapter X of the *Regulations*, but each pollutant is less than the one-hundred (100) tpy single pollutant threshold (50 tpy for VOC) for applicability to Title V of the federal Clean Air Act. Therefore, pursuant to §§5-1002, 5-1003, and 5-1005 of the *Regulations* the Facility is classified as a “Subchapter X Major Source”. In accordance with §5-1009 of the *Regulations*, the agency is issuing the Permit to Operate herein as a renewal of the previous Permit to Operate for the Facility and the Permit herein supersedes all prior Permits for the Facility.

In accordance with §5-1009 of the *Regulations*, the Agency is issuing the Permit to Operate herein as a renewal of the previous Permit to Operate for the Facility and the Permit herein supersedes all prior Permits for the Facility.

<b>Allowable Air Contaminant Emissions (tons/year)<sup>1</sup></b>					
<b>PM/PM<sub>10</sub>/PM<sub>2.5</sub></b>	<b>CO</b>	<b>NO<sub>x</sub></b>	<b>SO<sub>2</sub></b>	<b>VOCs</b>	<b>HAPs</b>
11.2	0.4	<100	0.2	<5	<1.0

<sup>1</sup> PM/PM<sub>10</sub>/PM<sub>2.5</sub> – total particulate matter, total particulate matter of 10 micrometers in size or smaller and total particulate matter of 2.5 micrometers in size or smaller, respectively. Unless otherwise specified, all PM is assumed to be PM<sub>2.5</sub>; SO<sub>2</sub> - sulfur dioxide; NO<sub>x</sub> - oxides of nitrogen measured as NO<sub>2</sub> equivalent; CO - carbon monoxide; VOCs - volatile organic compounds; HAPs - hazardous air pollutants as defined in §112 of the federal Clean Air Act.

(E) REVIEW OF CRITERIA POLLUTANT EMISSIONS FOR THE PERMIT TO CONSTRUCT

(a) New Source Review Designation

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to review under the New Source Review requirements in §5-501 or §5-502 of the *Regulations* at this time.

(b) Most Stringent Emission Rate

Pursuant to §5-502 of the *Regulations*, the owner/operator of each new major stationary source or major modification must apply control technology adequate to achieve the Most Stringent Emission Rate ("MSER") with respect to those air criteria pollutants for which there would be a major or significant actual emissions increase, respectively, but only for those currently proposed physical or operational changes which would contribute to the increased emissions.

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to review under the MSER requirements in §5-502 of the *Regulations* at this time. In addition, there have been no prior MSER evaluations conducted for any of the previous modifications to the Facility.

(c) Ambient Air Quality Impact Evaluation

An ambient air quality impact evaluation for criteria pollutants is performed to demonstrate whether or not a proposed project will cause or contribute to violations of the national ambient air quality standards and/or significantly deteriorate existing air quality for the regulated criteria pollutants.

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to an air quality impact analysis under §5-501 of the *Regulations* at this time. In addition, there have been no prior ambient air quality impact evaluations conducted for any of the previous modifications to the Facility.



(F) REVIEW OF CRITERIA POLLUTANT EMISSIONS FOR THE PERMIT TO OPERATE

(a) Applicable Requirements

The operations at the Facility are subject to the following state and federal laws and regulations, the requirements of which are embodied in the conditions of this Permit.

(i) *Vermont Air Pollution Control Regulations:*

<b>Applicable Requirements from the Vermont Air Pollution Control Regulations</b>
Section 5-201 – Prohibition of Open Burning
Section 5-211(1) - Prohibition of Visible Air Contaminants, Installations Constructed Prior to April 30, 1970.
Section 5-211(2) - Prohibition of Visible Air Contaminants, Installations Constructed Subsequent to April 30, 1970.
Section 5-221(1) - Prohibition of Potentially Polluting Materials in Fuel, Sulfur Limitation in Fuel.
Section 5-231(3) - Prohibition of Particulate Matter; Combustion Contaminants.
Section 5-231(4) - Prohibition of Particulate Matter; Fugitive Particulate Matter.
Section 5-241 – Prohibition of Nuisance and Odor.
Section 5-402 – Written Reports When Requested.
Section 5-403 – Circumvention.
Section 5-404 – Methods for Sampling and Testing of Sources.
Section 5-405 – Required Air Monitoring.
Section 5-406 – Required Air Modeling.
Section 5-407 – Prevention of Air Contaminant Emissions.
Section 5-408 – Change in Ownership or Operational Control.
Section 5-409 – False or Misleading Information.
Subchapter VIII – Registration of Air Contaminant Sources.
Subchapter X – Operating Permits.

(ii) Reasonably Available Control Technology - §5-1010 of the *Regulations*

Pursuant to 10 VSA §556a(d) and §5-1010 of the *Regulations* the Agency may establish and include within any Permit to Operate emission control

requirements based on Reasonably Available Control Technology ("RACT"). Based on the Facility's existing levels of emissions and emission controls, the Agency has not imposed any further requirements on this Facility under this authority at this time.

(iii) Existing Air Pollution Control Permit to Construct and/or Operate

The Facility does not currently operate under the confines of a Permit to Construct. The Facility currently operates under the confines of a Permit to Operate issued on September 20, 2018 (#AOP-18-002). The conditions within that existing permit are considered applicable requirements pursuant to §5-1002 of the *Regulations*. The requirements of that permit which are not being modified herein are incorporated into this new combined Permit to Construct and Operate (#OP-22-043).

(iv) Federal Requirements:

<b>Applicable Requirements from Federal Regulations and the Clean Air Act</b>
<p>40 <i>CFR</i> Part 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. Applicability: The affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 m<sup>3</sup> (19,804 gal) that is used to store volatile organic liquids (including petroleum). This subpart does not apply to the following:</p> <ol style="list-style-type: none"> <li>1. Any storage vessel with a capacity less than 75 m<sup>3</sup></li> <li>2. Any storage vessel storing a liquid with a vapor pressure less than 3.5 kPa</li> <li>3. Any storage vessel with a capacity &gt; 75 m<sup>3</sup> and &lt;151 m<sup>3</sup> with a v.p. &lt;15.0 kPa</li> <li>4. Pressure vessels &gt;29.7 psi and without emissions to the atmosphere.</li> <li>5. Vessels permanently attached to mobile vehicles.</li> <li>6. Vessels located at bulk gasoline plants.</li> <li>7. Vessels located at gasoline service stations.</li> </ol> <p>For affected facilities, there are recordkeeping requirements and depending upon the material stored there may be standards for the tank's vent system.</p> <p><i>The above-ground storage tanks at the Facility are not subject to this regulation, since the storage tanks were installed in 1964. In addition, No. 2 fuel oil has a vapor pressure less than 3.5 kPa and as such, a storage vessel containing No. 2 fuel oil would not be subject to this requirement.</i></p>
<p>40 <i>CFR</i> Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines: Applicable to gas turbines 10.7 gigajoules (10.1 MMBTU) per hour or greater, based on the fuel lower heating value, manufactured after October 3, 1977.</p> <p><i>The GE Frame 5 gas turbine is not subject to this regulation as it was manufactured before October 3, 1977.</i></p>

<b>Applicable Requirements from Federal Regulations and the Clean Air Act</b>
<p>40 <i>CFR</i> Part 63, Subpart YYYY - National Emission Standards for Stationary Gas Turbines: Applicable to stationary gas turbines that are major HAP sources or are located at a major HAP source.</p> <p><i>These requirements do not apply to this Facility since the Facility is not a major HAP source.</i></p>
<p>Clean Air Act §112(r)(1) Prevention of Accidental Release; Purpose and General Duty 40 <i>CFR</i> Part 68 Chemical Accident Prevention Programs. Facilities that produce, process, handle, or store substances identified in paragraph (3) of this subsection have a general duty to identify hazards which may result in releases using appropriate hazard assessment techniques, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which do occur.</p> <p><i>The Permittee has stated that the Facility does not produce, process, handle, or store substances identified in paragraph (3) of this subsection greater than the threshold quantities of this regulation.</i></p>
<p>40 <i>CFR</i> Part 98 Mandatory Greenhouse Gas Reporting. Requires reporting of GHG emissions annually to EPA for</p> <ol style="list-style-type: none"> <li>1) Facilities in source categories listed in §98.2(a)(1) including electric utility units subject to Acid Rain, MSW landfills that generate CH<sub>4</sub> in amounts equivalent to 25,000 metric tons of CO<sub>2</sub>e or more per year and electrical transmission and distribution equipment at facilities where the total nameplate capacity of SF<sub>6</sub> and PFC containing equipment exceeds 17,820 pounds,</li> <li>2) Facilities in source categories listed in §98.2(a)(2) including electronics manufacturing, iron and steel production and pulp and paper manufacturing that emit 25,000 metric tons of CO<sub>2</sub>e or more per year from such source categories as well as all stationary combustion,</li> <li>3) Facilities with stationary combustion sources that aggregate to 30 MMBtu/hr or more and which emit 25,000 metric tons of CO<sub>2</sub>e or more per year from all stationary combustion sources combined, and</li> <li>4) Fuel suppliers including all local natural gas distribution companies.</li> </ol> <p><i>The U.S. EPA has retained the implementing authority for this regulation and is responsible for determining applicability. This regulation under Part 98 is not considered to be an applicable requirement per 40 <i>CFR</i> Part 70.2 and as noted in 74 <i>FR</i> 56260 (October 30, 2009).</i></p> <p><i>Part 98 is not anticipated to apply to the Facility with the current fuel consumption limitations contained in this permit.</i></p>

## (b) Non-Applicable Requirements

Pursuant to §5-1015(a)(14) of the *Regulations*, an owner or operator of a Facility may request a permit shield from specific state or federally enforceable regulations and standards which are not applicable to the source. The Permittee has not requested such

a permit shield in accordance with the requirements of §5-1015(a)(14) of the *Regulations*. The Permittee has requested a permit shield with respect to several potentially applicable requirements.

(G) CONTROL OF HAZARDOUS AIR CONTAMINANTS

Pursuant to §5-261 of the *Regulations*, any stationary source subject to the rule<sup>1</sup> with current or proposed actual emissions of a hazardous air contaminant (HAC) equal to or greater than the respective Action Level (found in Appendix C of the *Regulations*) shall be subject to the Regulation and shall achieve the Hazardous Most Stringent Emission Rate (HMSEER) for the respective HAC. HMSEER is defined as a rate of emissions which the Secretary, on a case-by-case basis, determines is achievable for a stationary source based on the lowest emission rate achieved in practice by such a category of source and considering economic impact and cost. HMSEER may be achieved through application of pollution control equipment, production processes or techniques, equipment design, work practices, chemical substitution, or innovative pollution control techniques.

Based on information provided by the Permittee, the Agency does not anticipate the Facility to have regulated emissions of an identified HAC in excess of an Action Level. Therefore, the Facility is not being reviewed pursuant to §5-261 of the *Regulations* at this time.

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<sup>1</sup> APCR §5-261(1)(c)(ii) provides that solid fuel burning equipment (not including incinerators) installed or constructed prior to January 1, 1993, and all fuel burning equipment which combust virgin liquid or gaseous fuel shall not be subject to the requirements of §5-261.

Based on the Agency's review of the Facility's application and the above Findings of Fact, the Agency concludes that the Facility, subject to the following Permit conditions, complies with all applicable state and federal air pollution control laws and regulations. Therefore, pursuant to 10 VSA §§556 and 556a, as amended, the Agency hereby issues a Permit approving the Facility, as described in the above Findings of Fact, subject to the following:

## **PERMIT CONDITIONS**

### **- Construction and Equipment Specifications -**

- (1) The Permittee shall construct and operate the Facility in accordance with the plans and specifications submitted to the Agency and in accordance with the conditions set forth herein, including the equipment specifications as listed in Findings of Fact (A) or their equivalent as approved by the Agency. [10 V.S.A. § 556a(d)] [§5-409 and 5-501(1) of the *Regulations*] [Applications for #OP-95-104, #OP-02-026, #OP-18-002 and #OP-22-043]
- (2) Stack heights: The exhaust gases from the GE Frame 5 gas turbine shall be vented vertically through a stack which extends a minimum of twenty-six (26) feet above the stack base grade elevation. The stack shall not be equipped with any device that may obstruct the upward discharge of the exhaust gases such as a fixed rain cap of a type that has not been approved by the Agency.

For all other non-fugitive emission points at the Facility, the Agency recommends that they each be exhausted vertically through a stack(s) which extend a minimum of four (4) feet above the roof where the stack penetrates the roof and that they not be equipped with any device that may obstruct the upward discharge of the exhaust gases such as a fixed rain cap of a type that has not been approved by the Agency.

The Agency may require the Permittee to increase the stack height, remove a rain cap, or conduct a dispersion analysis to verify compliance with ambient air quality standards for any stack at the Facility if, in the judgment of the Agency, adequate dispersion cannot be maintained at the current stack configuration. Adequacy may in part be based on the actual emission rate of air contaminants, the characteristics of the current stack configuration, or inspections of the Facility that indicate poor dispersion or that confirm significant visible emissions or nuisance or odor beyond the property line. [10 V.S.A. §556a(d)] [§5-406 of the *Regulations*] [Applications for #OP-95-104]

**- Operational Limitations -**

- (3) Annual Fuel Usage Limitations: The annual fuel consumption in the GE Frame 5 gas turbine as well as all other stationary fuel burning heating equipment at the Facility shall not exceed a combined 1,600,000 gallons based on any rolling twelve (12) consecutive calendar month period. [10 V.S.A. §556a(d)] [[Application for #OP-02-026]
- (4) Fuel Sulfur Content Limitations: Only No.2 fuel oil, biodiesel fuel blends not exceeding B20, or lighter grade fuel oils, with a maximum sulfur content not to exceed 0.0015 percent by weight may be used as fuel in the GE Frame 5 gas turbine unless the Permittee obtains prior written approval from the Agency to use another type of fuel. [10 V.S.A. §556a(d)] [§§5-501 and 5-1015(a)(1) of the *Regulations*] [§5-221(1)(a) of the *Regulations*] [Application for #AOP-02-026]
- (5) Stationary Diesel Engines: The Permittee shall not install or operate a stationary reciprocating internal combustion engine, as defined in the *Regulations*, unless the engine complies with §5-271 of the *Regulations* as may be applicable as well as any federal regulations including 40 *CFR* Part 60 Subpart IIII and 40 *CFR* Part 63 Subpart ZZZZ, as may be applicable. All engines, including emergency engines, installed on or after July 1, 2007 must comply with the applicable emission standards (Tier 2) of §5-271 immediately upon installation. Installation of any size engine, even those below 300 bhp, may still require approval from the Agency in the form of an amended permit prior to installation. [10 V.S.A. §556a(d)] [§§5-271 and 5-501 of the *Regulations*]
- (6) Open Burning: Open burning is prohibited except as provided for in §5-202 of the *Regulations*. Prior to conducting open burning of any material, other than leaves, brush, or tree cuttings from normal grounds maintenance, the Permittee shall contact the Air Pollution Control Officer and obtain approval for such burning, if required. [10 V.S.A. §556a(d)] [§5-202 of the *Regulations*]

**- Emission Limitations -**

(7) Nitrogen Oxides [Facility Wide]: In order to maintain Facility emissions of nitrogen oxides (NO<sub>x</sub>) below the threshold of §5-251(2) of the *Regulations*, the Permittee shall limit emissions of nitrogen oxides from the GE Frame 5 gas turbine to less than 0.88 lb/MMBtu, of NO<sub>x</sub>, and NO<sub>x</sub> emissions from the entire Facility to less than one-hundred (100) tons per year based on any rolling twelve (12) consecutive calendar month period. Emissions of NO<sub>x</sub> shall be calculated in accordance with Condition (18) below. [10 V.S.A. §556a(d)] [§§5-2512) of the *Regulations*] [Application for #OP-02-026]

(8) Particulate Matter: Emissions of particulate matter ("PM") from the GE Frame 5 gas turbine shall not exceed the following limitations.

<b>GE Frame 5 Gas Turbine - PM Emission Limitations</b>		
Equipment	Emission Limitations	
	lbs/MMBTU <sup>1</sup>	lbs/hour <sup>2</sup>
GE Frame 5 gas turbine	0.10	33.4

<sup>1</sup> lbs/MMBTU equals pounds of pollutant emitted per million British Thermal Units of heat input.

<sup>2</sup> lbs/hour equals pounds of pollutant emitted per hour.

Any emission testing conducted to demonstrate compliance with the above emission limit shall be performed in accordance with 40 *CFR* Part 60, Appendix A, Reference Method 5 and 202 or equivalent methods approved in writing by the Agency. [§§5-231(3)(a)(i) and 5-404 of the *Regulations*]

(9) Particulate Matter: Emissions of particulate matter ("PM") from any fossil fuel burning device, except motorized vehicles, with a heat input rating of less than ten (10) million British Thermal Units per hour ("MMBtu/hr") shall not exceed 0.5 pounds per MMBtu.

Any emission testing conducted to demonstrate compliance with the above emission limit shall be performed in accordance with 40 *CFR* Part 60, Appendix A, Reference Method 5 and Part 51, Appendix M, Reference Method 202, or equivalent methods approved in writing by the Agency. [10 V.S.A. §556a(d)] [§§5-231(3)(a)(i) and 5-404 of the *Regulations*]

(10) Visible Emissions [Facility Wide]: Emissions of visible air contaminants from any installation at the Facility, except where otherwise noted in this Permit, shall not exceed twenty (20) percent opacity for more than a period or periods aggregating six (6) minutes in any hour and at no time shall visible emissions exceed sixty (60) percent opacity.

Any emission testing conducted to demonstrate compliance with the above emission limits shall be performed in accordance with 40 *CFR* Part 51, Appendix M, Methods 203B and 203C, respectively, or equivalent methods approved in writing by the Agency. [10 V.S.A. §556a(d)] [§§5-211(2), 5-211(3) and 5-404 of the *Regulations*]

- (11) Visible Emissions [Specific Installations prior to April 30, 1970]: Emissions of visible air contaminants from GE Frame 5 gas turbine and any other installation at the Facility installed prior to April 30, 1970 shall not exceed forty (40) percent opacity for more than a period or periods aggregating six (6) minutes in any hour and at no time shall visible emissions exceed sixty (60) percent opacity.

Any emission testing conducted to demonstrate compliance with the above emission limits shall be performed in accordance with 40 *CFR* Part 51, Appendix M, Methods 203B and 203C, respectively, or equivalent methods approved in writing by the Agency. [10 V.S.A. § 556a(d)] [§§5-211(1), 5-211(3) and 5-404 of the *Regulations*]

- (12) Volatile Organic Compounds: Emissions of volatile organic compounds from the Facility shall not equal or exceed five (5) tons per calendar year. [10 V.S.A. §556a(d)] [§5-502 of the *Regulations*]
- (13) Hazardous Air Pollutants: Emission of federally regulated hazardous air pollutants (HAPs) from the Facility shall not equal or exceed one (1) ton of total combined HAPs per calendar year. [10 V.S.A. §556a(d)] [§§5-261 and 5-501 of the *Regulations*] [40 *CFR* Part 63]
- (14) Hazardous Air Contaminants: Emissions of state hazardous air contaminants (HACs) from the applicable operations at the Facility shall not equal or exceed their respective Action Level (found in Appendix C of the *Regulations*) unless the Agency has reviewed and approved such HAC emission under §5-261(2) of the *Regulations*. [10 V.S.A. §556a(d)] [§5-261 of the *Regulations*]
- (15) Fugitive Particulate Matter Emissions: The Permittee shall take reasonable precautions at all times to control and minimize emissions of fugitive particulate matter from the operations at the Facility. [10 V.S.A. §556a(d)] [§5-231(4) of the *Regulations*]
- (16) Nuisance and Odor: The Permittee shall not discharge, cause, suffer, allow, or permit from any source whatsoever such quantities of air contaminants, or odors beyond the property line of a premises, which will cause injury, detriment, nuisance or annoyance to any considerable number of people or to the public or which endangers the comfort, repose, health or safety of any such persons or the public or which causes or has a natural tendency to cause injury or damage to business or property. [10 V.S.A. §556a(d)] [§5-241(1) of the *Regulations*]



**- Record Keeping and Reporting -**

- (17) Records of Fuel Use: The Permittee shall maintain records of the total quantity of fuel oil consumed in the GE Frame 5 gas turbine in gallons, each month. At the beginning of each month the Permittee shall calculate the total quantity of fuel oil consumed in the GE Frame 5 gas turbine, in gallons, during the previous twelve (12) consecutive month period. [10 V.S.A. §556a(d)] [§5-405(1) of the *Regulations*]
- (18) Records of NOx Emissions: Beginning at the end of the first full calendar month after the date of issuance of this Permit, and at the end of each month thereafter, Permittee shall calculate the total quantity of fuel oil consumed in the GE Frame 5 gas turbine, in gallons, and shall calculate and record the total quantity of NOx emissions to the atmosphere, in tons, during the previous twelve consecutive month period. For the purposes of calculating the total quantity of NOx emissions to the atmosphere based on fuel oil usage as required by this Condition, Permittee shall use a NOx emission factor of 0.88 pounds per million Btu for the GE Frame 5 gas turbine and a heating value of 140,000 Btu per gallon for No. 2 distillate fuel. The numerical factors for calculating the total quantity of NOx emissions to the atmosphere required by this Condition may be revised if approved in writing by the Agency. [§5-405(1) of the *Regulations*] [Application for #OP- 02-026]
- (19) Records: All records shall be retained for a minimum period of five (5) years from the date of record and shall be made available to the Agency upon request. [10 V.S.A. §§556a(d)] [§§5-402, 5-405(1) and 5-1015(a)(7) of the *Regulations*]
- (20) Notification: The Permittee shall notify the Agency in writing within ten (10) days of any violation, of which it is aware, of any requirements of this Permit. This notification shall include, at a minimum, the cause for the violation and corrective action or preventative maintenance taken to correct the violation. [10 V.S.A. §556a(d)] [§§5-402 and 5-1015(a)(6) of the *Regulations*]
- (21) Notification: The Permittee shall notify the Agency in writing of any proposed physical or operational change at the Facility which may increase the emission rate of any air contaminant to the ambient air regardless of any concurrent emission reductions that may be achieved. This notification requirement includes the proposed installation of any new equipment that is a source of air pollution, including the replacement of an existing permitted air pollution source. If the Agency determines that a permit amendment is required, a new application and the appropriate application fee shall be submitted. The permit amendment shall be obtained prior to commencing any such change except as may otherwise be allowed by the *Regulations*. [10 V.S.A. §556a(d)] [§§5-402 and 5-501 of the *Regulations*]

- (22) Annual Registration: The Permittee shall calculate the quantity of emissions of air contaminants from the Facility annually. If the Facility emits more than five (5) tons of any and all air contaminants per year or if the Facility performs one or more of the air contaminant emitting operations listed in 5-802(2) of the *Regulations*, the Permittee shall register the source with the Secretary of the Agency (hereinafter "Secretary"), and shall renew such registration annually. Each day of operating a source which is subject to registration without a valid, current registration shall constitute a separate violation and subject the Permittee to civil penalties. The registration process shall follow the procedures set forth in Subchapter VIII of the *Regulations*, including the payment of the annual registration fee on or before May 15 of each year. [10 V.S.A. §556a(d)] [Subchapter VIII §§5-802, 5-803, 5-807, 5-808 of the *Regulations*]
- (23) All records, notifications and reports that are required to be submitted to the Agency by this Permit shall be submitted to:

Air Quality & Climate Division  
 Department of Environmental Conservation  
 Agency of Natural Resources  
 Davis 4  
 One National Life Drive  
 Montpelier, Vermont 05620-3802

[10 V.S.A. §556a(d)] [§5-402 of the *Regulations*]

**- Standard Permit Conditions -**

- (24) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Agency which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [10 V.S.A. §§556(g) and 556a(d)] [40 CFR Part 60.11(d) and 63.6(e)]
- (25) These Permit conditions may be suspended, terminated, modified, or revoked for cause and reissued upon the filing of a written request with the Secretary of the Agency (hereinafter "Secretary") or upon the Secretary's own motion. Any modification shall be granted only with the written approval of the Secretary. If the Secretary finds that modification is appropriate, only the conditions subject to modification shall be re-opened. The filing of a request for modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay any terms or conditions of this Permit. The Secretary may provide opportunity for public comment on any proposed modification of these conditions. If public comments are solicited, the Secretary shall follow the procedures set forth in 10 V.S.A. §556 and §556a, as amended. [10 V.S.A. §§556(d) and 556a(g)] [§§5-1008(a) and 5-1008(e) of the *Regulations*]

- (26) Cause for reopening, modification, termination and revocation of this Permit includes, but is not limited to:
- (a) Inclusion of additional applicable requirements pursuant to state or federal law;
  - (b) A determination that the permit contains a material mistake or that inaccurate information was used to establish emissions standards or other terms or conditions of the operating permit;
  - (c) A determination that the operating permit must be modified or revoked to ensure compliance with applicable requirements;
  - (d) A determination that the subject source has failed to comply with a permit condition;
  - (e) For Title V subject sources, a determination by U.S. EPA that cause exists to terminate, modify, revoke or reissue an operating permit;
  - (f) Those causes which are stated as grounds for refusal to issue, renew or modify an operating permit under §5-1008(a) of the *Regulations*; or
  - (g) If more than three (3) years remain in the permit term and the source becomes subject to a new applicable requirement.

[10 V.S.A. §556a(d)] [§5-1008(e)(4) of the *Regulations*]

- (27) The Permittee shall furnish to the Agency, within a reasonable time, any information that the Agency may request in writing to determine whether cause exists to modify, revoke, reissue, or terminate the Permit or to determine compliance with this Permit. Upon request, the Permittee shall also furnish to the Agency copies of records required to be kept by this Permit. [10 V.S.A. §556a(d)] [§5-402 of the *Regulations*]
- (28) By acceptance of this Permit, the Permittee agrees to allow representatives of the State of Vermont access to the properties covered by the Permit, at reasonable times, to ascertain compliance with Vermont environmental and health statutes and regulations and with this Permit. The Permittee also agrees to give the Agency access to review and copy any records required to be maintained by this Permit, and to sample or monitor at reasonable times to ascertain compliance with this Permit. [10 V.S.A. §§556a(d) and 557] [§§5-402, 5-404, and 5-1015(a)(10) of the *Regulations*]
- (29) All data, plans, specifications, analyses and other information submitted or caused to be submitted to the Agency as part of the application for this Permit or an amendment to this Permit shall be complete and truthful and, for Title V permit applications, certified by a responsible official whose designation has been approved by the Secretary. Any such submission which is false or misleading shall be sufficient grounds for denial or revocation of this Permit, and may result in a fine and/or imprisonment under the authority of Vermont statutes. [10 V.S.A. §556a(d)] [§§5-409 and 5-1006(f) of the *Regulations*]
- (30) For the purpose of establishing whether or not a person has violated or is in violation of any condition of this Permit, nothing in this Permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [10 V.S.A. §556a(d)]

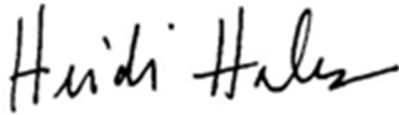
- (31) Any permit noncompliance could constitute a violation of the federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [10 V.S.A. §556a(d)] [§§5-1008(a) and 5-1008(e) of the *Regulations*]
- (32) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this Permit. [10 V.S.A. §556a(d)]
- (33) No person shall build, erect, install or use any article, machine, equipment or other contrivances, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which otherwise would constitute a violation of these *Regulations*. [10 V.S.A. §556a(d)] [§5-403 of the *Regulations*]
- (34) The provisions of this Permit are severable. If any provision of this Permit, or its application to any person or circumstances is held invalid, illegal, or unenforceable by a court of competent jurisdiction, the invalidity shall not apply to any other portion of this Permit which can be given effect without the invalid provision or application thereof. [10 V.S.A. §556a(d)]
- (35) This Permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize any injury to private property or any invasion of personal rights. [10 V.S.A. §556a(d)]
- (36) All subsequent owners and/or operators of this Facility must request an amendment and transfer of this Permit prior to commencing any operations covered by this Permit. All subsequent owners and/or operators shall submit to the Agency as part of the request for amendment all such information the Agency deems necessary to establish legal ownership and/or interest in the property and all such information the Agency deems necessary to ensure the new owners and/or operators will construct and operate the Facility in compliance with the *Regulations* and this Permit. The terms and conditions of this Permit shall remain in full force and effect after submittal of the request for amendment and until the issuance of an amended Permit or denial. Should the Secretary deny the request, the new owner and/or operator must take whatever action is necessary to comply with the denial. [10 V.S.A. §§556 and 556a] [§§5-408, 5-501, 5-1004, and 5-1013(a) of the *Regulations*]

- (37) Renewable Energy Projects – Right to Appeal to Public Utilities Commission: If this decision relates to a renewable energy plant for which a certificate of public good is required under 30 V.S.A. §248, any appeal of this decision must be filed with the Vermont Public Utilities Commission pursuant to 10 V.S.A. §8506. This section does not apply to a facility that is subject to 10 V.S.A. §1004 (dams before the Federal Energy Regulatory Commission), 10 V.S.A. §1006 (certification of hydroelectric projects) or 10 V.S.A. Chapter 43 (dams). Any appeal under this section must be filed with the Clerk of the Public Utilities Commission within 30 days of the date of this decision; the appellant must file with the Clerk an original and six copies of its appeal. The appellant shall provide notice of the filing of an appeal in accordance with 10 V.S.A. 8504(c)(2), and shall also serve a copy of the Notice of Appeal on the Vermont Department of Public Service. For further information, see the Rules and General Orders of the Public Utilities Commission, available on line at [www.psb.vermont.gov](http://www.psb.vermont.gov). The address for the Public Utilities Commission is 112 State Street, Montpelier, Vermont, 05620-2701 (Tel. # 802-828-2358). [10 V.S.A. §§556a(d) and 8506]
- (38) All Other Projects – Right to Appeal to Environmental Court: Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Court within 30 days of the date of the decision. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Court; and must be signed by the appellant or their attorney. In addition, the appeal must give the address or location and description of the property, project or facility with which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings, available on line at [www.vermontjudiciary.org](http://www.vermontjudiciary.org). The address for the Environmental Court is 2418 Airport Road, Suite 1, Barre, VT 05641 (Tel. # 802-828-1660). [10 V.S.A. §556a(d)]
- (39) This Operating Permit shall expire as indicated on the cover page to this Permit. The Permittee shall submit to the Agency a complete application for renewal of the Operating Permit at least six (6) months before the expiration of the Operating Permit. If a timely and administratively complete application for an operating permit renewal is submitted to the Secretary, but the Secretary has failed to issue or deny such renewal before the end of the term of this Operating Permit, then the Permittee may continue to operate the subject source and all terms and conditions of this Operating Permit shall remain in effect until the Secretary has issued or denied the operating permit renewal. However, this Operating Permit shall automatically expire if, subsequent to the renewal application being determined or deemed administratively complete pursuant to §5-1006 of the *Regulations*, the Permittee fails to submit any additional information required by the Secretary as well as information pertaining to changes to the Facility within thirty (30) days or such other period as specified in writing by the Secretary. [10 V.S.A. §556a(d)] [§§5-1011 and 5-1012(a) of the *Regulations*] [§§5-1005(c) and 5-1012 of the *Regulations*]
- (40) The conditions of this Permit as set forth above supersede all conditions contained in all prior Permits issued by the Agency to the Permittee for this Facility. [10 V.S.A. §556a(d)]

The Agency's issuance of this Air Pollution Control Permit relies upon the data, judgment, and other information supplied by the Permittee. The Agency makes no assurances that the air contaminant source approved herein will meet performance objectives or vendor guarantees supplied to the source Permittee. It is the sole responsibility of the Permittee to operate the source in accordance with the conditions herein and with all applicable state and federal standards and regulations.

Permit issued and effective this 14<sup>th</sup> day of June, 2023.

Permit issuance authorized by:  
Agency of Natural Resources  
John Beling, Commissioner  
Department of Environmental Conservation



By:

\_\_\_\_\_  
Heidi C. Hales, Director  
Air Quality & Climate Division

State of Vermont  
Department of Environmental Conservation  
Air Quality & Climate Division  
Davis Building – 4<sup>th</sup> Floor  
One National Life Drive  
Montpelier, VT 05620-3802  
(802) 828-1288  
FAX (802) 828-1250

AGENCY OF NATURAL RESOURCES

June 14, 2023

Jason Lisai  
Green Mountain Power Corporation  
163 Acorn Lane  
Colchester, VT 05446

RE: Final Air Pollution Control Permit to Operate (#OP-22-043)  
Unit No. 16 – Colchester (Gorge)

Dear Mr. Lisai:

The Vermont Agency of Natural Resources, Department of Environmental Conservation, Air Quality & Climate Division (Agency) has completed its review of Green Mountain Power Corporation's application for the renewal of the Permit to Operate for the Unit No. 16 (Gorge) peaking electrical power generation facility (Facility). The Facility is located on Gorge Street in the town of Colchester, Vermont. The Agency is now issuing a final Air Pollution Control Permit to Operate approving the continued operation of the Facility.

This Permit to Operate incorporates and supersedes all prior Permit to Operate approvals issued in the past and is valid for a period of five (5) years. An application to renew the Permit to Operate must be filed at least six (6) months prior to the date of expiration.

Please note that Condition (3) of this permit requires that annual fuel consumption in the GE Frame 5 gas turbine at the Facility shall not exceed 1,600,000 gallons per calendar year.

Also, please note the following recent changes to state regulations that apply to fuel requirements for all combustion equipment at the Facility.

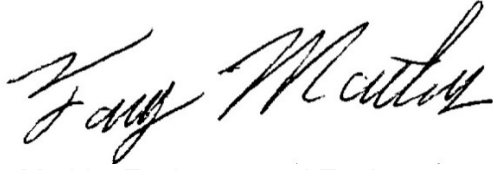
Lower Sulfur Content Fuels:

The State of Vermont has adopted regulations that will lower the allowed sulfur content of fuel oils, including kerosene, diesel, distillate and residual fuel oils. Commencing on July 1, 2018, the No. 2 distillate fuel used in the Facility's GE Frame 5 gas turbine will be limited to a maximum of 0.0015% (15 ppm). See Condition (4) of the attached permit.



If you have any questions or comments, please do not hesitate to contact me by phone at (802) 272-3445, by email at [tony.mathis@vermont.gov](mailto:tony.mathis@vermont.gov) or in writing at the above address.

Sincerely,

A handwritten signature in black ink that reads "Tony Mathis". The signature is written in a cursive style with a large, stylized initial "T".

Tony Mathis, Environmental Engineer  
Engineering Services/Permitting Section  
Air Quality & Climate Division

Y:\AP Admin\StationaryFacilities\Green Mountain Power Corporation\Colchester (Unit #16)\Permits\AOP-22-043\op122043\_itr-permit-final.pdf